## 20 <br> 06 <br> The University of Adelaide



## The University of Adelaide Calendar 2006

Handbook of Postgraduate Programs

## Address for Correspondence

Correspondence about academic programs, related matters (eg. admission, examinations, scholarships and prizes) and educational matters generally to:

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## The Arms of the University

The heraldic description of the Coat of Arms is as follows:

Per pale Or and Argent an Open Book proper edged Gold on a Chief Azure five Mullets, one of eight, two of seven, one of six and one of five points of the second, representing the Constellation of the Southern Cross; and the Motto associated with the Arms is

## Sub Cruce Lumen

'The light (of learning) under the (Southern) Cross'


## The University of Adelaide - Graduate Attributes

The University of Adelaide is a research-intensive university which seeks to develop graduates of international distinction by supporting high quality education.

The University of Adelaide provides an environment where students are encouraged to take responsibility for developing the following attributes:

1 Knowledge and understanding of the content and techniques of a chosen discipline at advanced levels that are internationally recognised.

2 The ability to locate, analyse, evaluate and synthesise information from a wide variety of sources in a planned and timely manner.

3 An ability to apply effective, creative and innovative solutions, both independently and cooperatively, to current and future problems.

4 Skills of a high order in interpersonal understanding, teamwork and communication.
5 A proficiency in the appropriate use of contemporary technologies.
6 A commitment to continuous learning and the capacity to maintain intellectual curiosity throughout life.

7 A commitment to the highest standards of professional endeavour and the ability to take a leadership role in the community.

8 An awareness of ethical, social and cultural issues and their importance in the exercise of professional skills and responsibilities.

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Note: The information in this volume is accurate as at 17 October 2005

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## PhD Rules

1 There shall be a degree of Doctor of Philosophy.

## Rules

2.1 The Vice-Chancellor, with authority devolved to her/him by Council, and after receipt of advice from the Research Education and Development Committee, shall from time to time prescribe Rules defining the academic standing required for candidature, eligibility for enrolment, the program of study and research for the degree, the condition of candidature and the assessment for the degree
2.2 Such Rules shall become effective from the date of prescription by the Vice-Chancellor or such other date as the Vice-Chancellor may determine.

Guidelines
3 The Research Education and Development Committee may from time to time approve guidelines on any matters included in these Rules and may authorise the Dean of Graduate Studies or the Manager, Graduate Administration and Scholarships, to act in accordance with such guidelines without reference to the Committee in each case.

## Academic standing

4.1 The academic standing required for acceptance as a candidate for a Doctor of Philosophy in the University shall be an Honours degree of Bachelor of at least a IIA standard or a degree of Master of the University of Adelaide or the equivalent thereof. Where a Master's degree is presented as a qualification for admission to a PhD program, the Master's degree must contain a research component deemed appropriate by the Research Education and Development Committee. A Master's degree that contains only coursework will not be accepted for this purpose.
4.2 A person who holds an Honours or Masters degree of another university or equivalent thereof, may be accepted as a candidate provided that the program of study undertaken and the academic standard reached are equivalent to those required of a candidate who is a graduate of the University of Adelaide.
4.3 The Committee may accept as a candidate a graduate who does not qualify under Rules 4.1 or 4.2 but has demonstrated an outstanding level of academic achievement and
(a) has completed to the satisfaction of the Committee at least one year of full-time postgraduate study or research and passed a qualifying examination of Honours standard prescribed by the appropriate Faculty and approved by the Committee or
(b) obtained a qualification that includes a significant research component or
(c) is experienced in research as evidenced by significant research publications or written reports on research work done by the applicant.
4.4 Applicants for a Doctor of Philosophy must satisfy the minimum English language proficiency requirement as set by the university.

## Credit for work previously completed

5.1 At the time of application, the Committee may grant credit in the program for the degree of Doctor of Philosophy for research undertaken in another program in the University or in another university or tertiary institution.
5.2 In consideration for acceptance under Rule 5.1 the Committee must be satisfied that
(a) the person is of such academic standing as would be required of other candidates for the degree and
(b) the person's progress so far has been satisfactory and the research for which credit is granted is of a satisfactory standard.

## Enrolment

6.1 A person shall not be enrolled as a candidate for the degree unless:
(a) the applicant's proposed field of study and research is acceptable to the University and the School/ Discipline responsible for the supervision of the candidate's work
(b) in the case of a person granted credit under Rule 5.1, at least one year of full-time study and research, or its equivalent, will still be necessary to complete the work for the degree
6.2 Except with the permission of the Dean of Graduate Studies, a candidate may not enrol concurrently in another academic program.
6.3 Except with the permission of the Dean of Graduate Studies, a candidate who is permitted to enrol concurrently in another academic program and who is granted leave of
absence must intermit all academic programs in which they are enrolled.

## Duration of candidature and mode of study

7 A candidate may proceed to the degree by full-time study or, if the Head of the School/Discipline concerned is satisfied that the candidate has adequate time to pursue supervised research under the control of the University, by half-time study. Except in circumstances approved by the Committee, the work for the degree shall be completed and the thesis submitted:
(a) in the case of a full-time candidate, not less than two years and not more than four years from the date of commencement of candidature
(b) in the case of a half-time candidate, not less than four years and not more than eight years from the date of commencement of candidature
(c) in the case of a candidate granted credit under Rule 5.1 the candidature shall normally expire
(i) in the case of a full-time candidate, not less than one year and not more than four years from the date the candidate commenced work in the other program or
(ii) in the case of a half-time candidate, not less than two years and not more than eight years from the date the candidate commenced work in the other program.

## Work for the degree

8.1 A candidate shall pursue an approved program of study and research under the control of the University and under the general guidance of supervisors appointed by the University leading to the generation of a thesis. At least one supervisor shall be a member of the academic staff of the School/Discipline of the University in which the candidate is enrolled.
8.2 The thesis shall:
(a) display original and critical thought
(b) be a significant contribution to knowledge
(c) relate the topic of research to the broader framework of the discipline within which it falls and
(d) be clearly, accurately and cogently written and be suitably illustrated and documented.
8.3 The thesis may comprise a conventional written narrative presented as typescript (see University Calendar Specifications for Thesis), a single major publication such as a book or a portfolio of publications that have been accepted following peer review (see Rule 8.4) or creative or visual work(s) (see Rules 8.5 and 19.3-19.5).
8.4 In the case of a thesis that comprises a single publication or portfolio of publications, publication(s) must not have been accepted for any other university award.
(i) The thesis shall also contain: a contextual statement that normally includes the aims underpinning the publication(s); a literature review or commentary that establishes the field of knowledge and provides a link between publications; and a conclusion showing the overall significance of the work and contribution to knowledge.
(ii) A portfolio of publications submitted as a PhD thesis must be closely related in terms of subject matter and form a cohesive research narrative.
The length of a major publication and the number and length of scholarly works included in a portfolio of publications shall be determined by Faculties in consultation with specific Discipline areas. Where the publication(s) are deemed to constitute a body of work worthy of the award, the candidate may include additional material submitted for publication.
(iv) Where publications have multiple authorship, the PhD candidate will be the first or principal author and must have written permission of the co-authors.
(v) Only publications that have been published or accepted by publishers approved by the Discipline and in accordance with DEST criteria for the Higher Education Research Data Collection may be included in the portfolio under these Rules.
8.5 Where other materials are to be examined, such as in the case of a thesis comprising creative work(s), the candidate must seek approval from the Research Education and Development Committee for the form and presentation of the thesis by the time of completion of the research proposal (see Rule 9.4).
(i) The creative work may be in the form of exhibition, music composition or performance, literary work, film or other format approved by the Research Education and Development Committee.
(ii) The creative work should provide a coherent demonstration that the candidate has reached an appropriate standard in the research and has made a significant and original contribution to knowledge in the area. The creative work should be the research outcome, while the exegesis that accompanies it should describe the research process and elaborate, elucidate and place in context the artistic practice undertaken.
8.6 the candidate shall present the context and importance of the research at a School/Discipline seminar.
8.7 the Head of School/Discipline shall certify that the thesis is worthy of examination.

## Required program of activities at the commencement of candidature

9.1 Each candidate (including those on remote candidature ) will be enrolled on a provisional basis for the first twelve months of the degree.
9.2 Continuation of enrolment at the end of this period will depend on overall academic progress and the completion of set activities to the satisfaction of the School/ Discipline concerned. These activities will form part of a Structured Program of activities extending through the candidature.
9.3 Such activities will be determined by the School/Discipline through which the candidate is enrolled and in the first year will include the completion and presentation of the research proposal and other programs and skills training deemed necessary by the School/Discipline. In the case of international students, completion of the Integrated Bridging Program is also required, except in those cases where an exemption has been granted.
9.4 The research proposal will be agreed and submitted to the Adelaide Graduate Centre preferably within three, but no later than six months from the commencement of candidature.
9.5 A major review of progress after twelve months will recommend confirmation of candidature, termination, or the extension of provisional status. In the case of extension, a further review after a clearly defined period, normally three but not in excess of six months would form the basis for confirmation or termination or change to a Masters enrolment.
9.6 A candidate who has completed the first year of a Master's program by research and who is qualified and permitted by the Committee to transfer to the degree of Doctor of Philosophy will be deemed to have completed the Core Component of the Structured Program of activities and the transfer will confirm candidature in the PhD .

## Remote candidature

10.1 Initial enrolment as a remote candidate may be permitted on academic grounds where the Schoo//Discipline concerned can ensure the provision of external supervision, facilities and affiliation to the satisfaction of the Research Education and Development Committee.
10.2 Unless otherwise exempted, a remote candidate will be required to complete a period of residence in the University of Adelaide as determined by the Research Education and Development Committee in consultation with the School/Discipline concerned.
10.3 Notwithstanding Rule 10.2, a remote candidate will normally be required to undertake their candidature in an
internal attendance mode until such time as the Core Component of the Structured Program has been completed.
10.4 In accordance with Rule 7, a remote candidate may proceed to the degree either by full-time or half-time study.
10.5 On the recommendation of the School/Discipline, the Committee at any time may permit an enrolled student to enrol as a remote candidate subject to the conditions specified in $10.1,10.2,10.3$ and 10.4 above.
10.6 A remote candidate may be permitted to convert to an internal mode of attendance at any time and shall be subject to the conditions normally applied.
10.7 Not withstanding Rules 10.1 to 10.5 above, remote candidates are also required to abide by the other Rules and guidelines for the Degree of Doctor of Philosophy.

## Joint candidature

11.1 Enrolment as a joint candidate may be permitted where a program of cooperation has been formally agreed between the University of Adelaide and another institution for jointly awarded degrees.
11.2 When it is proposed that the candidate spend the majority of candidature away from Adelaide, the Research Education and Development Committee must approve conditions as in 11.1.
11.3 Upon successful completion of the work for the degree, the badges of both institutions may appear on the parchment awarded.

## Review of academic progress

12.1 The Committee may review the progress of a candidate at any time during the program of candidature and, if the candidate's progress is unsatisfactory, may terminate the candidature.
12.2 A formal review of a candidate's progress shall be conducted by the School/Discipline at least once a year in accordance with guidelines determined by the Research Education and Development Committee and outlined in the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees.
12.3 A formal review of progress and confirmation of candidature will occur twelve months after enrolment (see 9.2 above). Additional reviews will occur around October each year with written reports forwarded to the Dean of Graduate Studies. A candidate's re -enrolment in the following year is conditional upon satisfactory progress in the year of the review.

## Absence from the university

13 Except for remote candidates the Committee, on the recommendation of the School/Discipline concerned, may permit a candidate to pursue away from the University work connected with the research for the degree. Such permission may only be granted under special circumstances during provisional candidature.

Leave of absence
14 A candidate whose work is interrupted for a period of time may be granted a leave of absence by the Committee of up to 12 months. If such an application is approved the minimum and maximum periods specified in Rule 7 will be adjusted accordingly by adding the length of the leave of absence.

15 A candidate granted leave of absence will formally inform the Adelaide Graduate Centre of resumption of candidature within fourteen days of the approved rate of return, or else, the Research Education and Development Committee may terminate candidature.

16 A candidate seeking to extend a period of leave of absence granted will formally apply for an extension of leave at least one week prior to the originally approved date of return.

## Extension of candidature

17 A candidate may be granted by the Committee one extension of candidature only of twelve months beyond the maximum period specified in Rule 7. If the thesis has not been submitted by the end of the extended period the candidature will lapse.

## Completion of thesis outside the university

A candidate who has completed the equivalent of two years of full-time work under the control of the University, who has completed the experimental work (where appropriate) and whose progress is sufficiently well advanced to permit the satisfactory completion of the thesis outside the University, may be granted permission by the Committee to complete the writing-up of the thesis outside the University. If such permission is granted the candidate will be allowed either twelve months or until the end of candidature, whichever is the lesser, to submit the thesis. If the thesis has not been submitted by the end of the writing-up period the candidature will lapse.

## Lapsed candidature

19.1 A candidature, which has lapsed, will be resumed if the completed thesis, which has not departed from the field of study that was being pursued before the candidature lapsed, is subsequently submitted to the Manager, Graduate Administration and Scholarships. The thesis will only be accepted for examination if the School/Discipline certifies that it is satisfactory to that School/Discipline.
19.2 Approval of the Committee is required for the resumption of a lapsed candidature under any other conditions.
19.3 In special circumstances the Committee may approve the resumption of a lapsed candidature for one period of up to six months (whether full- or half-time) prior to the submission of the completed thesis.

## Intention to submit thesis

20 A candidate shall notify the Manager, Graduate Administration and Scholarships, in writing, approximately three months before he or she expects to submit the thesis required under Rule 21. A summary of the thesis, together with the proposed thesis title, shall be submitted at the same time.

## Submission and examination of the thesis

21.1 On completion of the approved program of study and research a candidate shall submit a thesis embodying the results of that study and research, and may submit also, in support of the thesis, other relevant material.
21.2 The thesis may comprise a portfolio of scholarly works published during candidature. The format shall be in accordance with Rules 8.4 (i) to 8.4 (vi).
21.3 In the case of a doctoral thesis submitted in the areas of musical, artistic or visual practice, presentation may be in one of three forms, a) by a theoretical thesis or b) by one or more creative works and an exegesis or c) a series of music performance recordings and an exegesis.
21.4 In the case of a doctoral thesis submitted in the areas of musical, artistic or visual practice, the creative work and the exegesis will not be examined separately but as an integrated whole constituting the original and substantial contribution to knowledge required from doctoral candidates.
21.5 In the case of visual arts, the examiners will attend the exhibition at which time they will be given a copy of the exegesis in temporary binding. A final copy of the exegesis will be provided to the examiners within three months of their viewing the creative work.
21.6 The thesis and any other material submitted shall be assessed by examiners external to the University.
21.7 No thesis, material or publications presented for any other degree within this or any other institution shall be so submitted.
21.8 The Committee shall prescribe the form in which the thesis shall be submitted and the number of copies to be submitted.

## Appointment of examiners

22.1 Candidates shall have the right to submit objections to the appointment of potential examiners. Any such objections should be submitted to the Manager, Graduate Administration and Scholarships, at the same time as the notification of intention to submit required under Rule 20. Such objections do not serve as a veto.
22.2 The Committee shall appoint two examiners who are external to the University, taking account of any objections raised under Rule 22.1 and the recommendations of the head of the relevant School/Discipline.
22.3 The examiners shall be requested to report in such form as the Committee will determine and to recommend one of the alternatives listed in Rule 23.
22.4 After consideration of the reports of the examiners, the Committee may appoint a third external examiner and/or an external arbitrator.

## Examination results

23 After consideration of the reports of the examiners and such other information as it thinks fit, the Committee shall determine that:
(a) the candidate be awarded the degree or
(b) the candidate be awarded the degree but that minor amendments be made to the thesis or
(c) the candidate be awarded the degree subject to the specified amendments being made to the thesis or
(d) the candidate be not awarded the degree but be permitted to re-submit the thesis in a revised form or
(e) the candidate be awarded the appropriate degree of Master or
(f) the candidate be awarded the appropriate degree of Master upon making suitable amendments to the thesis or
$(\mathrm{g})$ the candidate be not awarded the degree of Doctor of Philosophy or the degree of Master or
(h) for candidates who submitted in publication format, any amendments under 23(b), (c) or (d) shall be confined to the contextual statements referred to in Rule 8.4(i).
24 In the case of a thesis presented for re-examination as provided for in Rule 23(d), the thesis will, as far as possible, be assessed by the original examiners.

25 A thesis presented for re-examination will not be submitted for further re-examination.

## Deposit of thesis in the library

26 Such number of copies of a thesis and any other material on which the degree is awarded shall be deposited in the Barr Smith Library or elsewhere in the University as determined by the Committee. Unless otherwise determined by the Committee, the copies shall be available for loan and photocopy.

## Loan or photocopy of thesis

27 A candidate who does not wish to allow the thesis to be lent or photocopied when it is deposited in the Library under Rule 26 shall make a written application to the Manager, Graduate Administration and Scholarships, at the same time as he or she notifies his or her intention to submit under Rule 20. The withholding of such permission and the period of time involved shall be determined by the Committee.

## General

When, in the opinion of the Research Education and Development Committee, special circumstances exist, the Committee, on the recommendation of the relevant School/Discipline in each case, may vary any of the provisions in Rules 1-27 above.

## Masters Degrees by Research

The General Academic Program Rules shall apply to all Masters by Research programs at the University of Adelaide. Specific Academic Program Rules for other Masters by Research awards have been developed within the framework of these General Masters Rules and are listed under their respective Faculty/School. The following academic programs have no specific Academic Program Rules and therefore are bound entirely by the General Masters Program Rules:

- Master of Agricultural Science
- Master of Applied Science
- Master of Design Studies
- Master of Design Studies (Landscape)
- Master of Science
- Master of Urban Design


## General Masters Rules

1 All students must comply with both the General and Specific Academic Program Rules and are advised to refer to them to gain an understanding of their rights and responsibilities regarding program matters.

## Rules

2 The Research Education and Development Committee may from time to time approve guidelines on any matters included in these Rules and may authorise the Dean of Graduate Studies or the Manager, Graduate Administration and Scholarships, to act in accordance with such guidelines without reference to the Committee in each case. Notwithstanding this, Faculties may develop their own specific guidelines as permitted within the framework of these Rules.

## Definitions

3.1 A Masters Degree by Research shall, in general, have the objectives of
(a) training students in research methodology and techniques
(b) developing critical evaluation skills appropriate to their research topic
(c) application of such methods by conducting a specified program of research under appropriate supervision and the development of new knowledge where possible
(d) providing training in literature analysis and
(e) encouraging debate in the substantive area of the thesis at an advanced level.
3.2 Examiners for a Masters degree should satisfy themselves that the candidate has
(a) a thorough understanding of the relevant methodology as demonstrated by a thorough critical review of the literature
(b) demonstrated competence through judicious selection and application of appropriate methods to yield meaningful results
(c) demonstrated the capacity to evaluate critically these results and presented a clear and well written thesis or portfolio of scholarly publications (see 8.3 below).

## Academic Standing

4.1 The academic standing required for acceptance as a candidate for a Masters degree by research in the University shall be an Honours degree of Bachelor or a degree of Master of the University of Adelaide or the equivalent thereof. Where a Master's degree is presented as a qualification for admission to a Masters by Research program, the Master's degree must contain a research component deemed appropriate by the Research Education and Development Committee. A Master's degree that contains only coursework will not be accepted for this purpose.
4.2 A person who holds an Honours or Masters degree of another university or equivalent thereof, may be accepted as a candidate provided that the program of study undertaken and the academic standard reached are equivalent to those required of a candidate who is a graduate of the University of Adelaide.
4.3 The Committee may accept as a candidate a graduate who does not qualify under Rules 4.1 or 4.2 but has demonstrated a high level of academic achievement and
(a) has completed to the satisfaction of the Committee at least one year of full-time postgraduate study or research and passed a qualifying examination of Honours standard prescribed by the appropriate Faculty and approved by the Committee or
(b) obtained a qualification that includes a significant research component or
(c) is experienced in research as evidenced by research publications or written reports on research work done by the applicant.
4.4 Applicants for a Masters degree by Research must satisfy the minimum English language proficiency requirement as set by the university.

## Credit for work previously completed

5.1 At the time of application, the Committee may grant credit in a Masters by Research program for research undertaken in another program in the University or in another university or tertiary institution.
5.2 In consideration for acceptance under Rule 5.1, the Committee must be satisfied that
(a) the person is of such academic standing as would be required of other candidates for the degree and
(b) the person's progress so far has been satisfactory and the research for which credit is granted is of a satisfactory standard.

## Enrolment

6.1 A person shall not be enrolled as a candidate for the degree unless:
(a) the applicant's proposed field of study and research is acceptable to the University and the School/Discipline responsible for the supervision of the candidate's work
(b) there are available at least two supervisors able to provide supervision of the proposed candidacy throughout its likely duration. The principal supervisor shall be a member of the academic staff of the School/Discipline of the University in which the candidate is enrolled and
(c) suitable resources and facilities are available (either in the University or, by arrangement acceptable to the Faculty, elsewhere) for the proposed research to be undertaken.
6.2 Except with the permission of the Dean of Graduate Studies, a candidate may not enrol concurrently in another academic program.
6.3 Except with the permission of the Dean of Graduate Studies, a candidate who is permitted to enrol concurrently in another academic program and who is granted leave of
absence must intermit all academic programs in which they are enrolled.

## Duration of candidature and mode of study

7.1 A candidate may proceed to the degree by full-time study or, if the Head of the School/Discipline concerned is satisfied that the candidate has adequate time to pursue supervised research under the control of the University, by half-time study. Except in circumstances approved by the Committee, the work for the degree shall be completed and the thesis submitted.
7.2 (a) in the case of a full-time candidate, not less than one year nor more than two years from the date of commencement of candidature
(b) in the case of a half-time candidate, not less than two years nor more than four years from the date of commencement of candidature.
(c) in the case of a candidate granted credit under Rule 5.1 , the candidature shall normally expire:
(i) in the case of a full-time candidate, not less than one year and not more than two years from the date the candidate commenced work in the other program or
(ii) in the case of a half-time candidate, not less than two years and not more than four years from the date the candidate commenced work in the other program.

## Work for the degree

8.1 A candidate shall pursue an approved program of study and research under the control of the University and under the general guidance of supervisors appointed by the University leading to the generation of a thesis.
8.2 Where a Masters by research program contains course work, the candidate shall be required to pass both the course work and thesis components independently but, in exceptional circumstances, this requirement may be waived by the Committee.
8.3 The thesis may comprise a conventional written narrative presented as typescript and where acceptable to the Faculty, a portfolio of publications that have been accepted following peer review (see Rule 8.4).
8.4 In the case of a thesis that comprises a portfolio of publications, publication(s) must not have been accepted for any other university award.
(i) the thesis shall also contain: a contextual statement that normally includes the aims underpinning the publication(s); a literature review or commentary that establishes the field of knowledge and provides a link between publications; and a conclusion showing the
overall significance of the work and contribution to knowledge.
(ii) a portfolio of publications submitted, as a Masters by Research thesis must be closely related in terms of subject matter and form a cohesive research narrative.
(iii) the number and length of scholarly works included in a portfolio of publications shall be determined by Faculties in consultation with specific Discipline areas. Where the publication(s) are deemed to constitute a body of work worthy of the award, the candidate may include additional material submitted for publication.
(iv) where publications have multiple authorship, the Masters candidate will be the first or principal author and must have written permission of the co-authors.
(v) only publications that have been published or accepted by publishers approved by the Discipline and in accordance with DEST criteria for the Higher Education Research Data Collection may be included in the portfolio under these Rules.
8.5 the candidate shall present the context and importance of the research at a School/Discipline seminar.
8.6 the Head of School/Discipline shall certify that the thesis is worthy of examination.

## Required program of activities at the commencement of candidature

9.1 Each candidate (including those on remote candidature) will be enrolled on a provisional basis for the first twelve months of the degree.
9.2 Continuation of enrolment at the end of this period will depend on overall academic progress including the satisfactory completion of the Core Component of the Structured Program within six months (or part time equivalent) from the commencement of candidature.
9.3 Such activities will be determined by the School/Discipline through which the candidate is enrolled and in the first year will include the completion and presentation of the research proposal and other programs and skills training deemed necessary by the School/Discipline. In the case of international students, completion of the Integrated Bridging Program is also required, except in those cases where an exemption has been granted.
9.4 The research proposal will be agreed and submitted to the Adelaide Graduate Centre preferably within three, but no later than six months from the commencement of candidature.
9.5 A Major Review of progress after twelve months will recommend confirmation of candidature, termination, or the extension of provisional status. In the case of
extension, a further review after a clearly defined period, normally three months, would form the basis for confirmation or termination of enrolment.
9.6 A candidate who has completed the first year of a Masters by research program and who is qualified and permitted by the Committee to transfer to the degree of Doctor of Philosophy will be deemed to have completed the Core Component of the Structured Program and the transfer will confirm candidature in the PhD.

## Remote candidature

10.1 Initial enrolment as a remote candidate may be permitted on academic grounds where the School/Discipline concerned can ensure the provision of external supervision, facilities and affiliation to the satisfaction of the Research Education and Development Committee.
10.2 Unless otherwise exempted a remote candidate will normally be required to complete a period/s of residence in the University of Adelaide as determined by the Research Education and Development Committee in consultation with the School/Discipline concerned.
10.3 Notwithstanding Rule 10.2, a remote candidate will normally be required to undertake their candidature in an internal attendance mode until such time as the Core Component of the Structured Program has been completed.
10.4 In accordance with rule 7.1, a remote candidate may proceed to the degree either by full-time or half-time study.
10.5 On the recommendation of the School/Discipline, the Committee at any time may permit an enrolled student to enrol as a remote candidate subject to the conditions specified in 10.1, 10.2 and 10.3 above.
10.6 A remote candidate may be permitted to convert to an internal mode of attendance at any time and shall be subject to the conditions normally applied.
10.7 Not withstanding Rules 10.1 to 10.6 above, remote candidates are also required to abide by the other Rules and guidelines for the degree of Masters by Research.

## Review of academic progress

11.1 The Committee may review the progress of a candidate at any time during the program of candidature.
11.2 A formal review of a candidate's progress shall be conducted by the School/Discipline at least once a year in accordance with guidelines determined by the Research Education and Development Committee and outlined in the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees .
11.3 A formal review of progress and confirmation of candidature will occur twelve months after enrolment (see 9.5 above). Additional reviews will occur around October each year with written reports forwarded to the Dean of Graduate Studies. A candidate's re-enrolment in the following year is conditional upon satisfactory progress in the year of the review.
11.4 Following a formal review, if, in the opinion of the Committee, a candidate is not making satisfactory progress, it may place the candidate on probation for one semester, requiring satisfactory completion of a defined program of research activities in that semester.
11.5 Failure to complete the program of activities (determined in 11.3) to the satisfaction of the Faculty will, with the endorsement of the Committee lead to the termination of candidature.

## Leave of absence

A candidate whose work is interrupted for a period of time may be granted a leave of absence by the Committee of up to twelve months. If such an application is approved, the minimum and maximum periods specified in Rule 7.1 will be adjusted accordingly by adding the length of the leave of absence.

13 A candidate granted leave of absence will formally inform the Adelaide Graduate Centre of resumption of candidature within fourteen days of the approved rate of return, or else, the Research Education and Development Committee may terminate candidature.

A dill for of granted will formally apply for an extension of leave at least one week prior to the originally approved date of return.

## Extension of candidature

Irrespective of full time or half time status, a candidate may be granted by the Committee one extension of candidature only of six months beyond the maximum period specified in Rule 7.1. If the thesis has not been submitted by the end of the extended period, the candidature will lapse.

## Completion of thesis outside the University

A candidate who has completed the equivalent of one year of full-time work under the control of the University, who has completed the experimental work (where appropriate) and whose progress is sufficiently well advanced to permit the satisfactory completion of the thesis outside the University, may be granted permission by the Committee to complete the writing-up of the thesis outside the University. If such permission is granted the candidate will be allowed either twelve months or until the end of
candidature, whichever is the lesser, to submit the thesis. If the thesis has not been submitted by the end of the writing-up period the candidature will lapse.

## Lapsed candidature

17.1 A candidature which has lapsed will be resumed if the completed thesis, which has not departed from the field of study that was being pursued before the candidature lapsed, is subsequently submitted to the Manager, Graduate Administration and Scholarships. The thesis will only be accepted if the School/Discipline certifies that it is satisfactory to that School/Discipline.
17.2 Approval of the Committee is required for the resumption of a lapsed candidature under any other conditions.
17.3 In special circumstances, the Committee may approve the resumption of a lapsed candidature for one period of up to six months (whether full- or half-time) prior to the submission of the thesis.

## Intention to submit thesis

18 A candidate shall notify the Manager, Graduate Administration and Scholarships, in writing, approximately three months before he or she expects to submit a thesis for examination. A summary of the thesis, together with the proposed thesis title, shall be submitted at the same time.

## Submission and examination of the thesis

19.1 On completion of the approved program of study and research a candidate shall submit a thesis embodying the results of that study and research, and may submit also, in support of the thesis, other relevant material.
19.2 The thesis shall embody the values described in Rule 3.2.
19.3 The thesis may comprise a portfolio of scholarly works published during candidature. The format shall be in accordance with Rules 8.4 (i) to 8.4 (vi).
19.4 No thesis, material or publications presented for any other degree within this or any other institution shall be so submitted.
19.5 The Committee shall prescribe the form in which the thesis shall be submitted and the number of copies to be submitted.

## Appointment of examiners

20.1 Candidates shall have the right to submit objections to the appointment of potential examiners. Any such objections should be submitted to the Manager, Graduate Administration and Scholarships, at the same time as the notification of intention to submit required under Rule 18. Such objections do not serve as a veto.
20.2 Assessment of the thesis shall in every case be by not less than two examiners appointed by the Committee of whom:
(a) at least one shall be external to the University
(b) at least one shall be an academic member or affiliate of a tertiary institution.
20.3 The candidate's supervisors shall not be eligible to act as examiners.
20.4 The examiners shall be requested to report in such form as the Committee will determine and to recommend one of the alternatives listed in Rule 21.1.
20.5 After consideration of the reports of the examiners, the Committee may appoint a third external examiner and/or an external arbitrator.

## Examination results

21.1 After consideration of the reports of the examiners and such other information as it thinks fit, the Committee shall determine that:
(a) the candidate be awarded the degree or
(b) the candidate be awarded the degree but that minor amendments be made or
(c) the candidate be awarded the degree subject to the specified amendments being made to the thesis or
(d) the candidate be not awarded the degree but be permitted to re-submit the thesis in revised form within one year or
(e) the candidate be not awarded the degree.
21.2 For candidates who submitted in publication format, any amendments under 21.1 (b), (c) or (d) shall be confined to the contextual statement referred to in Rule 8.4(i).
21.3 In the case of a thesis presented for re-examination as provided for in Rule 21.1 (d), the thesis will, as far as possible, be assessed by the original examiners.
21.4 A thesis presented for re-examination will not be submitted for further re-examination.

## Deposit of thesis in the library

Such number of copies of a thesis and any other material on which the degree is awarded shall be deposited in the Barr Smith Library or elsewhere in the University as determined by the Committee. Unless otherwise determined by the Committee, the copies shall be available for loan and photocopy.

## Loan or photocopy of thesis

23 A candidate who does not wish to allow the thesis to be lent or photocopied when it is deposited in the Library under Rule 22 shall make a written application to the Manager, Graduate Administration and Scholarships, at the same time as he or she notifies his or her intention to submit under Rule 18. The withholding of such permission and the period of time involved shall be determined by the Committee.

## Graduation

24 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## General

When, in the opinion of the Research Education and Development Committee, special circumstances exist, the Committee, on the recommendation of the relevant Faculty in each case, may vary any of the provisions in Rules 1-24 above.

## Introduction

This document must be read in conjunction with the:
(a) Academic Program Rules for the relevant degree/s which are published in Volume II of the University Calendar and
(b) The Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees, published by the Adelaide Graduate Centre.
These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters degrees by research offered by the University of Adelaide. These degrees are awarded mainly on the successful examination of a thesis prepared by the student under supervision and embodying the results of a period of research. (Faculties may also apply these guidelines to the research components of those Masters degrees which have an advanced study or coursework component and a research component.)

These documents are intended for use by supervisors and students throughout the period of candidature and will be a useful reference for intending students, Heads of Schools/Disciplines and Postgraduate Coordinators.

## 1 The enrolment process

### 1.1 The decision to enrol

Several factors must be taken into account by a potential student and the Head of the relevant School/Discipline before a decision is made about enrolling in a higher degree.
(a) Academic

In general, it is necessary for the potential student to have qualified for an Australian university honours degree (first or second class) or its equivalent, or higher.

## (b) Finance

The degree of Doctor of Philosophy and Masters by Research can be completed on a half-time basis, so that it is possible for students, in some instances, to be self-supporting from sources other than scholarships while enrolled. The University and the Commonwealth Government each offers a limited number of postgraduate scholarships annually almost exclusively to full-time students. Details of the scholarships available may be obtained from the Adelaide Graduate Centre.

Schools and Disciplines receive funding which is based (in part) on the number of postgraduate students enrolled in the School/Discipline, and they are expected to provide adequate equipment and funds for the research to be carried out. In particular, the development of the research proposal must take account of both the academic acceptability of the project and the resource implications for the School/Discipline and Faculty concerned.
(c) Choice of research topic and supervisors

A person who is contemplating enrolling for a higher degree should discuss the proposed candidature with the Head or Postgraduate Coordinator and members of the relevant School(s)/Discipline(s), and a decision must be made before the commencement of the candidature on the general area of study and the supervisors to be appointed to guide the student in the research. Since it is important that the supervisors are active in the general area of research which is chosen, it is clear that the choice of the research topic and supervisors are inter-related and decisions on both matters will need to be made together.
Guidelines for the supervision of higher degree by research students are outlined in the Code of Practice. Intending students may find it useful to discuss the general approach to supervision with potential supervisors at the outset. Clear understandings on issues such as how closely the work is to be supervised, the planned frequency of meetings between supervisors and students, the expectation of such meetings and the nature and level of commentary on the various stages of the work should be reached as soon as the supervisor has been appointed.
Where a student is to participate in a team project, the student's specific contribution to the project and the relationship with other participants should be clarified at the outset.

Where a student is to enrol in the Program remotely (refer Section 3 below), appropriate external supervision must be confirmed by the Head of School/Discipline, and approved by the Research Education and Development Committee, prior to enrolment. External supervisors should be affiliated with an appropriate university or research facility.

### 1.2 Enrolment

Research students are advised to enrol and commence their studies at the beginning of either Semester I or Semester II, as appropriate, so that they can participate in the Structured Program organised by their respective Faculty/School/Discipline and the compulsory Induction Program organised by the Adelaide Graduate Centre.

Enrolment forms are issued only when an application for candidature has been accepted. In the case of an applicant who had previously enrolled in a program in the University of Adelaide, an enrolment form will NOT be issued if the applicant has outstanding financial or other obligation(s) with the University. If you are in such a position, please contact the Student Centre for further details. Completed forms must be returned before the date on which work commences for the degree.

## 2 The Structured program

Each student commencing a PhD or Masters by Research is required to complete a Structured Program. The program comprises a Core Component to be completed within six months from the commencement of candidature (or part time equivalent) and a Development Component that extends for the duration of candidature. The Core Component involves at a minimum the completion and presentation of a detailed research proposal at a School/Discipline seminar, participation in a School/Discipline induction and regular attendance of the School/Discipline seminar program. Students will be required to complete and submit the Completion of the Core Component of the Structured Program form to the Adelaide Graduate Centre upon completion of the Core Component.
The focus of the Development Component is on acquiring professional and transferable skills that will facilitate the student's transition to a range of work environments. Participation in Development Component activities will be monitored as part of the Annual Review of Progress.
2.1 The Integrated Bridging Program (IBP) for international research students
Where applicable, international students, who have not been granted an exemption, are required to complete the Integrated Bridging Program as part of the Core Component of the Structured Program. The IBP is an innovative and successful 12-week program to help international research students gain access quickly and effectively to the academic, linguistic and cultural conventions of postgraduate study in their School or Discipline within the University of Adelaide. It usually focuses on supporting students in the production of a literature review and a research proposal, presented both as an oral presentation
and as a written document. On arrival, all international research students should contact the IBP staff in the Adelaide Graduate Centre to discuss how the program can best contribute to supporting their progress.

3 Remote program for Higher Degrees by Research

Application for enrolment in the Remote Program must be made on the appropriate form. Special conditions will apply and applications are considered by the Research Education and Development Committee on a case by case basis. A period of residence at the University of Adelaide may be required. The Head of School/Discipline must ensure that appropriate external supervision and facilities are available before recommending to the Research Education and Development Committee that a student be permitted to enrol in the Remote Program.

If the status of candidature is to be full-time, the Research Education and Development Committee must be satisfied that the student is able to devote full attention to the research project. Accordingly, the student must provide documentation supporting the application in the form of, for example, a supporting letter from the external supervisor and/or the Head of the institution or facility in which the student is to undertake the research and this must be accepted by the School/Discipline and the Research Education and Development Committee.

The financial implications of the student's research project must be negotiated and clarified between the School/Discipline, and any other external institution that is involved in providing supervision or facilities, in advance of confirmation of the student's candidature. The University cannot accept any retrospective financial claims. Similarly, any claims to be made on the intellectual property generated by the student must be negotiated between and confirmed with all parties concerned in advance of confirmation of the student's candidature.

As with other internal students, Remote students will also be subject to the normal Academic Program Rules and policies, including reviews of academic progress and annual re-enrolment. The University of Adelaide will at all times retain the ultimate authority over all matters pertaining to the student's candidature, the process of examination of the thesis and the award of the degree.

## 4 Intellectual property

In instances where a student and supervisor identify a general area of research in a commercially sensitive area, the student must sign a Student Project Participation Agreement (SPPA) with the University at the time of enrolment or as soon as possible thereafter.

If a potential student is an employee of another organisation, a formal agreement must be reached between, the University and the student's employer with respect to the ownership of any intellectual property arising from the research, preferably prior to enrolment.

The SPPA or any agreement between the University and a student's employer must be signed before the completion of the Core Component of the Structured Program.

Further information
Intending students requiring further information are requested to contact the Adelaide Graduate Centre.

1 Preparation
The responsibility for the layout of the thesis and selection of the title rests with the student after discussion with the supervisor/s. Students must consult with their supervisors concerning selection of an appropriate style for the thesis. The student's supervisor(s)and Head of School or Discipline must provide certification that the thesis is worthy of examination and that the technical presentation of the thesis is satisfactory.

## 2 Thesis Format

A Doctoral thesis may comprise a conventional written narrative presented as typescript (2.1), a portfolio of publications (2.2) or creative or visual work/s (2.3). A Master's by Research thesis may comprise a conventional written narrative presented as typescript and, where acceptable to the Faculty, a portfolio of publications.
2.1 The thesis should incorporate in the following order
(a) a title page giving the title of the thesis in full, the name of the student, the name of the School/Discipline/s of the University associated with the work and the date (month and year) when submitted for the degree. Students should ensure that the thesis title is written in title case and does not exceed the character limit of 300 (including spaces).
(b) a table of contents
(c) an abstract of the thesis in not more than five hundred words
(d) a statement signed and dated by the student declaring the originality of the work, consent for the thesis to be made available to the university library and the situation with respect to copyright where applicable.
See Section 3 for examples of declarations to be included where:
(i) a thesis does not contain work already in the public domain
(ii) a thesis contains publications (i.e. where the work includes published papers).
If the student has any objections to including this statement the student must apply in writing to the Adelaide Graduate Centre, preferably prior to submission, for a period of embargo to be placed on the thesis.
(e) an acknowledgment of any help given or work carried out by any other person or organisation.
If a student has sought professional editorial advice, the name of the editor and a brief description of the
service rendered should be included in the acknowledgements. Should the professional editor's current or former area of academic specialisation be similar to that of the candidate this should be noted.

See Section 4 for details of the University's policy on editing.
(f) the main body of work (which may include either text or, as specified in clauses 2.2 and 2.3 respectively, a contextual statement and a portfolio of publications or creative works.
(g) appendices (if any)
(h) bibliography
(i) additional pages or other material not suitable for binding should normally be placed near the back of the thesis as an appendix and treated as indicated in 8.2(d)- (g).
2.2 In the case of a thesis presented as a portfolio of publications which have been subject to peer review, the thesis should incorporate in the following order:

- a title page, a table of contents and an abstract as per 2.1 (a)- (c)
- a declaration in accordance with 2.1 (d)
- an acknowledgement of any help given as per 2.1 (e)
- statements of the contributions of jointly authored papers (see (a) below)
- the main body of work in accordance with 2.1 (f) (see (b) below) and
- appendices, bibliography and additional pages or material as per 2.1 (g)-(i).
(a) where papers have multiple authorship, the candidate must be the first or principal author. Jointly authored papers must begin with a clear statement on the contribution made by each author. The statement must be sufficiently detailed to describe accurately the contribution of each author. All authors are required to sign the statement and co-authors must give written permission for the paper to be included in the thesis. Original signatures are preferred but scanned signatures are acceptable.
(b) the main body of work should contain in addition to the relevant publications a contextual statement which includes a literature review, a description of the research undertaken and its aims and objectives. It should also describe the linkages between the various papers which comprise the thesis so that the reader understands the logic behind the progression of the research program. The literature review will, of necessity, replicate literature cited in subsequent
chapters but should contain a clear statement on the significance of the project aims, a critical review of relevant literature, identification of knowledge gaps and the relationship of the literature to the experimental program.
The thesis should also contain a conclusion comprising an overarching discussion of the main features of the thesis including the principal significance of the findings, problems encountered and future directions of the work. The discussion should not include a detailed reworking of the discussions from individual papers within the thesis.
2.3 In the case of a doctoral thesis submitted in the areas of musical, artistic or visual practice the thesis should incorporate in the following order:
- a title page, a table of contents and an abstract as per 2.1 (a)- (c)
- a declaration in accordance with 2.1 (d)
- an acknowledgement of any help given as per 2.1 (e)
- the main body of work in accordance with 2.1 (f) (see (a) below) and
- appendices, bibliography and additional pages or material as per $2.1(\mathrm{~g})$-(i):
(a) The main body of work may be in one of three forms:
(i) by a theoretical thesis which may include either text or a portfolio of publications or
(ii) by creative work(s) and exegesis. The creative or visual work should be a substantial opus and the criteria for this work should be determined by the Faculty. Such substantial works would normally include a book length work appropriate to its genre or musical compositions which require more than 75 minutes for performance or
(iii) by recorded musical performances and exegesis. The recordings shall constitute a substantial body of work of up to four hours duration.

The length and format of the exegesis should be determined by the Faculty but normally should not exceed 50,000 words. It should contain a description of the form and presentation of the artistic practice which constitutes the remainder of the thesis and inter alia, an analytical commentary and consideration of the work in the broader framework of the discipline and/or repertory. It should demonstrate mastery of the conceptual and scholarly skills associated with higher degree candidature.

In the case of a written exegesis or thesis and visual works both presented in the format of a compact disc, the written exegesis or textual portion of the thesis shall also be presented in hard copy and must be presented in accordance with the guidelines.
3.1 For a Thesis that does not contain work already in the public domain
This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of my thesis, when deposited in the University Library, being made available in all forms of media, now or hereafter known.
3.2 For a Thesis that contains publications

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of my thesis being made available in the University Library.
The author acknowledges that copyright of published works contained within this thesis (as listed below ) resides with the copyright holder/s of those works.

## 4

## Editing

The University has adopted the policy developed by the Deans and Directors of Graduate Studies collaboratively with the Council of Australian Societies of Editors with regard to the editing of research theses by professional editors.

The policy has been developed with close attention to the current Australian Standards for Editing Practice (ASEP) and it espouses the following principles:

A professional editor may be used by students in preparing their thesis for submission provided that the editing assistance is restricted to ASEP Standards for 'Language and Illustrations' and for 'Completeness and Consistency'. Where a professional editor provides advice on matters of 'Substance and Structure' exemplars only should be given.
Further information about the ASEP standards is available on line at: www.case-editors.org.

Students should discuss the procedures with their principal supervisor and before editing is commenced provide the editor with a copy of this section of the Specifications for Thesis and details of the ASEP standards. Material for editing or proof-reading should be submitted in hard copy.

A thesis, which may be produced on both sides of the paper, should normally be printed on A4 paper in a clear and legible font (eg. Arial Narrow 12 or Times 12).

## Margins

Margins for both text and figures should not be less than 35 mm on the inside edge and 15 mm on the other three sides to allow for binding and trimming. (See also 'Softbinding of thesis for examination' under 8: Binding, below.)

## 6 Copying

6.1 Archival (acid free) copy

The archival (acid-free) copy should be marked accordingly and will become the University's copy following the award of the degree. The archival copy should be produced on archival (acid-free) paper to ensure its long-term preservation. The Barr Smith Library may produce a copy on archival (acid-free) paper at the same cost as a plain paper copy.

### 6.2 Additional copies

Additional copies should be produced on bond, or similar high-quality paper using a copying method which produces a good-quality copy. Chemically coated paper is acceptable for the production of a thesis only if it is known to provide a high quality reproduction and proven long-term stability

### 6.3 Audio and audio-visual recordings

Audio and audio-visual recordings should be produced on an internationally compatible medium using a copying method which creates a high quality audio and visual reproduction with proven longevity. Students should consult with their supervisors regarding the technical issues involved in the submission of digital media.

## 7 Diagrams and figures

The following are general suggestions for normal practice, but they may be varied in special cases with the approval of the Librarian.
7.1 Diagrams and figures, etc, should preferably be drawn or photographed on A4 paper and bound in the appropriate place in the text. If it is necessary to mount photographs, the mounting should be on paper somewhat heavier than that of the other pages, and great care should be taken to avoid wrinkling the paper or distorting the shape of the volume.
7.2 Figures should either be inserted at an appropriate place in the text, or form a separate page. For normal orientation with the top of the figure upwards, the legend should be at the bottom of the figure. If it is necessary to rotate the
figure, it should be placed on a separate page with the top of the figure on the left-hand side of the page and the legend on the right-hand side of the page. This applies regardless of whether the figure forms a left-hand or a right-hand page, but if the thesis is produced with the text only on right-hand pages, then figures should also appear only on right-hand pages. If there is insufficient space for the legend, it may be placed on the page facing the figure.
7.3 Tables should be inserted in the appropriate place in the text, except that lengthy or bulky tables should appear as an appendix.
7.4 Folded diagrams, maps, tables, etc, should read as righthand pages when open.
7.5 Musical notation and similar forms of written notation should be inserted in the appropriate place in the text, except that lengthy examples should appear as an appendix.

8 Binding

### 8.1 Soft-binding of thesis for examination

Higher degree students may opt to submit their thesis in soft bound form initially for examination purposes.

Students who wish to have their theses soft-bound should note that
(a) it is not possible to rebind a thesis that has been softcovered using the currently available methods, such as Thermo-Bind or Wire-Spiral, without having first to trim the left hand margin by 10 to 15 mm . This means that the provision for the left hand margin of the thesis must be at least 45 mm . This may result in an increase in the number of pages of the thesis and the consequent increase in cost of production.
(b) most soft-binding processes will handle up to around 30 mm in thickness. Many theses are thicker than this and may have to be bound in more than one volume.
(c) students are responsible for all costs incurred in the soft-binding of their thesis as well as in the subsequent hard-binding. Some scholarships provide a thesis allowance and costs may be refunded to students on presentation of relevant receipts.
(d) When the examination process (including the completion of any required amendments) is complete, students are obliged to submit three hard-bound copies of their thesis before a degree can be conferred.

### 8.2 Hard-binding

(a) The thesis must be sewn and bound with cloth on stiff covers. (A sprint-type or screw-type binder is unacceptable. Stapling and plastic or 'perfect' binding without sewing are also unacceptable.)
(b) During binding the edges should be trimmed.
(c) On the spine of the thesis should be printed, in gold lettering of suitable size, normally reading from the top to the bottom, the title of the thesis, shortened if necessary, followed by the student's surname. Where the width of the spine allows, the lettering may be placed horizontally, with the title of the thesis near the top of the spine and student's surname near the middle.
(d) Supplementary material such as folding maps and other large folded sheets and primary data on sheets, and data on CD or DVD, may be placed in a pocket inside the back cover of the bound thesis.
(e) In the case of published papers of unusual size it may be desirable to bind them in a separate volume. If they have been bound by a publisher it is desirable to keep them in a special case made and lettered to simulate a bound volume of a thesis.
(f) Supplementary material which cannot readily be kept in a pocket should be placed in a special case made and lettered to simulate a bound volume of the thesis.
(g) In some cases, it may be desirable to submit audio or audio-visual recordings in a separate volume made to simulate a bound volume of the thesis.
(h) In view of problems of long term storage stability, presentation of material in a form other than printed copy should not be contemplated without prior consultation with the University Librarian.
(i) A supplementary case or additional volume of a thesis should be distinguished by a volume number but should otherwise be uniform with the first part of the thesis in respect to colour, lettering and, as far as possible, size.

## 9 Australian Digital Thesis (ADT) Program

The University of Adelaide is a member of the Australian Digital Theses Program. This is a national collaborative program which aims to establish a distributed database of digital versions of theses produced by postgraduate research students at Australian Universities.
In addition to the required printed copies, University of Adelaide postgraduate research students are encouraged to deposit a digital copy of their thesis for inclusion in the national database of Australian theses. The database is accessible through the University of Adelaide Library's web pages, the Library's web catalogue, a national database of Australian theses and also through web search engines. Submission of a digital thesis copy will be compulsory from 2007.

It is preferred that the the digital version be in PDF format. Before the digital thesis can be deposited it must be a direct copy of the thesis which has been approved by the University for the award of the degree.

Further assistance and deposit instructions for digital theses are available on the Library's web site at: thesis.library.adelaide.edu

# Adelaide Graduate School of Business 

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## Notes on Delegated Authority

1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2 Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete a program of study comprising one (1) trimester of full-time study or two (2) trimesters of part-time study. Except with the permission of the Faculty, the requirements of the graduate certificate must be completed within 2 years.

## 2 Admission

2.1 An applicant for admission to the academic program for the Graduate Certificate in Management shall have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent, plus have at least two years approved relevant work experience.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the graduate certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the graduate certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award.
2.3.2 Status may be awarded in exceptional circumstances will only be awarded for equivalent graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 Exemption may be granted for up to 6 units where, in the opinion of the Faculty, the candidate has already presented a course for another award that contains substantially the same material as a core course in the program. All exemptions granted must be replaced by courses from other parts of the program.
2.3.5 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Faculty or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 (a) a candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty or nominee and then only under such conditions as may be prescribed.
(b) supplementary examinations are allowable only in exceptional circumstances. A candidate must apply for special permission from the Head of School. In the case of a supplementary examination being granted, the overall maximum grade achievable for the course is $50 \%$ Pass Division 2.

### 3.4 Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show reason as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward this program.

## 4 Qualification requirements

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 points, as follows:

### 4.1 Academic program

### 4.1.1 Core Courses

All candidates shall complete the following core courses:
MANAGEMT 7086 Fundamentals of Leadership
MANAGEMT 7100 Accounting for Managers 3
MANAGEMT 7104 Marketing Management

### 4.1.2 Elective courses

All candidates shall complete 1 elective course to the value of 3 units selected from the Master of Business
Administration (Advanced) program.

### 4.2 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete a program of study comprising two (2) trimesters of full-time study or four (4) trimesters of part-time study. Except with the permission of the Faculty, the requirements of the graduate diploma must be completed within 3 years.

## 2 Admission

2.1 An applicant for admission to the academic program for the Graduate Diploma of Business Administration shall have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent, plus have at least two years approved relevant work experience.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the graduate diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the graduate diploma.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award.
2.3.2 Status may be awarded in exceptional circumstances will only be awarded for equivalent graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 12 units of status.
2.3.4 Exemption may be granted for up to 12 units where, in the opinion of the Faculty, the candidate has already presented a course for another award that contains substantially the same material as a core course in the program. All exemptions granted must be replaced by courses from other parts of the program.
2.3.5 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Faculty or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Graduate Diploma of Business Administration who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate in Management may be admitted to the latter award, as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Management and who subsequently satisfies the requirements for the Graduate Diploma of Business Administration must surrender the Graduate Certificate before being admitted to the Graduate Diploma

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 (a) a candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty or nominee and then only under such conditions as may be prescribed.
(b) supplementary examinations are allowable only in exceptional circumstances. A candidate must apply for special permission from the Head of School. In the case of a supplementary examination being granted, the overall maximum grade achievable for the course is $50 \%$ Pass.

### 3.4 Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show reason as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward this program.

4 Qualification requirements
To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to the value of 24 units, as follows:

### 4.1 Academic program

4.1.1 Core Courses

All candidates shall complete the following core courses:
MANAGEMT 7086 Fundamentals of Leadership
MANAGEMT 7087 Managing Contemporary Organisations3

MANAGEMT 7100 Accounting for Managers 3
MANAGEMT 7101 Managerial Finance 3
MANAGEMT 7103 Economics for Management 3
MANAGEMT 7104 Marketing Management 3

### 4.1.2 Elective Courses

All candidates shall complete 2 elective courses to the value of 6 units selected from the Master of Business Administration program.
4.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising three (3) trimesters of full-time study or six (6) trimesters of part-time study. Except with the permission of the Faculty, the requirements of the degree must be completed within 5 years.

## 2 Admission

2.1 An applicant for admission to the academic program for the degree of Master of Business Administration shall have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent, plus have at least two years approved relevant work experience.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award.
2.3.2 Status may be awarded in exceptional circumstances will only be awarded for equivalent graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 18 units of status.
2.3.4 Exemption may be granted for up to 18 units where, in the opinion of the Faculty, the candidate has already presented a course for another award that contains substantially the same material as a core course in the program. All exemptions granted must be replaced by courses from other parts of the program.
2.3.5 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Faculty or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Business Administration who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate in Management or Graduate Diploma of Business Administration may be admitted to one of those awards, as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Management or Graduate Diploma of Business Administration and who subsequently satisfies the requirements for the Master of Business Administration must surrender the Graduate Certificate or Graduate Diploma before being admitted to the Masters degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 (a) a candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty or nominee and then only under such conditions as may be prescribed.
(b) supplementary examinations are allowable only in exceptional circumstances. A candidate must apply for special permission from the Head of School. In the case of a supplementary examination being granted, the overall maximum grade achievable for the course is $50 \%$ Pass

### 3.4 Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show reason as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward this program.

## . 4 Qualification requirements

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 36 units, as follows:

### 4.1 Academic program

### 4.1.1 Core Courses

All candidates shall complete the following core courses:
MANAGEMT 7013 Economics for Management 3
MANAGEMT 7044 Strategic Management 3
MANAGEMT 7079 E-Business - New Dimensions 3
MANAGEMT 7081 Global Business 3
MANAGEMT 7086 Fundamentals of Leadership 3
MANAGEMT 7087 Managing Contemporary
Organisations
MANAGEMT 7100 Accounting for Managers 3
MANAGEMT 7101 Managerial Finance 3
MANAGEMT 7104 Marketing Management 3
4.1.2 Elective Courses

All candidates shall complete 3 elective courses to the value of 9 units selected from the Master of Business Administration (Advanced) program.
4.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Business Administration (Advanced)

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising four (4) trimesters of full-time study or eight (8) trimesters of part-time study. Except with the permission of the Faculty, the requirements of the degree must be completed within 6 years.

## 2 Admission

2.1 An applicant for admission to the academic program for the degree of Master of Business Administration (Advanced) shall have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent, plus have at least two years approved relevant work experience.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award.
2.3.2 Status may be awarded in exceptional circumstances will only be awarded for equivalent graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 24 points of status.
2.3.4 Exemption may be granted for up to 18 units where, in the opinion of the Faculty, the candidate has already presented a course for another award that contains substantially the same material as a core course in the program. All exemptions granted must be replaced by courses from other parts of the program.
2.3.5 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Faculty or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Business Administration (Advanced) who does not complete the requirements for the degree but satisfies the requirements for the Graduate Certificate in Management, Graduate Diploma of Business Administration or Master of Business Administration may be admitted to one of those awards, as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Management, Graduate Diploma of Business Administration or Master of Business Administration and who subsequently satisfies the requirements for the Master of Business Administration (Advanced) must surrender the Graduate Certificate, Graduate Diploma or Masters before being admitted to the Master of Business Administration (Advanced) degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 (a) a candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty or nominee and then only under such conditions as may be prescribed.
(b) supplementary examinations are allowable only in exceptional circumstances. A candidate must apply for special permission from the Head of School. In the case of a supplementary examination being granted, the overall maximum grade achievable for the course is $50 \%$ Pass.

### 3.4 Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show reason as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance
may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward this program.

## 4 Qualification requirements

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 48 points, as follows:

### 4.1 Academic program

### 4.1.1 Core Courses

All candidates shall complete the following core courses:
MANAGEMT 7013 Economics for Management 3
MANAGEMT 7022 Business Law 3
MANAGEMT 7031 Operations Management 3
MANAGEMT 7044 Strategic Management 3
MANAGEMT 7079 E-Business - New Dimensions 3
MANAGEMT 7081 Global Business 3
MANAGEMT 7086 Fundamentals of Leadership 3
MANAGEMT 7087 Managing Contemporary
Organisations
MANAGEMT 7100 Accounting for Managers 3
MANAGEMT 7101 Managerial Finance 3
MANAGEMT 7104 Marketing Management 3
MANAGEMT 7225 Business Project 3

### 4.1.2 Elective Courses

All candidates shall complete 4 elective courses to the value of 12 units selected from the list of approved electives.
4.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Business Administration - Graduate Attributes

## Knowledge

- An understanding of trends in the political, economic, technological, social and cultural environments within which businesses operate.
- An understanding of the forces leading towards international convergence in managerial practices, and those leading to divergence.
- An understanding of the role of business in value creation through the integrated management of business processes.
- An understanding of principles of accounting, economics, finance, management of people at the individual and organisational level, marketing and strategy, and the relationships between these areas in the international business environment.
- An appreciation of the ethical, legal and social responsibilities facing managers and organisations.
- An appreciation of the constraints facing organisations as they balance the application of business and management theories to practical situations.
- An understanding of the theories and tools that support managerial decision making processes in organisations.


## Skills

- Ability to appreciate the changing knowledge base of management and the business environment and to respond to the demands for change.
- Capacity to engage with current issues of significance in business and management.
- Ability to effectively manage complex business situations that require understanding of a wide range of functional issues.
- Ability to evaluate and synthesise information and existing knowledge from numerous sources and experiences.
- Ability to manage business operations and relationships in a context of cultural and national diversity.
- Ability to integrate functional business skills and personal business experience to find progressive solutions for the challenges of today's businesses and organisations.
- Capacity to apply relevant theories to the demands of business and management practice.
- Ability to recognise the limits of management practice and a capacity to identify, develop and apply alternative methods to coincide diverging interests.
- Ability to identify complex business issues, ascertain their causes and effects through application of appropriate analytical tools, develop feasible and constructive solutions and provide advice to relevant business managers for successful implementation.
- Capacity to participate constructively in team situations to complete tasks and meet deadlines.
- High level analytical, critical thinking and problem solving skills.
- High level oral communication skills.
- High level written communication skills.
- Capacity to engage in life-long learning.


## Attitudes and Values

- A commitment to high levels of scholarship.
- A commitment to business ethics.
- An appreciation of social justice through organisations that pursue good governance, meet professional standards and conform to societal norms.


## School of Architecture, Landscape Architecture \& Urban Design

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M.Des.St.(Dig.Media).
.52

Master of Landscape Architecture

M.L.Arch.
.55

Masters by Research Programs:
Master of Architecture
M.Arch.

Master of Building Science
M.Bldg.Sc. .59

Master of Design Studies
M.Des.St.

Master of Design Studies
(Landscape)
M.Des.St.(Landscape)

Please refer to the Adelaide Graduate Centre for Academic Program Rules . 8

Master of Landscape Architecture by Research
M.L.Arch. ......................................... 59

Master of Urban Design
M.Urb.Des.

Please refer to the Adelaide Graduate Centre for Academic Program Rules . 8

## Doctor of Philosophy

PhD.
Please refer to the Adelaide Graduate Centre for Academic Program Rules .3

# Postgraduate awards in the School of Architecture, Landscape Architecture and Urban Design 

- Graduate Certificate in Architecture (Digital Media)
- Graduate Certificate in Design Studies
- Graduate Certificate in Design Studies (Digital Media)
- Graduate Certificate in Design Studies (Landscape)
- Graduate Diploma in Architecture (Digital Media)
- Graduate Diploma in Design Studies
- Graduate Diploma in Design Studies (Digital Media)
- Graduate Diploma in Design Studies (Landscape)
- Master of Architecture
- Master of Architecture (Coursework)
- Master of Architecture (Digital Media)
- Master of Building Science
- Master of Design Studies
- Master of Design Studies (Digital Media)
- Master of Design Studies (Landscape)
- Master of Landscape Architecture
- Master of Landscape Architecture by Research
- Master of Urban Design


## Notes on Delegated Authority

1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2 Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete one semester of full-time study or the equivalent of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Graduate Certificate in Architecture (Digital Media) shall have qualified for the degree of Bachelor of Architecture of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University
2.2 The Faculty may, subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 A candidate will not be granted status for any course which he or she has completed for another award.
2.3.2 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Head of School of Architecture, Landscape Architecture and Urban Design (or nominee) concerned, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

A candidate for the Graduate Diploma in Architecture (Digital Media) who satisfies the requirements for the Graduate Certificate but who does not complete the requirements for the Graduate Diploma may be admitted to the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in the courses for the Graduate Certificate. Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

## 4 Qualification requirements

4.1 To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

ARCHDM 7007 Rules and Contingency in Design with Digital Media

6
ARCHDM 7008 Interactivity in Virtual Architecture 6
4.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Review of Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Certificate in Design Studies Graduate Certificate in Design Studies (Landscape) Graduate Diploma in Design Studies Graduate Diploma in Design Studies (Landscape)

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of programs

1.1 Except with the permission of the School of Architecture, Landscape Architecture and Urban Design, the program for the Graduate Certificate in Design Studies or the Graduate Certificate in Design Studies (Landscape) shall be completed in not less than one semester and not more than one year of full-time study and in not less than one year and not more than two years of part-time study.
1.2 Except with the permission of the School of Architecture, Landscape Architecture and Urban Design, the program for the Graduate Diploma in Design Studies or the Graduate Diploma in Design Studies (Landscape) shall be completed in not less than two semesters and not more than three semesters of full-time study and in not less than one year and not more than two years of part-time study.

## 2 Admission

2.1 Applications for admission to the program shall be made through the South Australian Tertiary Admissions Centre (SATAC) on the appropriate form by the required date. Successful applicants to the program may not defer their studies to the following year.
An applicant for admission to the program of study for the Graduate Certificate in Design Studies or the Graduate Certificate in Design Studies (Landscape) must have obtained:
(a) the degree or Honours degree of Bachelor of Design Studies of the University of Adelaide or
(b) a degree or Honours degree of the University of Adelaide or an equivalent award from another educational institution accepted by the University for that purpose, subject to the approval of the Head of the School of Architecture, Landscape Architecture and Urban Design.
2.2 An applicant for admission to the program of study for the Graduate Diploma in Design Studies must have obtained:
(a) the Graduate Certificate in Design Studies of the University of Adelaide or an equivalent award from another educational institution accepted by the University for the purpose or
(b) the degree or Honours degree of Bachelor of Design Studies of the University of Adelaide or
(c) a Bachelor or Honours degree of the University of Adelaide or an equivalent award from another educational institution accepted by the University for that purpose, subject to the approval of the Head of the School of Architecture, Landscape Architecture and Urban Design.
2.3 An applicant for admission to the program of study for the Graduate Diploma in Design Studies (Landscape) must have obtained:
(a) the Graduate Certificate in Design Studies (Landscape) of the University of Adelaide or an equivalent award from another educational institution accepted by the University for the purpose or
(b) the degree or Honours degree of Bachelor of Design Studies of the University of Adelaide or
(c) a Bachelor or Honours degree of the University of Adelaide or an equivalent award from another educational institution accepted by the University for that purpose, subject to the approval of the Head of the School of Architecture, Landscape Architecture and Urban Design.
2.4 The Faculty may in special cases and subject to such conditions (if any) as the Head of the School of Architecture, Landscape Architecture and Urban Design may see fit to impose in each case, accept as a candidate for the Graduate Certificate in Design Studies or Graduate Certificate in Design Studies (Landscape), or Graduate

Diploma in Design Studies or Graduate Diploma in Design Studies (Landscape), an applicant who does not hold the qualifications specified in 2.1, 2.2 or 2.3 above but who has given evidence satisfactory to the Head of School of fitness to undertake work for the Graduate Certificate in Design Studies or Graduate Certificate in Design Studies (Landscape) or Graduate Diploma in Design Studies or Graduate Diploma in Design Studies (Landscape).
2.5 Status, exemption and credit transfer
2.5.1 A candidate who has passed postgraduate level courses in the School of Architecture, Landscape Architecture and Urban Design or in other faculties of the University or in other educational institutions may on written application to the School Executive Officer be granted such exemption from Academic Program Rule 5.1 as the Head of School may determine.
2.5.2 Candidates who have previously completed the requirements of the Graduate Certificate in Design Studies shall receive full status towards the Graduate Diploma in Design Studies for studies undertaken in the Graduate Certificate.
2.5.3 Candidates who have previously completed the requirements of the Graduate Certificate in Design Studies (Landscape) shall receive full status towards the Graduate Diploma in Design Studies (Landscape) for studies undertaken in the Graduate Certificate.
2.5.4 No candidate may be granted more than 12 units of status towards the Graduate Diploma in Design Studies or the Graduate Diploma in Design Studies (Landscape).

### 2.6 Articulation with other awards

2.6.1 A candidate who holds a Graduate Certificate in Design Studies of the University of Adelaide shall surrender it before being admitted to the Graduate Diploma in Design Studies.
2.6.2 A candidate who holds a Graduate Certificate in Design Studies (Landscape) of the University of Adelaide shall surrender it before being admitted to the Graduate Diploma in Design Studies (Landscape).

## 3 Assessment and examinations

3.1 There shall normally be four classifications of pass in the final assessment of any course for the Graduate Certificate and Graduate Diploma awards, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. If the Pass classification is in two divisions a pass in the higher division may be prescribed in the syllabuses as a prerequisite for admission to further studies in that course or to other courses. Results in certain courses as specified in the Academic Program Rules will not be classified.
3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
3.4 A candidate who fails a course or who obtains a lower division pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of School, again complete the required work in that course to the satisfaction of the teaching staff concerned.

### 3.5 Review of academic progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

## 4 Qualification requirements

### 4.1 Academic program

4.1.1 To qualify for the Graduate Certificate in Design Studies a candidate shall pass a combination of the courses listed in Rule 4.1.3 to the value of at least 12 units.
4.1.2 To qualify for the Graduate Certificate in Design Studies (Landscape) a candidate shall pass a combination of the courses listed in Rule 4.1.4 to the value of at least 12 units.
4.1.3 To qualify for the Graduate Diploma in Design Studies a candidate shall pass the following courses to the value of at least 24 units:
DESST 6000 Special Topic (Design) IVA* 6
DESST 6006 Special Topic (Design) IVB* 6
DESST 6018 Technology in Design IV 6
DESST 6019 Culture, History and Designed
Environments IV
DESST 6020 Urban Design IV 6
DESST 6022 Architecture Design Studio IV 6
4.1.4 To qualify for the Graduate Diploma in Design Studies (Landscape) a candidate shall pass the following courses to the value of at least 24 units:

DESST 6010 Special Topic (Landscape) IVB*
DESST 6011 Special Topic (Landscape) IVA*
DESST 6019 Culture, History and Designed Environments IV
DESST 6020 Urban Design IV 6
DESST 6021 Natural and Landscape Systems IV 6
DESST 6023 Landscape Architecture Design Studio IV 6
*Students should consult the Head of the School of Architecture, Landscape Architecture and Urban Design about availability of courses.
4.1.5 Course substitutions will normally be selected from a list available from the School Executive Officer; in unusual cases the Head of the School of Architecture, Landscape Architecture and Urban Design may approve different studies upon application by a candidate. In considering an application for a course substitution the Head of School shall have regard to the candidate's previous academic and practical experience.
4.2 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Transition Arrangements from 2006 (not forming part of the Academic Program Rules)

- A student who has completed only one of DESST 6009 Design and Environments IV and DESST 6015 Twentieth Century Architecture and Landscapes IV will be required to enrol in DESST 6019 Culture and Design IV and will be granted appropriate exemption from components of the course already completed.


# Graduate Certificate/Diploma in Design Studies Graduate Certificate/Diploma in Design Studies (Landscape) <br> - Graduate Attributes 

## Knowledge

- To form and express deep criticism of architectural and landscape design objects from a broad perspective;
- To generate and present relevant proposals for intervention in situations in the built environment;
- To combine criticism and proposal generation into a working process of design.


## Intellectual and Social Capabilities

- Instrumental:
finding, ordering, sifting, filtering, organising information;
intelligent use of library resources and research of library materials;
information acquisition, collation and management from libraries and other sources;
visualising, representing and manipulating spatial objects;
drawing and model making using hand and computer techniques.
- Writing:
designing, outlining, and refining thought expressed with the written word, using hand and computer techniques.
- Speaking:
designing, outlining, organising, and refining thought expressed with the spoken word.
- Computing:
computational techniques using algorithms and data relationships.
- Working in groups:
acting as both a leader and a member of a group of individuals.


## Attitudes and Values

- Critical Thinking:
to present coherent intellectual structures within which observation, analysis, understanding and judgement of situations, texts and objects can be made;
to demonstrate the relevance of these structures.
- Creative Action:
to present current knowledge of the act of designing from both theoretical and practical perspectives;
to demonstrate its application to the management of the design process.
- Architecture and Landscape Architecture:
to present accounts of the built and human modified environments, the processes of its production, and the positions, values and preferences that influence its forms and patterns;
to demonstrate the relevance of these accounts;
to demonstrate the understanding of the synergies between architecture and landscape architecture.

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete 12 units of study in one semester of full-time study or the equivalent of part-time study.

## 2 Admission

2.1 Applications for admission shall be directly to the School of Architecture, Landscape Architecture and Urban Design.
Successful applicants to the program may not defer their studies to the following year.
An applicant for admission to the program of study for the Graduate Certificate in Design Studies (Digital Media) shall have qualified for
(a) a degree of Bachelor of Landscape Architecture of the University or for a Bachelor degree of another institution accepted for the purpose by the University or
(b) a Bachelor degree of the University or another approved institution in one or more of the following areas: design studies, interior architecture or an allied built environment discipline.
2.2 The Faculty may, subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above, but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 A candidate will not be granted status for any course which he or she has completed for another award.
2.3.2 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Head of the School, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Graduate Diploma in Design Studies (Digital Media) who satisfies the requirements for the Graduate Certificate but who does not complete the requirements for the Graduate Diploma may be admitted to the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in the courses for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

### 3.3 Review of Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

## 4 Qualification requirements

4.1 To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

ARCHDM 7007 Rules and Contingency in Design with Digital Media 6

DESSTDM 7006 Interactivity in Design with Digital Media
4.2 No candidate will be permitted to count for the Graduate Certificate any course that, in the opinion of the Faculty, contains substantially the same material as any other course which he or she has already presented for another award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete 24 units of study in one year of fulltime study or the equivalent of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Graduate Diploma in Architecture (Digital Media) shall have qualified for the degree of Bachelor of Architecture of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University; or hold or be eligible to hold the Graduate Certificate in Architecture (Digital Media) of the University
2.2 The Faculty may, subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be granted status except candidates who have qualified for the Graduate Certificate in Architecture (Digital Media) or have completed ARCHDM 7007 Rules and Contingency in Design with Digital Media.
2.3.2 No candidate shall be granted status for courses with a total value of more than 6 units, except candidates who have qualified for the Graduate Certificate in Architecture (Digital Media).
2.3.3 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Head of School of Architecture, Landscape Architecture and Urban Design (or nominee) concerned, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

A candidate who has been admitted to the Graduate Certificate in Architecture (Digital Media) and who has been granted status toward the Graduate Diploma for courses presented for the Graduate Certificate must surrender the Graduate Certificate before being admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in the courses for the Graduate Diploma. Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Head of School and then only under such conditions as may be prescribed.

### 3.4 Review of Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to the value of 24 units, as follows:
ARCHDM 7007 Rules and Contingency in Design with Digital Media
ARCHDM 7008 Interactivity in Virtual Architecture 6
ARCHDM 7009 Representing Real \& Virtual Architecture 6
ARCHDM 7010 Designing Architecture with Digital Media
4.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial
amount of the same material; and no course or portion of a course may be counted twice towards an award.
4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete 24 units of study in one year of fulltime study or the equivalent of part-time study.

## 2 Admission

2.1 Applications for admission shall be directly to the School of Architecture, Landscape Architecture and Urban Design. Successful applicants to the program may not defer their studies to the following year.
An applicant for admission to the program of study for the Graduate Diploma in Design Studies (Digital Media) shall have qualified for
(a) a degree of Bachelor of Landscape Architecture of the University or for a Bachelor degree of another institution accepted for the purpose by the University or
(b) a Bachelor degree of the University or another approved institution in one or more of the following areas: design studies, interior architecture or an allied built environment discipline or
(c) the Graduate Certificate in Design Studies (Digital Media).
2.2 The Faculty may, subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above, but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be granted status except candidates who have qualified for the Graduate Certificate in Design Studies (Digital Media) or have completed ARCHDM 7007 Rules and Contingency in Design with Digital Media.
2.3.2 No candidate shall be granted status for courses with a total value of more than 6 units, except candidates who have qualified for the Graduate Certificate in Design Studies (Digital Media).
2.3.3 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the

Head of the School, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate who has been admitted to the Graduate Certificate in Design Studies (Digital Media) and who has been granted status toward the Graduate Diploma for courses presented for the Graduate Certificate must surrender the Graduate Certificate before being admitted to the Graduate Diploma.

3 Assessment and examinations
3.1 There shall be four classifications of pass in the courses for the Graduate Diploma. Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

### 3.3 Review of Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

## 4 Qualification requirements

4.1 To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to the value of 24 units, as follows:

ARCHDM 7007 Rules and Contingency in Design with Digital Media
DESSTDM 7006 Interactivity in Design with Digital Media6

DESSTDM 7007 Representation in Design with Digital Media
DESSTDM 7008 Narrative in Design with Digital Media
4.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

1.1 The program of study for the degree shall extend over five semesters of full-time study or the equivalent. Students shall pass courses to the value of at least 60 units. The unit values of the courses are contained in Academic Program Rule 4.1.

2 Admission
2.1 Applications for admission shall be directly to the South Australian Tertiary Admissions Centre (SATAC) or the University International Admissions Office on the appropriate form by the required date. Successful applicants to the program may not defer their studies to the following year.

A candidate for admission to the program of study for the Master of Architecture (Coursework) must have obtained or completed the requirements for:
(a) the Honours degree of Bachelor of Design Studies of the University of Adelaide subject to successful completion of courses comprising the Architectural Studies major or
(b) the Honours degree of Bachelor of Architecture or Honours degree of Bachelor of Landscape Architecture of the University of Adelaide or an equivalent award from another educational institution accepted by the University for the purpose or
(c) the degree of Bachelor of Architecture of the University of Adelaide and at least two years' appropriate professional experience or
(d) the degree of Bachelor of Architecture (New) of the University of Adelaide with credit average result or better or
(e) a five year degree in Architecture or Landscape Architecture from another educational institution accepted by the University for the purpose and at least two years' appropriate professional experience or
(f) the Graduate Diploma in Design Studies of the University of Adelaide with credit average result or better, or an equivalent award from another educational institution accepted by the University for the purpose.
2.2 Subject to the approval of Council the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not hold the qualifications specified in 2.1 above but who has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 A candidate who has passed postgraduate level courses in the School of Architecture, Landscape Architecture and Urban Design or in other faculties/schools of the University or in other educational institutions, may on written application to the Head of School be granted such exemption from these Academic Program Rules as the School may determine.
2.3.2 No student may be granted more than 36 units of status towards the Master's degree. Status will not be granted for the course ARCH 7023A/B Architecture Dissertation (M).

### 2.4 Articulation with other awards

2.4.1 Notwithstanding the above Rules a candidate who has been enrolled for the Master of Architecture (Coursework) and who has completed the work prescribed herein for the degree or Honours degree of Bachelor of Architecture of the University of Adelaide and who has not been awarded the Master's degree shall, on written application to the Head of the School of Architecture, Landscape Architecture and Urban Design, be awarded the appropriate degree of Bachelor of Architecture.

## 3 Assessment and examinations

3.1 There shall normally be four classifications of pass in the final assessment of any course for the Masters (Coursework) degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. If the Pass classification be in two divisions a pass in the higher division may be prescribed in the syllabuses as a prerequisite for admission to further studies in that course or to other courses. Results in certain courses as specified in the relevant Academic Program Rules will not be classified.
3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
3.4 A candidate who fails a course or who obtains a lower division pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the School of Architecture, Landscape Architecture and Urban Design, again complete the required work in that course to the satisfaction of the teaching staff concerned.
3.5 The Head of School shall appoint at least two examiners of the Dissertation, at least one of whom shall be external to the School of Architecture, Landscape Architecture and Urban Design.

### 3.6 Review of academic progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the degree of Master of Architecture (Coursework) a candidate shall pass the core courses to the value of at least 48 units, and elective courses to the value of 12 units including at least one of ARCH 7015 Architecture Elective Studio A (M) or ARCH 7018 Architecture Elective Studio B (M):

Core courses
ARCH 7016 Architecture Studio (M) 6
ARCH 7017 Urban Design Studio (M) 6
ARCH 7019 Architecture Processes (M) 6
ARCH 7020 Professional Practice (M) 4
ARCH 7021 Design Seminar (M) 2
ARCH 7022A/B Architecture Project (M) 10
ARCH 7023A/B Architecture Dissertation (M) 12
ARCH 7024 Architecture Seminar (M) 2

## Elective courses

ARCH 7015 Architecture Elective Studio A (M) 6
ARCH 7018 Architecture Elective Studio B (M) 6
LARCH 7016 Landscape Architecture Elective
Studio A (M)
LARCH 7018 Landscape Architecture Elective
Studio B (M)
4.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Architecture (Coursework)- Graduate Attributes

## Knowledge

- Acquired advanced knowledge and skills for exploration of creative process and ideas
- Acquired advanced knowledge and skills sufficient for various stages of activities in an architectural practice
- Further developed intellectual and creative approaches and adaptability for continued learning and development throughout professional life.


## Intellectual and Social Capabilities

- Designing:

The practice of architectural design, emphasising the pervasion of design from planning to documenting and the interrelationship of aesthetic, economic, environmental, legal, societal and individual reactions, and technical factors, and the nature of design as a group activity. .

- Surveying:

The principles of building measurement, documentation and land surveying.

- Communicating:

The communication and documentation of designs for presentation to clients, and other stakeholders, and for construction; The preparation of professional reports.

- Managing:

The management and operation of an architectural practice.

## Attitudes and Values

- The profession of architecture:

Ethics; environmental sustainability; cultural, social, economic and legal responsibilities of the profession of architecture.

- Architectural services:

The understanding of situations where an architect can contribute, the formulation of appropriate strategies, and appropriate pre-design, design, documentation, project management and post construction services;
Processes in developing designs, including the development of a brief, and the outline, assessment and detailed design of proposals in conformity with codes and other requirements;
The organisation, management and documentation associated with building construction and the administration of building contracts;
The marketing of architectural services.

- The technology of architecture:

Building planning, construction, structure and services as they relate to new buildings and alterations to existing buildings.

- The architect in relation to other professions, organisations and the building industry:

The relationship of architects to builders, structural and building services engineers, landscape architects, interior designers, urban designers, planners, and others involved in the creation of the built environment;
The relationship of the profession of architecture to statutory authorities and to the building industry.

- Architecture and Landscape Architecture

The demonstration of the synergies between architecture and landscape architecture, urban design and master planning.

## Master of Architecture (Digital Media)

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

To qualify for the Master's degree, a candidate shall satisfactorily complete three semesters of full-time study or the equivalent of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Master of Architecture (Digital Media) shall have qualified for the degree of Bachelor of Architecture of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University; or hold or be eligible to hold the Graduate Diploma in Architecture (Digital Media) of the University.
2.2 The Faculty may, subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above, but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be granted status except candidates who have qualified for the Graduate Diploma in Architecture (Digital Media) or have completed ARCHDM 7007 Rules and Contingency in Design with Digital Media.
2.3.2 No candidate shall be granted status for courses with a total value of more than 6 units, except candidates who have qualified for the Graduate Diploma in Architecture (Digital Media).
2.3.3 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Head of the School, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate who has been admitted to the Graduate Diploma in Architecture (Digital Media) and who has been granted status toward the Master's degree for courses presented for the Graduate Diploma must surrender the Graduate Diploma before being admitted to the Master's degree.
2.4.2 A candidate for the Master of Architecture (Digital Media) who satisfies the requirements for the Graduate Diploma but who does not complete the requirements for the Master's degree may be admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in the courses for the Master's degree. Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

### 3.3 Review of Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 36 units, as follows:

ARCHDM 7007 Rules and Contingency in Design with Digital Media
ARCHDM 7008 Interactivity in Virtual Architecture 6
ARCHDM 7009 Representing Real \& Virtual Architecture 6
ARCHDM 7010 Designing Architecture with
Digital Media
ARCHDM 7001 Architectural Design with Digital Media Masters Project
4.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Certificate in Architecture (Digital Media) Graduate Diploma in Architecture (Digital Media) Master of Architecture (Digital Media) <br> - Graduate Attributes

## Knowledge

- Acquired knowledge of design using computing, modelling, animation and associated industry awareness with regard to issues in architecture and landscape architecture.


## Intellectual and Social Capabilities

- Preparation of life-long learning towards personal development and professional practice.
- Effective problem solving skills applying logical, critical and creative thinking.
- Ability to work autonomously as well as collaboratively with peak industry partners and digital media associations.
- Effective written and verbal communication with individuals, mass audiences, small groups and target groups.
- Ability to demonstrate international perspectives in design and research.


## Attitudes and values

- Committed to ethical action and social responsibility regarding intellectual property ownership and copyright law awareness.


## Master of Design Studies (Digital Media)

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

To qualify for the Master's degree, a candidate shall satisfactorily complete three semesters of full-time study or the equivalent of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Master of Design Studies (Digital Media) shall have qualified for:
(a) a degree of Bachelor of Landscape Architecture of the University or a Bachelor degree of another institution accepted for the purpose by the University or
(b) a Bachelor degree of the University or another approved institution in one or more of the following areas: design studies, interior architecture or an allied built environment discipline, and have at least one year's appropriate professional experience or
(c) the Graduate Diploma in Design Studies (Digital Media).
2.2 The Faculty may, subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above, but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be granted status except candidates who have qualified for the Graduate Diploma in Design Studies (Digital Media) or have completed ARCHDM 7007 Rules and Contingency in Design with Digital Media.
2.3.2 No candidate shall be granted status for courses with a total value of more than 6 units, except candidates who have qualified for the Graduate Diploma in Design Studies (Digital Media).
2.3.3 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Head of the School, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate who has been admitted to the Graduate Diploma in Design Studies (Digital Media) and who has been granted status toward the Master's degree for courses presented for the Graduate Diploma must surrender the Graduate Diploma before being admitted to the Master's degree.
2.4.2 A candidate for the Master of Design Studies (Digital Media) who satisfies the requirements for the Graduate Diploma but who does not complete the requirements for the Master's degree may be admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in the courses for the Master's degree. Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

### 3.3 Review of Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

## 4 Qualification requirements

4.1 To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 36 units, as follows:

ARCHDM 7007 Rules and Contingency in Design with Digital Media
DESSTDM 7004 Design with Digital Media Masters Project

DESSTDM 7006 Interactivity in Design with Digital Media
DESSTDM 7007 Representation in Design with Digital Media
DESSTDM 7008 Narrative in Design with Digital Media 6
4.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Graduate Certificate in Design Studies (Digital Media) Graduate Diploma in Design Studies (Digital Media) Master of Design Studies (Digital Media) <br> - Graduate Attributes 

## Knowledge

- Acquired knowledge of design using computing, modelling, animation and associated industry awareness of digital media.


## Intellectual and Social Capabilities

- Preparation of life-long learning towards personal development and professional practice.
- Effective problem solving skills applying logical, critical and creative thinking.
- Ability to work autonomously as well as collaboratively with peak industry partners and digital media associations.
- Effective written and verbal communication with individuals, mass audiences, small groups and target groups.
- Ability to demonstrate international perspectives in design and research.


## Attitudes and values

- Committed to ethical action and social responsibility regarding intellectual property ownership and copyright law awareness.

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

1.1 The program of study for the degree shall extend over five semesters of full-time study or the equivalent. Students shall pass courses to the value of at least 60 units. The unit values of the courses are contained in Academic Program Rule 4.1.

## 2 Admission

2.1 Applications for admission shall be directly to the South Australian Tertiary Admissions Centre (SATAC) or the University International Admissions Office on the appropriate form by the required date. Successful applicants to the program may not defer their studies to the following year.
A candidate for admission to the program of study for the Master of Landscape Architecture must have obtained or completed the requirements for:
(a) the Honours degree of Bachelor of Design Studies of the University of Adelaide subject to successful completion of courses comprising the Landscape Studies major or
(b) the Honours degree of Bachelor of Architecture or Honours degree of Bachelor of Landscape Architecture of the University of Adelaide or an equivalent award from another educational institution accepted by the University for the purpose or
(c) the degree of Bachelor of Architecture of the University of Adelaide and at least two years' appropriate professional experience or
(d) the degree of Bachelor of Landscape Architecture of the University of Adelaide with credit average result or better or
(e) a five year degree in Architecture or Landscape Architecture from another educational institution accepted by the University for the purpose or
(f) the Graduate Diploma in Design Studies (Landscape) of the University of Adelaide with credit average result or better, or an equivalent award from another educational institution accepted by the University for the purpose.
2.2 Subject to the approval of Council the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not hold the qualifications specified in 2.1 above but who has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 A candidate who has passed postgraduate level courses in the School of Architecture, Landscape Architecture and Urban Design or in other faculties/schools of the University or in other educational institutions, may on written application to the Head of School be granted such exemption from these Academic Program Rules as the School may determine.
2.3.2 No student may be granted more than 36 units of status towards the Master's degree. Status will not be granted for the course LARCH 7021A/B Landscape Architecture Dissertation (M).

### 2.4 Articulation with other awards

Notwithstanding the above Rules a candidate who has been enrolled for the Master's degree of Landscape Architecture and who has completed the work prescribed herein for the degree or Honours degree of Bachelor of Landscape Architecture of the University of Adelaide and who has not been awarded the Master's degree shall, on written application to the Head of School of Architecture, Landscape Architecture and Urban Design, be awarded the appropriate degree of Bachelor of Landscape Architecture.

## 3 Assessment and examinations

3.1 There shall normally be four classifications of pass in the final assessment of any course for the Masters degree, as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass. If the Pass classification be in two divisions a pass in the higher division may be prescribed in the syllabuses as a prerequisite for admission to further studies in that course or to other courses. Results in certain courses as specified in the relevant Academic Program Rules will not be classified.
3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 In determining a candidate's final result in a course (or part of a course) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice at the commencement of the teaching of the course of the way in which work will be taken into account and of its relative importance in the final result.
3.4 A candidate who fails a course or who obtains a lower division pass and who desires to take that course again shall, unless exempted wholly or partially therefrom by the Head of the School of Architecture, Landscape Architecture and Urban Design complete again the required work in that course to the satisfaction of the teaching staff concerned.
3.5 The Head of School shall appoint at least two examiners of the Dissertation, at least one of whom shall be external to the School of Architecture, Landscape Architecture and Urban Design.
3.6 Review of academic progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the degree of Master of Landscape
Architecture a candidate shall pass the core courses to the value of at least 48 units and elective courses to the value of at least 12 units including at least one of LARCH 7015 Landscape Architecture Elective Studio A or LARCH 7018 Landscape Architecture Elective Studio B:

## Core courses

ARCH 7017 Urban Design Studio (M) 6
ARCH 7020 Professional Practice (M) 4
ARCH 7021 Design Seminar (M) 2
LARCH 7017 Landscape Architecture Studio (M) 6
LARCH 7019 Landscape Architecture Processes (M) 6
LARCH 7020A/B Landscape Architecture Project 10
LARCH 7021A/B Landscape Architecture Dissertation (M) 12
LARCH 7022 Landscape Architecture Seminar (M) 2

## Elective courses

ARCH 7015 Architecture Elective Studio A (M)
ARCH 7018 Architecture Elective Studio B (M) 6
LARCH 7016 Landscape Architecture
Elective Studio A (M)
LARCH 7018 Landscape Architecture
Elective Studio B (M)
4.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Landscape Architecture (Coursework) <br> - Graduate Attributes

## Knowledge

- Acquired advanced knowledge and skills for exploration of creative process and ideas.
- Acquired advanced knowledge and skills sufficient for various stages of activities in a landscape architectural practice.
- Further developed intellectual and creative approaches and adaptability for continued learning and development throughout professional life.


## Intellectual and Social Capabilities

- Designing:

The practice of landscape architectural design, emphasising the pervasion of design from planning to detailing and the interrelationship of aesthetic, economic, environmental, legal, societal and individual reactions, and technical factors, and the nature of design as a group activity.

- Site Planning:

Understanding and taking advantage of variables relevant to site planning including flora, fauna, soils, water systems, energy systems, building materials, human activities and desires, heritage conservation and the poetics of space, site and structure assembly and arrangement, etc.

- Surveying:

The principles of land surveying.

- Communication:

The communication and documentation of designs as a part of the individual and group processes and for clients, construction, public presentation and statutory authorities.
The preparation of professional reports.

- Managing:

The management and operation of a landscape architectural practice and the activities of a landscape architectural practice.

## Attitudes and Values

- The profession of landscape architecture:

Ethics: environmental sustainability; cultural, social, economic and legal responsibilities of the profession of landscape architecture.

- Landscape architectural services:

The understanding of situations where a landscape architect can contribute, the formulation of appropriate strategies, and appropriate pre-design, design, project management and post construction services;
Processes in developing designs, including the development of a brief, and the outline, assessment, detailed design and costing of proposals in conformity with codes and other requirements.
The organisation, management and documentation associated with construction and the administration of contracts; the marketing of landscape architectural services.

- The technology of landscape architecture:

Site planning, construction, vegetation and habitat provision, water systems and hydrology, structures and services as they relate to new buildings, alterations, and site planning and design interventions.

- The landscape architect in relation to other professions, organisations and the building industry:

The relationship of landscape architects to builders, structural and building services engineers, architects, interior designers, urban designers, planners, and others included in the creation of the built environment and human-dominated and shaped landscapes.

The relationship of the profession of landscape architecture to statutory authorities and to the design industry.

- Landscape Architecture and Architecture

The demonstration of the synergies between landscape architecture and architecture, urban design and master planning.

Master of Architecture Master of Building Science Master of Landscape Architecture

## Academic Program Rules

1
General
1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.
These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

## 2 Admission

### 2.1 Master of Architecture

The Research Education and Development Committee may accept as a candidate for the degree of Master of Architecture any person who:
(a) has qualified for the Honours degree of Bachelor of Architecture of the University of Adelaide or
(b) has obtained in another university or tertiary institution qualifications which are deemed at least equivalent to those of the Honours degree of Bachelor of Architecture or
(c) has qualified for a degree, whose academic qualifications are accepted by the Committee as sufficient.

### 2.2 Master of Building Science

The Research Education and Development Committee may accept as a candidate for the degree of Master of Building Science any person who:
(a) has qualified for the Honours degree of Bachelor of Architectural Studies or the Honours degree of Bachelor of Architecture of the University of Adelaide or
(b) has obtained in another university or tertiary institution qualifications which are deemed at least equivalent to those of the Honours degree of Bachelor of Architectural Studies or
(c) has qualified for a degree, whose academic qualifications are accepted by the Committee as sufficient.

### 2.3 Master of Landscape Architecture by Research

The Research Education and Development Committee may accept as a candidate for the degree of Master of Landscape Architecture by Research any person who:
(a) has qualified for the Honours degree of Bachelor of Landscape Architecture of the University of Adelaide or
(b) has obtained in another university or tertiary institution qualifications which are deemed at least equivalent to those of the Honours degree of Bachelor of Landscape Architecture or
(c) has qualified for a degree, whose academic qualifications are accepted by the Faculty as sufficient.

## School of Commerce

 www.commerce.adelaide.edu.au
Masters by Coursework Programs:
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## Master of Commerce

 (Accounting)M.Com.(Accounting).

## Master of Commerce

(Applied Finance)
M.Com.(Applied Finance).

## Master of Commerce <br> (Marketing)

M.Com.(Marketing).

Master of Commerce
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Master of Business Law/Master of Commerce (Coursework)
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## Postgraduate awards in the School of Commerce

- Master of Accounting and Finance
- Master of Applied Finance
- Master of Commerce
- Master of Commerce (Coursework)
- Master of Commerce (Accounting)
- Master of Commerce (Applied Finance)
- Master of Commerce (Marketing)
- Master of Commerce (Performance Management)


## Notes on Delegated Authority

1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2 Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

## Master of Accounting and Finance

## Academic Program Rules

## 1 Duration of Program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising four semesters of full-time study or equivalent part-time study. The maximum time permitted for completion of the program is eight years.

## 2 Admission

2.1 An applicant for admission to the academic program for the degree of Master of Accounting and Finance shall have qualified for a degree of the University of Adelaide, or a degree of another institution accepted by the Faculty for the purpose as equivalent;
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 1.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate shall be granted status for courses with a total value of more than 12 units on account of courses presented for any other award except with permission of Faculty.
2.3.2 Exemptions may be granted for up to 12 units where, in the opinion of Faculty, the candidate has already presented a course/s for another award that contain(s) substantially the same material as any course in the program. All exemptions granted must be replaced by courses from other parts of the program.
2.3.3 A candidate who has completed either the Master of Commerce (Accounting) or the Master of Commerce (Applied Finance) at the University of Adelaide and who applies for transfer to the Master of Accounting and Finance may be granted full credit for the total units completed. A candidate who has been admitted to the Master of Commerce (Accounting) or the Master of Commerce (Applied Finance) and who subsequently satisfies the requirements for the Master of Accounting and Finance must surrender the Master of Commerce degree before being admitted to the award of Master of Accounting and Finance.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Head of Faculty or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.
3.4 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

4.1 To qualify for the degree of Master of Accounting and Finance, a candidate shall satisfactorily complete courses to the value of 48 units as follows:
4.1.1 12 units of Foundation Courses:

ACCTING 7000 Accounting and Decision Making (M)* or

ACCTING 7019 Accounting Concepts \& Methods (M)
and
COMMERCE 7005 Principles of Finance
COMMERCE 7033 Quantitative Methods (M) 3
ECON 7200 Economic Principles (M)
4.1.2 12 units of Accounting courses from:

ACCTING 7008 Financial Accounting Issues (M)
ACCTING 7010 Corporate Accounting (M)
ACCTING 7012 Commercial Law and
Accounting Regulation (M)
ACCTING 7014 Management Accounting (M) 3
COMMLAW 7011 Corporate Law (M)
4.1.3 12 units of Applied Finance courses:

CORPFIN 7019 Portfolio Theory and Management (M)
CORPFIN 7020 Options, Futures and
Risk Management (M)
CORPFIN 7039 Equity Valuation and Analysis (M)
CORPFIN 7040 Fixed Income Securities (M)
4.1.4 either
(i) a further 6 units of Accounting courses from 4.1.2 or 4.2.1 or
(ii) a further 6 units of Applied Finance courses from 4.2.2.
4.1.5 6 units of electives to be selected from 4.2.1, 4.2.2 and 4.2.3. below. Unless exempted, all international students are required to undertake the specialist course COMMERCE 7041 Business Communications (M). This course may be presented in lieu of an elective.

### 4.2 Academic Program

### 4.2.1 Accounting

ACCTING 7009 Auditing and Assurance Services (M)3
ACCTING 7015 Advanced Financial Reporting (M) ..... 3
ACCTING 7017 Financial Statement Analysis (M) ..... 3
ACCTING 7018 Public Sector and Not-For-Profit Accountability (M) ..... 3
COMMLAW 7013 Income Taxation (M) ..... 3
COMMLAW 7016 Business Taxation and GST (M) ..... 3
COMMERCE 7036 Knowledge Management andMeasurement (M)3
CORPFIN 7044 Financial Planning (M) ..... 3
4.2.2 Applied Finance

ACCTING 7017 Financial Statement Analysis (M)
CORPFIN 7021 Corporate Investment \& Strategy (M) 3
CORPFIN 7022 Corporate Finance Theory (M) 3
CORPFIN 7023 Financial Modelling Techniques (M) 3
CORPFIN 7042 Treasury and Financial Risk
Management (M)3
CORPFIN 7044 Financial Planning(M) ..... 3
ECON 7096 Econometrics IIID ..... 3
ECON 7114 Money, Banking and Financial Markets IIID ..... 3ECON 7201 International Finance (M)3

### 4.2.3 Electives

BUSINESS 7000 Social Challenges to Global Business
COMMERCE 7034 Project Management (M)**3

COMMERCE 7035 Contemporary Issues in Commerce (M)

COMMERCE 7037 Research Methodology in Commerce (M) 3

COMMERCE 7041 Business Communications (M) \# 3
ECOMMRCE 7004 Internet Commerce (M) 3
Any other course from a postgraduate or honours program offered by the Faculty of Professions with approval of Head of Faculty.

* To be replaced with 7019 Accounting Concepts and Methods in semester 22006
**May not be offered in 2006
\# Available to students whose native language is not English.
Note: MBA electives will normally be open to students meeting the 2 -year professional experience criterion.


### 4.3 Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: This program is taught only in Singapore

## Academic Program Rules

## 1 Duration of program

To quality for the degree, a candidate shall satisfactorily complete a program of study equivalent to one and a half (1.5) years of full-time study. Except with the permission of the Faculty, the requirements of the degree must be completed within 5 years.

## 2 Admission

2.1 An applicant for admission to the academic program for the degree of Master of Applied Finance shall have qualified for a four (4) year undergraduate program in an institution accepted by the Faculty as appropriate OR have qualified for a three (3) year program and have relevant work experience.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree. This may include acceptance of professional qualifications where they are of high quality and provide an appropriate background to undertake a postgraduate qualification in finance.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award. Except with special permission of the Faculty, no candidate will be granted status for another course that he or she has presented for any award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for equivalent graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 12 units of status.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Executive Dean or nominee and then only under such conditions as may be prescribed.

4 Qualification requirements

### 4.1 Academic program

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 36 units, as follows:

### 4.1.1 Core Courses

All candidates shall complete the following core courses:

COMMERCE 7002NA Accounting Information for
Financial Decision Makers

COMMERCE 7003NA Financial Quantitative Procedures
COMMERCE 7005NA Principles of Finance 3
COMMERCE 7006NA Equity
COMMERCE 7007NA Fixed Income Securities 4
COMMERCE 7008NA Futures, Options and Swaps 4
COMMERCE 7009NA Corporate Finance Theory 4
COMMERCE 7010NA Portfolio Management 4
ECON 7200NA Economic Principles (M) 3

### 4.1.2 Elective Courses

All candidates shall complete one elective to the value of 4 points selected from the list of approved electives:

COMMERCE 7012NA Treasury Management
COMMERCE 7013NA Financial Statement Analysis

COMMERCE 7014NA Personal Financial Planning
CORPFIN 7043NA Principles of Financial Modelling (M)

### 4.2 Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Commerce (Research)

## Academic Program Rules

## 1 General

1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.

These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

## 2 Admission

2.1 The Research Education and Development Committee may accept as a candidate for the degree of Master of Commerce any person who:
(a) has qualified for the degree of Bachelor of Commerce with First or Second-Class Honours at the University of Adelaide or
(b) has qualified for another Honours degree which the Committee regards as being equivalent to a First or Second-Class Honours degree in Commerce of the University of Adelaide.

In addition to Rules 9.1-9.3 of the General Program Rules, postgraduate students of the School of Commerce are normally expected to attend the majority of research seminars arranged by the School in each year of their candidature. For full-time students, attendance at a minimum of 50 per cent of seminars is expected. For parttime students, a minimum of 30 percent is expected.

# Master of Commerce <br> Master of Commerce (Accounting) Master of Commerce (Applied Finance) Master of Commerce (Marketing) Master of Commerce (Performance Management) 

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising three semesters of full-time study or equivalent part-time. The maximum time permitted for completion of the program is six years.

2 Admission
2.1 An applicant for admission to the academic program for the degree of Master of Commerce, Master of Commerce (Accounting), Master of Commerce (Applied Finance), Master of Commerce (Marketing) or Master of Commerce (Performance Management) shall have qualified for a degree of the University of Adelaide, or a degree of another institution accepted by the Faculty for the purpose as equivalent.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.
2.3 On satisfying the admission requirements for entry to the Master of Commerce, students will enrol in a program of study to allow them to qualify for one of the following degrees:
Master of Commerce
Master of Commerce (Accounting)
Master of Commerce (Applied Finance)
Master of Commerce (Marketing)
Master of Commerce (Performance Management).
2.4 Status, exemption and credit transfer
2.4.1 No candidate shall be granted status for courses with a total value of more than 12 units on account of courses presented for any other award except with permission of the Faculty.
2.4.2 Exemptions may be granted for up to 12 units of courses where, in the opinion of the Faculty, the candidate has already presented a course/s for another award that contain/s substantially the same material as any of the courses in the program. Exemptions granted must be replaced by courses from within the same discipline where possible.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Faculty or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.
3.4 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Master of Commerce

4.1.1 To qualify for the degree of Master of Commerce, a candidate shall satisfactorily complete courses to the value of 36 units, as follows:
4.1.2 12 units of Foundation courses.
4.1.3 18 units of Master of Commerce courses, chosen from 4.6.
4.1.4 6 units of electives, chosen from 4.6 below. Unless exempted, all international students are required to undertake a specialist course COMMERCE 7041 Business Communications (M). This course may be presented in lieu of an elective.

### 4.2 Master of Commerce (Accounting)

4.2.1 To qualify for the degree of Master of Commerce (Accounting), a candidate must satisfy all conditions in 4.1 above.
4.2.2 In addition, the Foundation courses presented must include: ACCTING 7000 Accounting and Decision Making (M)* or
ACCTING 7019 Accounting Concepts and Methods (M) and
COMMERCE 7005 Principles of Finance (M)
COMMERCE 7033 Quantitative Methods (M)
ECON 7200 Economic Principles (M)
4.2.3 18 units of Accounting courses to be chosen from the following courses:
ACCTING 7008 Financial Accounting Issues (M) ACCTING 7009 Auditing and Assurance Services (M)**
ACCTING 7010 Corporate Accounting (M)
ACCTING 7012 Commercial Law and Accounting Regulation (M)
ACCTING 7014 Management Accounting (M)
COMMLAW 7011 Corporate Law (M)
COMMLAW 7013 Income Taxation (M)**

* To be replaced with 7019 Accounting Concepts and Methods in semester 22006
** All seven courses above must be presented for eligibility to the CA Program, but the two starred courses are not required for eligibility for the CPA Program and can be replaced with electives, of which at least one must be from the list of Accounting courses in 4.6 below or, such courses as approved by the Head of Faculty.


### 4.3 Master of Commerce (Applied Finance)

4.3.1 To qualify for the degree of Master of Commerce (Applied Finance), a candidate must satisfy all conditions in 4.1 above.
4.3.2 In addition, the Foundation courses presented must include:

ACCTING 7024 Accounting Essentials for Decision Making (M)
COMMERCE 7005 Principles of Finance (M)
COMMERCE 7033 Quantitative Methods (M)
ECON 7200 Economic Principles (M).
4.3.3 18 units of Finance courses, 12 units must include the following core courses:
CORPFIN 7019 Portfolio Theory and Management (M) CORPFIN 7020 Options, Futures and Risk Management (M) CORPFIN 7039 Equity Valuation and Analysis (M) CORPFIN 7040 Fixed Income Securities (M).

### 4.4 Master of Commerce (Marketing)

4.4.1 To qualify for the degree of Master of Commerce (Marketing), a candidate must satisfy all conditions in 4.1 above.
4.4.2 In addition, the Foundation courses presented must include:

ACCTING 7024 Accounting Essentials for Decision Making (M)
COMMERCE 7005 Principles of Finance ( M ) COMMERCE 7033 Quantitative Methods (M) ECON 7200 Economic Principles (M).
4.4.3 18 units of Marketing courses must include:

MARKETNG 7023 Consumer Behaviour (M)
MARKETNG 7024 International Marketing (M)
MARKETNG 7025 Marketing Communications (M)
MARKETNG 7026 Market Research and Planning (M)
MARKETNG 7030 Marketing Ethics
MARKETNG 7032 Strategic Marketing (M)*

* MARKETNG 7032 Strategic Marketing ( M$)^{*}$ is a capstone course for the M Com (Marketing) pathway, and as such must be taken in the final semester of study.


### 4.5 Master of Commerce

(Performance Management)
4.5.1 To qualify for the degree of Master of Commerce (Performance Management), candidates must satisfy all conditions in 4.1 above.
4.5.2 In addition 12 units of Foundation courses presented must include:
ACCTING 7024 Accounting Essentials for Decision Making (M)
COMMERCE 7033 Quantitative Methods (M)
COMMGMT 7008 Management Practice (M)
ECON 7200 Economic Principles (M).
4.5.3 18 units of Management courses, 6 units must include the following core courses:
COMMGMT 7006 Organisational Behaviour (M)
COMMGMT 7007 Strategic Management (M).

### 4.6 Academic program

### 4.6.1 Foundation Courses

ACCTING 7000 Accounting and Decision Making (M)*3
ACCTING 7019 Accounting Concepts \& Methods (M) ..... 3
ACCTING 7024 Accounting Essentials for Decision Making (M) ..... 3
COMMERCE 7005 Principles of Finance ..... 3
COMMERCE 7033 Quantitative Methods (M) ..... 3
COMMERCE 7041 Business Communications (M) ..... 3
COMMGMT 7008 Management Practice (M) ..... 3
ECON 7200 Economic Principles (M) ..... 3
MARKETNG 7005 Marketing Principles (M) ..... 3

### 4.6.2 Discipline courses

## Accounting

ACCTING 7008 Financial Accounting Issues (M)
ACCTING 7009 Auditing and Assurance Services (M) ..... 3
ACCTING 7010 Corporate Accounting (M) ..... 3
ACCTING 7012 Commercial Law and Accounting Regulation (M) ..... 3
ACCTING 7014 Management Accounting (M) ..... 3
ACCTING 7015 Advanced Financial Reporting (M) ..... 3
ACCTING 7017 Financial Statement Analysis (M) ..... 3
ACCTING 7018 Public Sector and Not-For-Profit Accountability (M) ..... 3
COMMERCE 7036 Knowledge Management and Measurement (M) ..... 3
COMMLAW 7011 Corporate Law (M) ..... 3
COMMLAW 7013 Income Taxation (M) ..... 3
COMMLAW 7016 Business Taxation and GST (M) ..... 3
CORPFIN 7044 Financial Planning (M) ..... 3
Applied Finance
ACCTING 7017 Financial Statement Analysis (M) ..... 3
CORPFIN 7019 Portfolio Theory and Management (M) ..... 3
CORPFIN 7020 Options, Futuresand Risk Management (M)3
CORPFIN 7021 Corporate Investment and Strategy (M) ..... 3
CORPFIN 7022 Corporate Finance Theory (M) ..... 3
CORPFIN 7023 Financial Modelling Techniques (M) ..... 3
CORPFIN 7039 Equity Valuation and Analysis (M) ..... 3CORPFIN 7040 Fixed Income Securities (M)CORPFIN 7042 Treasury and Financial RiskManagement (M)3
CORPFIN 7044 Financial Planning (M) ..... 3
ECON 7096 Econometrics IIID ..... 3
ECON 7114 Money, Banking and Financial Markets IIID ..... 3
ECON 7201 International Finance(M) ..... 3
ECON 7114 Money, Banking \& Financial Markets IIID ..... 3
Management
COMMGMT 7006 Organisational Behaviour (M) ..... 3
COMMGMT 7007 Strategic Management (M) ..... 3
COMMGMT 7009 Structure and Performance in Organisations (M) ..... 3
COMMGMT 7010 Optimising Human Performance (M) ..... 3
COMMGMT 7011 Corporate Governance and Globalisation(M ..... 3)
COMMGMT 7012 Managing Social Responsibility (M) ..... 3
COMMGMT 7013 Strategic Evaluation and Control (M) ..... 3
COMMGMT 7014 Strategic Compensation Management (M) ..... 3
Marketing
MARKETNG 7023 Consumer Behaviour (M) ..... 3
MARKETNG 7024 International Marketing (M) ..... 3
MARKETNG 7025 Marketing Communications (M) ..... 3
MARKETNG 7026 Marketing Research and Planning (M) ..... 3
MARKETNG 7027 Brand Management (M) ..... 3
MARKETNG 7028 E-Marketing (M) ..... 3
MARKETNG 7029 International Market Entry Strategies (M) ..... 3
MARKETNG 7030 Marketing Ethics (M) ..... 3
MARKETNG 7031 Relationship Marketing (M) ..... 3
MARKETNG 7032 Strategic Marketing (M) ..... 3
4.6.3 Electives
BUSINESS 7000 Social Challenges to Global Business ..... 3
COMMERCE 7034 Project Management (M) ** ..... 3
COMMERCE 7035 Contemporary Issues in Commerce (M) ..... 3
COMMERCE 7037 Research Methodology in Commerce (M) ..... 3
COMMERCE 7041 Business Communications (M) \# ..... 3
ECOMMRCE 7004 Internet Commerce (M) ..... 3
ECON 7011 Consumers, Firms and Markets IID ..... 3
ECON 7032 Public Economics IIID ..... 3
ECON 7036 International Trade \& Investment Policy IID ..... 3
ECON 7070 Labour Economics IIID ..... 3
ECON 7141 Challenges Facing Economic Policy Makers ..... 4

Any other course from a postgraduate or honours program in the Faculty of Professions approved by the Head of Faculty or nominee.

* semester 12006 offering only
** May not be offered in 2006
\# Available to students whose native language is not English.
Note: MBA electives will only be open to students meeting the 2-year professional experience criterion.


### 4.7 Academic Progress

The Faculty may prescribe rules for review of academic progress. Any student who meets the requirements for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

### 4.8 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Dental School

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- Graduate Diploma in Forensic Odontology
- Master of Science in Dentistry
- Doctor of Clinical Dentistry
- Doctor of Dental Science


## Notes on Delegated Authority

1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2 Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty. The Head of department or centre and the Principal of the School of Dental Therapy may approve minor changes to any previously approved syllabus.

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 General

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete Graduate Certificate in Dentistry courses to an aggregate of 12 units.

## 2 Duration of program

2.1 To qualify for the Graduate Certificate a candidate shall:
(a) complete satisfactorily an approved program of study extending over a period of not more than three years as a part-time candidate and
(b) pass such written, oral, clinical and practical examinations as may be required by the Dental School.
2.2 The programme of study, examination and such other work as may be required and the period of study for each candidate shall be specified by the Dean and approved by the Dental School.
2.3 Unless the Dental School, on the advice of the Dean, approves an extension of time in a particular case, the work for the Graduate Certificate shall be completed within the period of study approved for the particular candidate under Academic Program Rule 2.1.

## 3 Admission

3.1 The Dental School may accept as a candidate for the Graduate Certificate any person who:
(a) has qualified in the University of Adelaide for the degree of Bachelor of Dental Surgery
(b) has qualified in another university for a degree or degrees in the field of dentistry which the Dental School regards as equivalent for the purpose to the qualification specified in Academic Academic Program Rule 3.1 (a) hereof
(c) Subject to the approval of the Dean, the Dental School may accept as a candidate an applicant who does not satisfy the requirements of Academic Program Rule 3.1 (b) above but who has given evidence satisfactory to the Dental School of fitness to undertake advanced work in dentistry.

### 3.2 Articulation with other awards

Students who complete the Graduate Certificate are eligible to apply for entry to the Graduate Diploma in Clinical Dentistry program and if successful on gaining entry, are eligible to apply for status for studies they have undertaken in the Graduate Certificate, to a maximum value of 6 units.

### 3.3 Prescribed communicable infections policy

The University promotes a pro-active public health approach to prescribed communicable infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students' academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from discrimination, challenging views that result in discriminatory attitudes toward people with PCls.
The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff members and visitors, and recognises that some students with such infections will not be permitted to complete the Bachelor of Medicine, Bachelor of Surgery, the Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences.

All prospective medical and dental school students are strongly advised to consult the University's Students With Prescribed Communicable Infections Policy - available through the University's website at www.adelaide.edu.au/ student/current/policies.html - which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

## 4 Assessment and examinations

4.1 A candidate shall not be eligible to present for examination unless the required program of study has been completed to the satisfaction of the Dean.
4.2 The Dental School shall appoint examiners for written, oral, clinical and other assessments.
4.3 There shall be one grading classification in any course for the Graduate Certificate: Non Graded Pass.

### 4.4 Review of academic progress

A candidate's progress may be reviewed at any time by the Dean. If, in the opinion of the Dental School a candidate is not making satisfactory progress the Dental School may, with the consent of Council, terminate the candidature.

## 5 Qualification requirements

### 5.1 Academic Program

All students shall satisfactorily complete the compulsory course

DENT 6001HO Contemporary Dental Practice *
Students shall complete elective courses to the value of six units taken from the following (subject to availability):

DENT6021HO Adhesive Dentistry C 2
DENT6022HO Advanced Restorative Dentistry C 2
DENT 6023HO Endodontics C 2
DENT6024HO High Caries Risk C 2
DENT 6025HO Implantology C 2
DENT 6026HO Orofacial Pain C 2
DENT 6027HO Oral Pathology C 2
DENT 6028HO Dento-Alveolar Surgery C 2
DENT6029HO Orthodontics C 2
DENT6030HO Periodontics C 2
DENT 6031HO Removable Prosthodontics (full) C 2
DENT 6032HO Removable Prosthodontics (partial) C2

DENT 6033HO Special Needs Dentistry C 2
DENT6034HO Dental Wear C 2
DENT6036HO Aesthetic Dentistry C 2
DENT6037HO Panoramic Radiography C 2
DENT 6038HO Extra-Oral Radiography C 2
DENT6039HO Dental Trauma C 2
DENT 6040HO Dental Laboratory Technology C 2
DENT6061HO Maxillo-Facial Prosthetics 2
DENT6063HO Pain Management C 2
DENT 6064HO Oral Medicine C 2
DENT 6065 Paedodontics C 2
Other courses as they become available

* available in external mode only
5.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.


### 5.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 General

1.1 A candidate who complies with the foregoing conditions and satisfies the examiners and the Dental School shall be awarded the Graduate Diploma of Clinical Dentistry.
1.2 No candidate will be permitted to count for the Graduate Diploma in Clinical Dentistry any course that in the opinion of the Dental School contains substantially the same material as any course which he or she presented already for another qualification, other than the Graduate Certificate in Dentistry, to a maximum of 6 units.

## 2 Duration of program

2.1 To qualify for the Graduate Diploma, a candidate shall:
(a) complete satisfactorily an approved program of study extending over at least one year as a full-time student, or with approval of Dental School, over a period of not more than three years as a part-time candidate and
(b) pass such written, oral, clinical and practical examinations, and submit such reports as may be required by the Dental School.
2.2 The program of study, examination, reports and such other work as may be required and the period of study for each candidate shall be specified by the Dean and approved by the Dental School.
2.3 Unless the Dental School, on the advice of the Dean, approve an extension of time in a particular case, the work for the Graduate Diploma shall be completed within the period of study approved for the particular candidate under Academic Program Rule 2.1.

3 Admission
3.1 An applicant for admission to the program of study for the Graduate Diploma shall have qualified for the degree of Bachelor of Dental Surgery, or Bachelor of Oral Health or Diploma of Dental Therapy in the University of Adelaide, or hold qualifications in a field of dentistry from another institution accepted for the purpose by the University.
3.2 Subject to the approval of the Dean, the Dental School may accept as a candidate an applicant who does not satisfy the requirements of Academic Program Rule 3.1 above but
who have given evidence satisfactory to the Dental School of fitness to undertake advanced work in dentistry.

### 3.3 Prescribed communicable infections policy

The University promotes a pro-active public health approach to prescribed communicable infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students' academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from discrimination, challenging views that result in discriminatory attitudes toward people with PCIs.
The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff members and visitors, and recognises that some students with such infections will not be permitted to complete the Bachelor of Medicine, Bachelor of Surgery, the Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences.

All prospective medical and dental school students are strongly advised to consult the University's Students With Prescribed Communicable Infections Policy - available through the University's website at www.adelaide.edu.au/ student/current/policies.html - which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

## 4 Assessment and examinations

4.1 There shall be four classifications of pass in the courses for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
4.2 A candidate shall not be eligible to present for examination unless the required program of study has been completed to the satisfaction of the Dean.
4.3 The Dental School shall appoint examiners for written, oral, clinical and other assessments.

### 4.4 Review of academic progress

A candidate's progress may be reviewed at any time by the Dean. If, in the opinion of the Dental School a
candidate is not making satisfactory progress the Dental School may, with the consent of Council, terminate the candidature.

## 5 Qualification requirements

5.1 Academic Program

The program of study shall be as follows:
DENT 6003HO Basic and Applied Dental Sciences
DENT 6004HO Research Methods and Ethics 2
DENT 6058HO Advanced Dental Selective 3
DENT 6059HO Advanced Dental Studies 3
DENT 6067HO Dental Selective 3
DENT 6068HO Dental Studies 3
DENT 6069HO Clinical Studies 4
DENT 6070HO Advanced Clinical Studies 4
5.2 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
5.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 General

1.1 For each candidate, the Dental School shall appoint a supervisor or supervisors for guidance.
1.2 A candidate for the diploma shall regularly attend lectures and tutorials, do such written, clinical and other practical work, and pass such examinations, as may be required by the Dean of the Dental School.
1.3 Students shall at all times be under the direction and supervision of a member of the teaching staff, duly appointed by the Director of the Forensic Odontology Unit, and shall carry out such work as shall be allocated.

## 2 Duration of program

To qualify for the Diploma a candidate shall satisfactorily complete a program of full-time study extending over one year, or of part-time study extending over at least two years. Except with special permission of the Dental School, the program for the Graduate Diploma shall be completed in not more than three years.

## 3 Admission

3.1 An applicant for admission to the program of study for the Graduate Diploma shall have qualified for the degree of Bachelor of Dental Surgery in the University of Adelaide, or hold qualifications in Dentistry from another institution accepted for the purpose by the University.
3.2 Subject to the approval of the Council, the Dental School may accept as a candidate an applicant who does not satisfy the requirements of Academic Program Rule 3.1 above but who have given evidence satisfactory to the Dental School of fitness to undertake advanced work in dentistry.

### 3.3 Prescribed communicable infections policy

The University promotes a pro-active public health approach to prescribed communicable infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students' academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from
discrimination, challenging views that result in discriminatory attitudes toward people with PCIs.
The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff members and visitors, and recognises that some students with such infections will not be permitted to complete the Bachelor of Medicine, Bachelor of Surgery, the Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences.
All prospective medical and dental school students are strongly advised to consult the University's Students With Prescribed Communicable Infections Policy - available through the University's website at www.adelaide.edu.au/ student/current/policies.html - which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

## 4 Assessment and examinations

4.1 The Dental School may appoint a Board of Examiners to carry out or supervise the examination of candidates for the Graduate Diploma in accordance with the schedules and syllabuses.
4.2 A candidate shall not be eligible to attend for examination unless the prescribed program of study has been completed to the satisfaction of the Dean of the Dental School.

### 4.3 Review of academic progress

If in the opinion of the Dental School a candidate is not making satisfactory progress, the Dental School may, with the consent of Council, terminate the candidature.

## 5 Qualification requirements

5.1 To qualify for the diploma a candidate shall pass the following courses
DENT6004HO Research Methods and Ethics ODONT6008AHO/BHO Casework in Forensic Odontology ODONT 6012HO Principles and Methods of Forensic Odontology

ODONT 6014AHO/BHO Forensic Odontology Research ODONT 6015HO Integrated Forensic Science
5.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 5.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Science in Dentistry

## Academic Program Rules

1 General
1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.

These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

## 2 Admission

2.1 The Research Education and Development Committee may accept as a candidate for the degree any person who:
(a) has qualified in the University of Adelaide for the degree of Bachelor of Dental Surgery and for the Honours Degree of Bachelor of Science in Dentistry with First or Second Class Honours
(b) has qualified for a degree in Dentistry and whose qualifications are regarded by the Committee as equivalent to those specified in 2.1 (a) or
(c) has qualified for a degree or degrees other than in Dentistry which the Committee regards as equivalent to the qualifications specified in 2.1 (a).
2.2 In addition to Rules 4.1-4.5 of the General Academic Program Rules and Rule 1 above, it is a condition of enrolment and continuing enrolment in all undergraduate programs and all clinical postgraduate programs in the Dental School, that students abide by the following policy:

### 2.3 Prescribed communicable infections policy

The University promotes a pro-active public health approach to prescribed communicable infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C , and seeks to minimise the impact of these infections on students'
academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from discrimination, challenging views that result in discriminatory attitudes toward people with PCls.

The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff members and visitors, and recognises that some students with such infections will not be permitted to complete the Bachelor of Medicine, Bachelor of Surgery, the Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences.

All prospective medical and dental school students are strongly advised to consult the University's Students With Prescribed Communicable Infections Policy - available through the University's website at www.adelaide.edu.au/ student/current/policies.html - which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

1.1 Except in circumstances approved by the Graduate School Advisory Board of the Dental School, the work for the degree shall be completed and the research thesis or related works submitted:
(a) in the case of a full time candidate, not less than three years and not more than four years from the date of commencement of candidature, except where status has been granted
(b) in the case of a part time candidate, not less than four years and not more than six years from the date of commencement of candidature, except where status has been granted.

## 2 Admission

2.1 The Graduate School Advisory Board may accept as a candidate for the degree any person who:
(a) has qualified in the University of Adelaide for the degree of Bachelor of Dental Surgery, or has qualified in another University for a degree or degrees in dentistry which the Graduate School Advisory Board regards as equivalent and
(b) has completed at least two years of relevant practical experience since qualifying for that degree and
(c) has qualified for an Honours degree of the University of Adelaide equivalent to at least a second class division standard, or has qualified for the Graduate Diploma in Clinical Dentistry of the University of Adelaide or equivalent, or has successfully completed the Primary Examinations of the Royal Australasian College of Dental Surgeons or equivalent. A case for equivalence can be made by applicants with extensive experience of at least five years in dental practice and who can demonstrate active participation in continuing education

### 2.2 Status and articulation

2.2.1 A candidate who is currently enrolled for the Graduate Diploma in Clinical Dentistry or Master of Dental Surgery shall, on written application to the Dental School Graduate School Advisory Board, be considered for status in all
equivalent courses completed towards the Graduate Diploma in Clinical Dentistry or Master of Dental Surgery.
2.2.2 With the permission of the Graduate School Advisory Board of the Dental School, students with a degree from other than the University of Adelaide may present for the degree of Doctor of Clinical Dentistry courses to a maximum aggregate units value of 24 units.

### 2.2.3 Transitional arrangements

2.2.3.1 Students with a degree of Master of Dental Surgery from the University of Adelaide may present for the degree of Doctor of Clinical Dentistry courses to a maximum aggregate units value of 48 units.
2.2.3.2 Students with a three year degree of Master of Dental Surgery (Orthodontics) from the University of Adelaide may present for the degree of Doctor of Clinical Dentistry courses to a maximum aggregate units value of 72 units.
2.2.3.3 Students with the Graduate Diploma in Clinical Dentistry from the University of Adelaide may present for the degree of Doctor of Clinical Dentistry courses to a maximum aggregate units value of 24 units.
2.2.3.4 Candidates who have maximum status awarded as outlined in rule 2.2.1 shall surrender the degree for which status is granted before being admitted to the degree of Doctor of Clinical Dentistry.

### 2.3 Acceptance

2.3.1 A person shall not be enrolled as a candidate for the degree unless:
(a) the applicant's proposed field of study and research is acceptable to the Graduate School Advisory Board of the Dental School and
(b) the Dental School can provide appropriate supervisors and other resources to support the candidate at this university or a collaborating university.
2.3.2 Collaborating Universities for the purpose of this degree shall be defined from time to time by the Dental School.

### 2.4 Extensions and intermissions

2.4.1 The Graduate School Advisory Board of the Dental School may grant a candidate one extension of candidature of twelve months beyond the maximum period specified in
rule 1.1, but if the research thesis or related works has not been submitted by the end of that period, the candidature will lapse.
2.4.2 A candidate whose work is interrupted for a period of time may be granted an intermission of candidature by the Graduate School Advisory Board. If an intermission is approved the duration of the candidature specified in rule 1.1 will be adjusted accordingly.
2.4.3 For candidates undertaking the Oral and Maxillofacial Surgery stream, an intermission of up to four years may be granted while the candidate completes the prerequisites of 8051AHO/BHO Specialist Oral and Maxillofacial Surgery VII. The duration of the candidature specified in Rule 1.1 will be adjusted accordingly.

### 2.5 Resumption of lapsed candidature

2.5.1 A candidature which has lapsed will be resumed if the completed research work, which has not departed from the field of study which was being pursued before the candidature lapsed, is subsequently submitted within two years from the date when the candidature lapsed to the Postgraduate Coordinator. The research work will only be accepted if the Dental School certifies that it is satisfactory to the School. Any extension beyond the two years shall be determined on a case by case basis by the Graduate School Advisory Board in consultation with the School. Approval of the Board is required for resumption of a lapsed candidature under any other conditions.

In special circumstances the Board, on the recommendation of the School, may approve the resumption of a lapsed candidature for one period of up to six months prior to the submission of the completed research work.

### 2.6 Prescribed communicable infections policy

The University promotes a pro-active public health approach to prescribed communicable infections (PCI) such as HIV/AIDS, Hepatitis B and Hepatitis C, and seeks to minimise the impact of these infections on students' academic progress. It offers understanding and practical support to students with such infections, and aims to provide a work and study environment free from discrimination, challenging views that result in discriminatory attitudes toward people with PCls.

The University also has a legal and ethical obligation to take all reasonable measures to prevent the transmission of prescribed communicable infections among students, staff members and visitors, and recognises that some students with such infections will not be permitted to complete the Bachelor of Medicine, Bachelor of Surgery, the Bachelor of Dental Surgery or other clinical programs offered by the Faculty of Health Sciences.

All prospective medical and dental school students are strongly advised to consult the University's Students With Prescribed Communicable Infections Policy - available through the University's website at www.adelaide.edu.au/ student/current/policies.html - which makes reference to the relevant legislation, elaborates on the reasons for the adoption of this policy, and outlines procedures for implementing the policy.

## 3 Assessment and examinations

### 3.1 Clinical component

Candidates shall be assessed annually. This assessment may take the form of a written examination, viva voce or clinical presentation. Should a candidate's progress be unsatisfactory, their candidature will be reviewed by the Graduate School Advisory Board of the Dental School.

### 3.2 Research component

3.2.1 In order to fulfil the requirements of the research component for the degree, students shall submit a research work consisting of either (1) a thesis based on original research, or (2) a compilation of a minimum of two papers based on research undertaken for the degree, and accepted for publication in internationally refereed journals, with an accompanying summary. By the end of their third year, candidates shall lodge with the Postgraduate Coordinator, three copies of the research work for assessment which shall be prepared in accordance with directions given from time to time. Candidates should refer to the Guidelines on Higher Degrees by Research and Specifications for Thesis in this volume.
3.2.2 The Graduate School Advisory Board of the Dental School shall appoint two examiners external to the Dental School for assessment of the research thesis.
3.2.3 Where a candidate submits a compilation of two or more papers accepted for publication in internationally refereed journals, with an accompanying summary, the research work shall be assessed by the Doctoral Examination Committee which shall make appropriate recommendation to the Graduate School Advisory Board.

### 3.3 Recommendations of Doctoral Examination Committee

The Doctoral Examination Committee may recommend to the Graduate School Advisory Board that the candidate:
(a) be awarded the degree or
(b) be examined orally or otherwise on the subject of the research work and the general field of knowledge in which it falls or
(c) be awarded the degree subject to such amendments of the research thesis as the examiners may have suggested or
(d) be not awarded the degree but be allowed to revise and resubmit the research thesis within such period as the Graduate School Advisory Board may allow or
(e) be not awarded the degree.

### 3.4 Doctoral Examination Committee

3.4.1 For each candidate, there shall be a Doctoral Examination Committee which shall consist of the Principal Supervisor, the Postgraduate Coordinator and one person nominated by the Graduate School Advisory Board of the Dental School.
3.4.2 The Doctoral Examination Committee shall:
(a) recommend the appointment of examiners
(b) consider the reports of the examiners of a research thesis, or published works submitted as fulfilment of the requirements of the research component, and the results of any examination, and make appropriate recommendation to the Graduate School Advisory Board regarding the award of the degree.

### 3.5 Review of Academic Progress

A formal review of a candidate's progress shall be conducted by the Dental School at least once a year, in accordance with Dental School guidelines. A candidate's re-enrolment in the following year is conditional upon his/her having attained satisfactory progress in the year except where the School is satisfied that special circumstances beyond the candidate's control affected the progress. If a candidate's progress is unsatisfactory, the School may terminate the candidature, in accordance with the guidelines outlined in the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees.

4 Qualification requirements
4.1 A candidate shall pursue a program of study and research approved by the Graduate School Advisory Board of the Dental School.
4.2 Within the coursework study component, which comprises two thirds of the degree, all candidates shall be required to complete core courses to the value of 12 units and specialist stream courses to the value of 36 units.
4.3 Within the research component which shall comprise one third of the degree, all candidates shall be required to complete research courses to the value of 24 units.
4.4 Candidates shall satisfactorily complete:
(a) the following core courses:

DENT8001AHO/BHO Research Methods, Experimental Design \& Ethics
DENT8002AHO/BHO Common topics in Dental Clinical Science

DENT8003AHO/BHO Interdisciplinary seminars in
Clinical Dentistry

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(b) all courses in one of the following course streams:
(i) Dento-Maxillo-Facial Radiology

DENT8010AHO/BHO Specialist Clinical Dento-Maxillo-Facial Radiology VI
DENT8011AHO/BHO Specialist Clinical
Dento-Maxillo-Facial Radiology VII 8
DENT8012AHO/BHO Specialist Clinical
Dento-Maxillo-Facial Radiology VIII 24
(ii) Endodontics

DENT8020AHO/BHO Specialist Clinical Endodontics VI

8
DENT8021AHO/BHO Specialist Clinical
Endodontics VII
DENT8022AHO/BHO Specialist Clinical Endodontics VIII

(iii) Forensic Odontology

DENT8030AHO/BHO Specialist Clinical
Forensic Odontology VI

8

DENT8031AHO/BHO Specialist Clinical
Forensic Odontology VII
DENT8032AHO/BHO Specialist Clinical Forensic Odontology VIII
(iv) Oral \& Maxillofacial Surgery

DENT8050AHO/BHO Specialist
Oral \& Maxillofacial Surgery VI
DENT8050AHO/BHO Specialist
Oral \& Maxillofacial Surgery VII
DENT8052AHO/BHO Specialist Oral \& Maxillofacial Surgery VIII
(v) Oral Medicine

DENT8060AHO/BHO Specialist Oral Medicine VI
DENT 8061AHO/BHO Specialist
Oral Medicine VII
DENT 8062AHO/BHO Specialist
Oral Medicine VIII
(vi) Oral Pathology

DENT8070AHO/BHO Specialist Oral Pathology VI

8
DENT8071AHO/BHO Specialist
Oral Pathology VII
DENT8072AHO/BHO Specialist
Oral Pathology VIII

## (vii) Orthodontics

DENT 8080AHO/BHO Specialist

Orthodontics VI

DENT 8081AHO/BHO Specialist
Orthodontics VII
DENT 8082AHO/BHO Specialist
Orthodontics VIII
(viii) Paediatric Dentistry

DENT8090AHO/BHO Specialist
Paediatric Dentistry VI
DENT8091AHO/BHO Specialist
Paediatric Dentistry VII

DENT8092AHO/BHO Specialist
Paediatric Dentistry VIII
(ix) Periodontics

DENT8100AHO/BHO Specialist
Periodontics VI
DENT8101AHO/BHO Specialist Periodontics VII
DENT8102AHO/BHO Specialist Periodontics VIII
(x) Prosthodontics

DENT8110AHO/BHO Specialist Prosthodontics VI

DENT8111AHO/BHO Specialist
Prosthodontics VII

DENT8112AHO/BHO Specialist
Prosthodontics VIII
(xi) Special Needs

DENT8113AHO/BHO Specialist Clinical
Special Needs Dentistry VI
DENT8114AHO/BHO Specialist Clinical Special Needs Dentistry VII8

DENT8115AHO/BHO Specialist Clinical Special Needs Dentistry VIII24
(c) the following four courses which shall be taken sequentially:
DENT8004HO Doctor of Clinical Dentistry Research A

DENT 8005HO Doctor of Clinical Dentistry B 6
DENT 8006HO Doctor of Clinical Dentistry C
DENT 8007HO Doctor of Clinical Dentistry D

### 4.5 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial
amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.6 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

1 A person shall not be accepted as a candidate for the degree of Doctor of Dental Science until the expiration of at least four years from admission to the degree of Bachelor of Dental Surgery in the University of Adelaide provided that, in the case of a graduate in dentistry of another university who has been admitted ad eundem gradum in the University of Adelaide, the period of four years shall be reckoned from the date of the first graduation in dentistry.
2 Except in special cases approved by the Board of Research Education and Development, acting with authority wittingly devolved to it by Council only persons who have been admitted to the degree of Master of Dental Surgery or Master of Science in Dentistry or Doctor of Philosophy may become candidates for the degree of Doctor of Dental Science:
(a) a person who desires to become a candidate for the degree shall give notice of the intended candidature in writing to the Manager Graduate Administration and Scholarships, Adelaide Graduate Centre. At the same time, and in a separate statement, the applicant shall furnish particulars of personal achievements and a summary of the progress of knowledge relevant to the work proposed for the degree, and indicate where it is considered that the work advances dental knowledge or practice.
(b) the Dental School shall appoint a committee to investigate the information submitted, including the quality and nature of the work to be submitted, and to advise the School as to whether the School should
(i) allow the applicant to proceed, and approve the subject or subjects of the work to be submitted
(ii) advise the applicant to revise the submission
(iii) advise the applicant not to submit the work or
(iv) not allow the applicant to proceed and the School's decision shall be conveyed to the applicant.
(c) If the candidature is accepted and the candidate proceeds with the submission, the School shall approve two or more examiners recommended by the committee of whom at least one shall be external to the University.
(d) The thesis may be written specially for the degree, or may be an already published work, or may be a series of papers. It shall not be a compilation from books,
nor a mere compendium of cases, nor merely observational. On the recommendation of an examiner, a candidate may be required to undergo examination in the subject matter of, or in subjects cognate to, the thesis.
(e) In submitting published works, the candidate shall state generally in a preface and specifically in notes, the main sources from which the information was derived and the extent to which the work of others has been included, especially where joint publications are concerned. The candidate may also signify in general terms those parts of the work that are claimed as original. The candidate is also required to indicate what part, if any, of the work has been submitted for a degree in this or any other university.
4 To qualify for the degree, the candidate must satisfy the examiners that the thesis makes an original contribution of distinguished merit and advances knowledge in some branch of dental science.
5 The candidate shall lodge with the Adelaide Graduate Centre three copies of the work prepared in accordance with the directions given in sub-paragraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree the two of the copies will be transmitted to the University Library.
6 On receipt of the reports of the examiners appointed to adjudicate upon the thesis the Dental School will recommend whether the degree be granted or withheld or delayed.

7 Notwithstanding anything contained in the preceding rules, the School may in exceptional circumstances recommend the award of the degree to any person who is not a member of the staff of the University. Any such recommendation must be accompanied by evidence that the person for whom the award is proposed has made an original and substantial contribution of distinguished merit to some branch of dental science.
For further information please contact the Adelaide Graduate Centre.
Regulations allowed 10 December, 1942
Amended: 16 Mar. 1961: 5; 15 Jan. 1976: 7; 4 Feb. 1982: 5; 1 Mar. 1984: 2, 7
Regulations repealed and substituted 1 Mar. 1989; 21 Feb, 1991: 2 Rule approved and Regulation repealed 18 March 1999.

## School of Economics


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## Postgraduate awards in the School of Economics

- Professional Certificate in International Trade
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- Graduate Certificate in International Economics
- Graduate Diploma in Advanced Economics
- Graduate Diploma in Applied Economics
- Graduate Diploma in International Economics
- Master of Applied Economics
- Master of Applied Economics (International)
- Master of Economics
- Master of Economics (Coursework)


## Notes on Delegated Authority

1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2 Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

## Professional Certificate in International Trade

## Academic Program Rules

## 1 Duration of Program

To qualify for the Professional Certificate, a candidate shall satisfactorily complete the equivalent of one semester of part-time study delivered in six two-day intensive modules.

## 2 Admission

2.1 An applicant for admission to the academic program for the Professional Certificate in International Trade shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty as equivalent to a degree of the University.
2.2 The Faculty may accept as a candidate for the Professional Certificate a person who does not satisfy the requirements of 2.1 above but who presents evidence of professional experience appropriate to undertake work for the Professional Certificate.

### 2.3 Status, exemption and credit transfer

Candidates are permitted to count courses towards the Professional Certificate in International Trade, which they have already presented towards another qualification, up to a maximum aggregate value of 6 units.

3 Assessment
3.1 There shall be four classifications of pass associated with the program leading to the Professional Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass. Each of the six modules will have an assessment requirement.
3.2 A candidate who fails a course and wishes to repeat the course shall, unless exempted partially therefrom by the Executive Director of the Institute of International Business, Economics and Law or nominee, again complete the required work to the satisfaction of the staff concerned .
3.3 A candidate who has failed a course twice may not enrol in that course except by permission of the Executive Director of the Institute of International Business, Economics and Law, and then only under such conditions as may be prescribed.

## 4 Qualification Requirements

4.1 To qualify for the Professional Certificate in International Trade, a candidate shall satisfactorily complete the following two courses:

TRADE 5000 International Trade: Negotiations \& Agreements
TRADE 5001 International Trade: Strategies \& Opportunities
4.2 In addition candidates are required to complete a major project.

### 4.3 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the teaching area concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate a candidate shall complete satisfactorily a program of full-time study extending over at least one semester or of part-time study extending over at least two semesters.

## 2 Admission

2.1 Except as provided in 2.2 below, an applicant for admission to the program for the Graduate Certificate shall have qualified for a degree of the University or a degree of another institution accepted by the School for the purpose as equivalent to a degree of this University.
2.2 Subject to the approval of the Council, the School may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not hold a degree of a tertiary institution but has given evidence satisfactory to the School of fitness to undertake work for the Graduate Certificate.
2.3 The School may require an applicant to complete such additional preliminary work as it may prescribe before he or she is accepted as a candidate for the Graduate Certificate.
2.4 A knowledge of SACEStage 2 Mathematical Studies or equivalent is assumed.

### 2.5 Status, exemption and credit transfer

2.5.1 A candidate who has passed courses in other educational institutions and who has not presented these courses towards an award may, on written application to the Head be granted such exemption from the requirements of these rules as the School shall determine. Status may be granted for a maximum of 3 units under 4.2 of the Program Rules.
2.5.2 No candidate will be permitted to count for the Graduate Certificate in Economics any course that in the opinion of the School contains substantially the same material as any other course which has been presented already for another qualification.

### 2.6 Articulation with other awards

Candidates intending to continue on to a graduate Diploma or Master's degree are advised strongly to consult the course requirements for those programs to ensure they complete the compulsory courses satisfactorily.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in the final assessment of any course for the Graduate Certificate as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass.
3.2 A candidate for the Graduate Certificate in Economics shall attend regularly lectures and tutorials, do written work as may be prescribed, and pass examinations in accordance with the provisions of the Program Rules.
3.3 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to present for examination or final assessment shall be deemed to have failed the examination/final assessment.
(b) a candidate who fails a course and wishes to repeat the course shall again attend lectures and satisfactorily do such written and practical work as the lecturer concerned may prescribe.
(c) a candidate who has twice failed the examination in any course for the Graduate Certificate or for any other course which in the opinion of the School contains a substantial amount of the same material, may not enrol for that course except by permission of the School and then only under such conditions as School may prescribe.

### 3.4 Review of Academic Progress

The Faculty my prescribe rules for review of academic progress. Any student who meets the requirement for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

## 4 Qualification requirements

To qualify for the Graduate Certificate in Economics the candidate shall satisfactorily completethe following:

### 4.1 Academic Program

4.1.1 Four one-semester courses (a minimum of twelve units) which shall comprise lectures and tutorials in any of the following courses not previously completed.
$\begin{array}{ll}\text { ECON7001 Applied Econometrics IIID* } & 3 \\ \text { ECON7011 Consumers, Firms \& Markets IID } & 3 \\ \text { ECON 7016 Resource \& Environmental Economics IIID } & 3 \\ \text { ECON7022 Econometrics IIID* } & 3 \\ \text { ECON7032 Public Economics IIID } & 3 \\ \text { ECON7044 International Finance IIID } & 3 \\ \text { ECON7050 International Economic History IIID } & 3 \\ \text { ECON7051 Economic and Financial Data Analysis IID* } & 3 \\ \text { ECON7058 Development Economics IIID } & 3 \\ \text { ECON 7062 Strategic Thinking for Decision Making IIID } & 3 \\ \text { ECON7070 Labour Economics IIID } & 3 \\ \text { ECON7071 Macroeconomic Theory \& Policy IID } & 3 \\ \text { ECON7072 International Trade IIID } & 3 \\ \text { ECON7074 Business Data Analysis ID* } & 3 \\ \text { ECON7075 Mathematical Economics IID* } & 3 \\ \text { ECON7076 Australian Economic History IID } & 3 \\ \text { ECON7096 Economic Theory IIID } & 3 \\ \text { ECON7114 Money, Banking \& Financial Markets IIID } & 3 \\ \text { *students are reminded that some mathematical and statistical } \\ \text { background is desirable for these courses. } & \\ \text { Note: check with the School of Economics for course availability }\end{array}$ each year.
4.1.2 A candidate may, with the permission of the Head of School, substitute one four unit course drawn from 4.2 of the Academic Program Rules of the Graduate Diploma in Advanced Economics in place of a 3 unit course towards the Certificate.
4.2 The number of courses to be offered in any semester will be dependent upon staff availability and student demand.
4.3 In special circumstances, candidates may be given permission to substitute another course for courses specified in 4.1 above.
4.4 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of Program

A candidate for the Graduate Certificateshall complete satisfactorily a program of full-time study extending over at least one semester or of part-time study extending over at least two semesters. A candidate shall take not more than six consecutive semesters to complete the requirements of the Certificate.

2 Admission
2.1 Except as provided in 2.2 below, an applicant for admission to the program for the Graduate Certificate shall have qualified for a degree of the University or a degree of another institution accepted by the School for the purpose as equivalent to a degree of this University.
2.2 Subject to the approval of the Council, the School may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not hold a degree of a tertiary institution but has given evidence satisfactory to the School of fitness to undertake work for the Graduate Certificate.
2.3 The School may require an applicant to complete such additional preliminary work as it may prescribe before he or she is accepted as a candidate for the Graduate Certificate.
2.4 A knowledge of SACE Stage 2 Mathematical Studies or its equivalent is assumed.
2.5 Status, exemption and credit transfer
2.5.1 A candidate who has passed courses in other educational institutions and who has not presented these courses towards an award may, on written application to the Head be granted such exemption from the requirements of these rules as theSchoolshall determine. Status may be granted for a maximum of 3 units under 4.2 of the Academic Program Rules.
2.5.2 No candidate will be permitted to count for the Graduate Certificate in International Economics any course that in the opinion of theSchool contains substantially the same material as any other course which he or she has presented already for another qualification.

### 2.6 Articulation with other awards

Candidates intending to continue on to a Graduate Diploma or Master's degree are advised strongly to consult the course requirements for those programs to ensure they complete the compulsory courses satisfactorily.

3 Assessment and examinations
3.1 There shall be four classifications of pass in the final assessment of any course for the Graduate Certificate as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass.
3.2 A candidate for the Graduate Certificate in International Economics shall attend regularly lectures and tutorials, do written work as may be prescribed, and pass examinations in accordance with the provisions of the Academic Program Rules of the Certificate.
3.3 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to present for examination or final assessment shall be deemed to have failed the examination/final assessment.
(b) a candidate who fails a course and wishes to repeat the course shall again attend lectures and tutorials and satisfactorily do such written and practical work as the lecturer concerned may prescribe.
(c) a candidate who has twice failed the examination in any course for the Graduate Certificate or for any other course which in the opinion of the School contains a substantial amount of the same material, may not enrol for that course except by permission of the School and then only under such conditions as School may prescribe.

### 3.4 Review of Academic Progress

The Faculty my prescribe rules for review of academic progress. Any student who meets the requirement for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

### 4.1 Academic program

To qualify for the Graduate Certificate in International Economics the candidate shall satisfactorily complete four one-semester courses (a minimum of twelve units) which shall comprise the following:
4.1.1 (a) at least one of the following International Economics courses (or their equivalent):
ECON 7036International Trade and Investment Policy IID
ECON7044 International Finance IIID 3
ECON7072 International Trade IIID
(b) at least three of the following courses not previously or otherwise completed (9 units):
ECON7001 Applied Econometrics IIID* 3
ECON 7011 Consumers, Firms \& Markets IID
ECON7016 Resource \& Environmental Economics IIID
ECON 7022 Econometrics IIID* 3
ECON 7032 Public Economics IIID 3
ECON7036International Trade and Investment Policy IID 3

ECON 7044International Finance IIID 3
ECON 7050International Economic History IIID 3
ECON7051 Economic and Financial Data Analysis IID*3

ECON7058Development Economics IIID 3
ECON 7062 Strategic Thinking
for Decision Making IIID
ECON 7070 Labour Economics IIID 3
ECON 7071 Macroeconomic Theory \& Policy IID 3
ECON 7072International Trade IIID 3
ECON7096Economic Theory IIID 3
ECON7114 Money, Banking \& Financial Markets IIID 3
*students are reminded that some mathematical and statistical background is desirable for these courses.
Note: check with the School of Economics for course availability each year.
(c) A candidate may, with the permission of the Head of School substitute one four unit course drawn from 4.2 of the Academic Program Rules of the Graduate Diploma in Advanced Economics in place of a 3 unit course towards the Certificate.
4.2 The number of courses to be offered in any semester will be dependent upon staff availability and student demand.
4.3 In special circumstances, candidates may be given permission to substitute another course for courses specified in 4.1 above.
4.4 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Certificates in Economics - Graduate Attributes

## Program Objectives

- To provide students with analytical and econometric skills that will provide an understanding of economic policy issues for holders of a Bachelors degree in a field other than economics.


## Graduate attributes

- To achieve the program objective students will require theoretical and analytical skills equivalent to those acquired at Level IIID coursework in the fields of macroeconomics, microeconomics and econometrics.

On successful completion of the program, students should be able to demonstrate the following attributes and skills:

- Explain and evaluate the use of economic theory and basic econometric methods in the analysis of economic policies contained in government publications by the Central Bank, Departments of Treasury and Finance or the ACCC and other similar regulatory bodies.


## Generic Skills

On completion of the program students should be able to demonstrate;

- The ability to interpret the results of an econometric analysis of economic data.
- Apply the analytical skills obtained to provide precise written and oral reports.


## Mapping of Attributes to the Program

- Econometrics at Levels IID and IIID provides students with the basic econometric theory.
- Courses in microeconomics and macroeconomics at Level IID and IIID cover the required economic theory.
- Assessment is by examination and assignments with written and oral components that ensure that graduates reach an acceptable level of competency in the presentation of their analysis.


## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma in Advanced Economics a candidate shall satisfactorily complete a program of fulltime study extending over at least two semesters or of part-time study extending over at least four semesters.

## 2 Admission

2.1 An applicant for admission to the program for the Graduate Diploma shall have qualified for a degree of the University or a degree of another institution accepted by the School for the purpose as equivalent to a degree of this University. The degree must contain a major in Economics.
2.2 Subject to the approval of the School, the Council may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of 2.1 above but who has given evidence satisfactory to the School of fitness to undertake work for the Graduate Diploma.
2.3 The School may require an applicant to complete such additional preliminary work as it may prescribe before he or she is accepted as a candidate for the Graduate Diploma.

### 2.4 Status, exemption and credit transfer

2.4.1 A candidate who has passed courses in other educational institutions and who has not presented these courses towards an award may, on written application to the School, be granted such exemption from the requirements of these Program Rules as the School shall determine. Status may be granted for a maximum of 8 units under 4.2 below.
2.4.2 No candidate will be permitted to count for the Graduate Diploma in Advanced Economics any course that in the opinion of the School contains substantially the same material as any other course which he or she has presented already for another qualification, other than for the Graduate Certificates in Economics or the Graduate Diploma in Applied Economics or the Graduate Diploma in International Economics and then only upon its surrender.

### 2.5 Articulation with other awards

2.5.1 A candidate holding a Graduate Certificate in Economics or International Economics or Graduate Diploma in Applied or International Economics may count courses passed in
these programs toward the Graduate Diploma upon surrender of the other award.
2.5.2 Candidates intending to continue on to aMaster's degree are advised strongly to consult the course requirements for such programs to ensure they complete the compulsory courses satisfactorily.
2.5.3 Candidates currently enrolled in the Graduate Diploma in Economics will proceed under the regulations and schedules in force at the date of enrolment.

3 Assessment and examinations
3.1 There shall be four classifications of pass in the final assessment of any course for the Graduate Diploma as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass.
3.2 A candidate for the Graduate Diploma in Advanced Economics shall regularly attend lectures and tutorials, do written work as may be prescribed, and pass examinations in accordance with the provisions of these Academic Program Rules.
3.3 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to present for examination or final assessment shall be deemed to have failed the examination/final assessment.
(b) a candidate who fails a course and wishes to repeat the course shall attend again lectures and satisfactorily do such written and practical work as the lecturer concerned may prescribe.
(c) a candidate who has twice failed the examination in any course or division of a course may not enrol for that course again except by special permission to be obtained in writing from the School and then only under such conditions as may be prescribed.

### 3.4 Review of Academic Progress

The Faculty my prescribe rules for review of academic progress. Any student who meets the requirement for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

### 4.1 Academic program

To qualify for the Graduate Diploma in Advanced Economics the candidate shall complete satisfactorily six semester courses (24 units) which shall comprise lectures and tutorials in the following:
4.1.1 (a) the following two compulsory core courses (8 units):

ECON7025Microeconomics A (H)
ECON7059Macroeconomics A (H)
(b) one of the following quantitative courses (four units):

ECON7038Econometrics IIIA
ECON7082Applied Econometrics IIIA
ECON7203Econometrics (H)
(c) at least two courses, not previously or otherwise completed, chosen from the list (a minimum of 8 units) including the presentation of a research essay in at least one of the courses:

| ECON7009Mathematical Economics (H) | 4 |
| :--- | :--- |
| ECON7053Long Run Growth (H) | 4 |
| ECON7055International Trade (H) | 4 |
| ECON7056International Finance (H) | 4 |
| ECON7065 Public Economics (H) | 4 |
| ECON7077Economic Development (H) | 4 |
| ECON7104Labour Economics (H) | 4 |
| ECON7203Econometrics (H) | 4 |

(d) one other course not previously or otherwise completed, from those listed above in 4.2 or from the following (4 units):
ECON7005 Resource \& Environment Economics IIIA 4

ECON7007International Finance IIIA 4
ECON7038Econometrics IIIA 4
ECON7069International Trade IIIA 4
ECON7082Applied Econometrics IIIA 4
ECON 7088 Strategic Thinking
for Decision Making IIIA
ECON7089Development Economics IIIA 4
ECON7095Economic Theory IIIA 4
ECON7099 International Economic History IIIA 4
ECON7105Labour Economics IIIA 4
ECON7113Money, Banking
and Financial Markets IIIA
ECON7116 Public Economics IIIA

Note: check with the School of Economics for course availability each year.
4.2 The number of courses to be offered in any semester will be dependent upon the availability of staff and student demand.
4.3 In special circumstances, candidates may be given permission to substitute another course for courses specified in 4.1 above.
4.4 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Diploma in Applied Economics

## Academic Program Rules

1 Duration of program
To qualify for the Graduate Diploma a candidate shall complete satisfactorily a program of full-time study extending over at least two semesters or of part-time study extending over at least four semesters.

## 2 Admission

2.1 An applicant for admission to the program for the Graduate Diploma shall have qualified for a degree of the University or a degree of another institution accepted by the School for the purpose as equivalent to a degree of this University and have obtained the approval of the School of Economics. The degree need not contain a major in Economics.
2.2 Subject to the approval of the Council the School may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not hold a degree of a tertiary institution but has given evidence satisfactory to the School of fitness to undertake work for the Graduate Diploma. Normally that would involve completing satisfactorily the requirements for the Graduate Certificate in Economics.
2.3 A knowledge of SACE Stage 2 Mathematical Studies or equivalent is assumed.

### 2.4 Status, exemption and credit transfer

2.4.1 A candidate who has passed courses in other educational institutions and who has not presented these courses towards an award may, on written application to the Head, be granted such exemption from the requirements of these regulations as the School shall determine. Status may be granted for a maximum of 6 units under 4.2 of the Academic Program Rules.
2.4.2 No candidate will be permitted to count for the Graduate Diploma in Applied Economics any course that in the opinion of the School contains substantially the same material as any other course which he or she has presented already for another qualification, other than for the Graduate Certificate in Economics or International Economics and then only upon its surrender.

### 2.5 Articulation with other awards

2.5.1 A candidate holding a Graduate Certificate in Economics or International Economics may count courses passed in the Graduate Certificate toward the Graduate Diploma upon surrender of the Graduate Certificate.
2.5.2 Candidates intending to continue on to a Master's degree are advised strongly to consult the course requirements for such programs to ensure they complete the compulsory courses satisfactorily.
2.5.3 Candidates currently enrolled in the Graduate Diploma in Economics will proceed under the regulations and schedules in force at the date of enrolment.

3 Assessment and examinations
3.1 There shall be four classifications of pass in the final assessment of any course for the Graduate Diploma as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass.
3.2 A candidate for the Graduate Diploma in Applied Economics shall attend regularly lectures and tutorials, do written work as may be prescribed, and pass examinations in accordance with the provisions of these Academic Program Rules.
3.3 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to present for examination or final assessment shall be deemed to have failed the examination/final assessment.
(b) a candidate who fails a course and wishes to repeat the course shall again attend lectures and satisfactorily do such written and practical work as the lecturer concerned may prescribe.
(c) a candidate who has failed twice the examination in any course or division of a course may not enrol for that course again except by special permission to be obtained in writing from the School and then only under such conditions as may be prescribed.

### 3.4 Review of Academic Progress

The Faculty my prescribe rules for review of academic progress. Any student who meets the requirement for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot
adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma in Applied Economics the candidate shall complete satisfactorily eight semester courses (a minimum of 24 units) which shall comprise lectures and tutorials in the following:
4.1.1 (a) the following two compulsory core courses (6 units): $\begin{array}{ll}\text { ECON } 7011 \text { Consumers, Firms \& Markets IID } & 3 \\ \text { ECON } 7071 \text { Macroeconomic Theory \& Policy IID } & 3\end{array}$
(b) one of the following quantitative courses (3 units):

ECON7001Applied Econometrics IIID* 3
ECON7022Econometrics IIID* 3
ECON7051Economic and Financial
Data Analysis IID*
ECON7074Business Data Analysis ID 3
ECON7075Mathematical Economics IID* 3
(c) at least five courses not previously or otherwise completed ( 15 units) chosen from the following list, of which at least three courses ( 9 units) must be IIID courses:
ECON7001 Applied Econometrics IIID* 3
ECON7016 Resource \& Environmental
Economics IIID
ECON7022 Econometrics IIID* 3
ECON7032 Public Economics IIID 3
ECON7036 International Trade and
Investment Policy IID
ECON7044International Finance IIID 3
ECON7050 International Economic History IIID 3
ECON7058Development Economics IIID 3
ECON 7062 Strategic Thinking
for Decision Making IIID
ECON7070Labour Economics IIID 3
ECON7072International Trade IIID 3
ECON7075Mathematical Economics IID* 3
ECON7096Economic Theory IIID\# 3
ECON7114Money, Banking and
Financial Markets IIID
3

* these courses are available for students with some mathematical and statistical background.
\# highly recommended

Note: students are recommended to check with the School of Economics for course availability each year.
(d) a candidate may substitute one or more 4 unit course drawn from 6.2.4 of the Academic Program Rules of the Master of Applied Economics in place of a 3 unit course towards the Diploma.
4.2 The number of courses to be offered in any semester will be dependent upon staff availability and student demand.
4.3 In special circumstances, candidates may be given permission to substitute another course for courses specified in 4.1 above.
4.4 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of Program

To qualify for the Graduate Diploma a candidate shall complete satisfactorily a program of full-time study extending over at least two semesters or of part-time study extending over at least four semesters.

## 2 Admission

2.1 An applicant for admission to the program for the Graduate Diploma shall have qualified for a degree of the University or a degree of another institution accepted by the School for the purpose as equivalent to a degree of this University. The degree need not contain a major in Economics.
2.2 The School may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not hold a degree of a tertiary institution but has given evidence satisfactory to the School of fitness to undertake work for the Graduate Diploma. Normally that would involve completing satisfactorily the requirements for the Graduate Certificate in Economics or Graduate Certificate in International Economics.
2.3 A knowledge of SACE Stage 2 Mathematical Studies or its equivalent is assumed.

### 2.4 Status, exemption and credit transfer

2.4.1 A candidate who has passed courses in other educational institutions and who has not presented these courses towards an award may, on written application to the Head, be granted such exemption from the requirements of these regulations as the School shall determine. Status may be granted for a maximum of 6 units under 4.2 of the Academic Program Rules.
2.4.2 No candidate will be permitted to count for the Graduate Diploma in International Economics any course that in the opinion of the School contains substantially the same material as any other course which he or she has presented already for another qualification, other than for the Graduate Certificate in International Economics and then only upon its surrender.

### 2.5 Articulation with other awards

2.5.1 A candidate holding a Graduate Certificate in Economics or International Economics may count courses passed in the

Graduate Certificate toward the Graduate Diploma upon surrender of the Graduate Certificate.
2.5.2 Candidates intending to continue on to a Master's degree are advised strongly to consult the course requirements for such programs to ensure they complete the compulsory courses satisfactorily.
2.5.3 Candidates currently enrolled in the Graduate Diploma in Economics will proceed under the regulations and schedules in force at the date of enrolment.

3 Assessment and examinations
3.1 There shall be four classifications of pass in the final assessment of any course for the Graduate Diploma as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass.
3.2 A candidate for the Graduate Diploma in International Economics shall attend regularly lectures and tutorials, do written work as may be prescribed, and pass examinations in accordance with the provisions of these Program Rules of the Diploma.
3.3 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to present for examination or final assessment shall be deemed to have failed the examination/final assessment.
(b) a candidate who fails a course and wishes to repeat the course shall again attend lectures and tutorials and satisfactorily do such written and practical work as the lecturer concerned may prescribe.
(c) a candidate who has failed twice the examination in any course or division of a course may not enrol for that course again except by special permission to be obtained in writing from the School and then only under such conditions as may be prescribed.

### 3.4 Review of Academic Progress

The Faculty my prescribe rules for review of academic progress. Any student who meets the requirement for review will be asked to show cause as to why they should be permitted to continue their studies. Students who cannot adequately explain poor academic performance may have their enrolment cancelled or restricted, and/or be precluded from undertaking further studies toward their program.

### 4.1 Academic program

To qualify for the Graduate Diploma in International Economics the candidate shall complete satisfactorily eight semester courses (a minimum of 24 units) which shall comprise the following:
4.1.1 (a) at least two of the following International Economics courses or their equivalents ( 6 units):
ECON7036 International Trade and
Investment Policy IID
ECON7044 International Finance IIID
ECON7072 International Trade IIID
(b) ECON7011Consumers, Firms \& Markets IID (or equiv.)
(c) at least one of the following quantitative courses or their equivalents (3 units):

ECON7001Applied Econometrics IIID*
ECON7022 Econometrics IIID* 3
ECON7051 Economic and
Financial Data AnalysisilID*
(d) at least four of the following courses not previously or otherwise completed (a minimum of 12 units):
ECON7001 Applied Econometrics IIID* 3
ECON 7016 Resource \& Environmental Economics IIID3

ECON7022 Econometrics IIID* ..... 3
ECON7032 Public Economics IIID ..... 3
ECON7036 International Trade and Investment Policy IID ..... 3
ECON7044 International Finance IIID ..... 3
ECON7050 International Economic History III D ..... 3
ECON7058 Development Economics IIID ..... 3
ECON 7062 Strategic Thinking for Decision Making IIID ..... 3
ECON 7070 Labour Economics IIID ..... 3
ECON7071Macroeconomics IID ..... 3
ECON7072International Trade IIID ..... 3
ECON 7096 Economic Theory IIID\# ..... 3ECON7114Money, Banking andFinancial Markets IIID3

* these courses are available for students with some mathematical and statistical background
\# highly recommended
Note: students are strongly recommended to check with the School of Economics for course availability each year.
(e) a candidate may substitute one or more 4unit courses drawn from 6.2.4 of the Academic Program Rules of the Master of Applied Economics in place of a 3 unit course in the Diploma.
4.2 The number of courses to be offered in any semester will be dependent upon staff availability and student demand.
4.3 In special circumstances, candidates may be given permission to substitute another course for courses specified in 4.1 above.
4.4 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.


### 4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Diplomas in Economics - Graduate Attributes

## Program Objectives

- To provide students with analytical and econometric skills that will provide an understanding of economic policy issues for holders of a Bachelors degree in a field other than economics.


## Graduate Attributes

- To achieve the program objective students will require theoretical and analytical skills at least equivalent to those acquired at level IIID coursework in the fields of macroeconomics, microeconomics and econometrics.

On successful completion of the program, students should be able to demonstrate the following attributes and skills:

- Explain and critically evaluate the use of economic theory and basic econometric methods in the analysis of economic policies contained in government publications by the Central Bank, Departments of Treasury and Finance or the ACCC and other similar regulatory bodies.


## Generic Skills

On completion of the program students should be able to demonstrate;

- Mastery of Excel or equivalent software for basic econometric analysis.
- Apply the analytical skills obtained to provide precise written and oral reports.


## Mapping of Attributes to the Program

- Econometrics at levels IID and IIID provides students with the basic econometric theory and mastery of the appropriate software.
- Courses in microeconomics and macroeconomics at level II and III cover the required economic theory.
- Assessment is by examination and assignments with written and oral components that ensure that graduates reach an acceptable level of competency in the presentation of their analysis.


## 1 General

1.1 Each candidate will be required to undertake during university vacations such studies as may be prescribed.
1.2 A candidate for the degree of Doctor of Philosophy whose work is considered by the School to be not of sufficient merit may be awarded the degree of Master of Applied Economics.

## 2 Duration of program

2.1 (a) Except by special permission of the School, the work of the degree for a full-time candidate shall be completed in not less than two semesters and not more than six semesters from the date of candidature accepted by the School.
(b) Except by special permission of the School, the work of the degree for a part-time candidate shall be completed in not less than four semesters and not more than twelve semesters from the date of candidature accepted by the School.

## 3 Admission

3.1 The School may accept as a candidate for the degree any graduate who:
(a) has qualified for the degree Bachelor of Economics of the University of Adelaide at an average equivalent to a credit or better or
(b) has qualified for a degree of another university at an average equivalent to a credit or better, which degree the School regards as being equivalent to the degree Bachelor of Economics of the University of Adelaide or
(c) has qualified for a joint degree in Economics of the University of Adelaide or its equivalent from another university, supplemented by the satisfactory completion of bridging coursework as the School may deem necessary (courses to be specified by the Dean of School or nominee) or
(d) has qualified for a degree of the University of Adelaide or a degree of another institution accepted by the School for the purpose as equivalent to a degree of this University at an average equivalent to a credit or better and has obtained the approval of the School. The degree need not contain a major in Economics but must be supplemented by the satisfactory
completion of bridging coursework as the School may deem necessary (courses to be specified by the Head of School or nominee) or
(e) has qualified for either of the Graduate Diplomas in Applied or International Economics from the University of Adelaideor their equivalent from another university.
3.2 The School may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who, irrespective of whether or not the candidate is a university graduate, has given evidence satisfactory to the School of fitness to undertake work for the degree.

### 3.3 Status, exemption and credit transfer

A candidate who has completed a Bachelor's degree which includes a major in economics, or the Graduate Certificate in Economics or International Economics, or the Graduate Diploma in Applied Economics or International Economics, may be granted status in up to 12 units, as part of the qualification requirements as specified in 6.1.3, towards the degree. A candidate who has completed the Professional Certificate in International Trade may be granted status up to 6 units, as part of the qualification requirements specified in 6.3 towards the degree. Results obtained in these courses must be of a standard deemed acceptable by the Head of the School for the purposes of granting status.

## 4 Enrolment

A candidate's program of study must be approved by the Head of the School (or nominee) at enrolment each year.

## 5 Assessment and examinations

5.1 Students undertaking the dissertation option as specified in 6.1.6 shall lodge with the School three copies of the dissertation or project prepared in accordance with the directions given to candidates by the School.
5.2 Results of those who pass in any of the courses shall be published within the following classifications: High Distinction, Distinction, Credit, Pass.
5.3 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to present
for examination or final assessment shall be deemed to have failed the examination/final assessment.
(b) a candidate who fails a course and wishes to repeat the course shall again attend lectures and tutorials and satisfactorily do such written and practical work as the lecturer concerned may prescribe.
(c) a candidate who has failed twice the examination in any course or division of a course may not enrol for that course again except by special permission to be obtained in writing from the School and then only under such conditions as may be prescribed.

### 5.4 Review of academic progress

A candidate's progress shall be reviewed by the School at the end of each year. If in the opinion of the School, a candidate is not making satisfactory progress the School may, with the consent of the Council, withdraw its approval of the candidature and the candidate shall cease to be enrolled for the degree.

6 Qualification requirements

### 6.1 Academic Program

To qualify for the degree of Master of Applied Economics, the candidate shall complete satisfactorily a program of study which shall consist of courses as follows, with a combined total of not less than 36 units:
6.1.1 ECON7096 Economic Theory IIID 3
6.1.2 One of the following quantitative courses:

ECON7001 Applied Econometrics IIID
ECON7022 Econometrics IIID
6.1.3 Two elective courses not previously or otherwise completed ( 6 units) to be chosen from the following list:
ECON7001 Applied Econometrics IIID 3

ECON7016 Resource \& Environmental Economics IIID 3
ECON7022 Econometrics IIID 3
ECON7032 Public Economics IIID 3
ECON7044 International Finance IIID 3
ECON7050 International Economic History IIID 3
ECON7058 Development Economics IIID 3
ECON 7062 Strategic Thinking for Decision Making IIID 3
ECON7070 Labour Economics IIID 3
ECON7072 International Trade IIID 3
ECON7114 Money, Banking and Financial Markets IIID
Note: Level IIID courses involve work and assessment in addition to that which is required in Level III courses.
6.1.4 Two elective courses not previously or otherwise completed (8 units) to be chosen from the following list.

ECON7009 Mathematical Economics (H) 4
ECON7025 Microeconomics A (H) \# 4
ECON 7053 Long Run Growth (H) 4
ECON7055 International Trade (H) 4
ECON 7056 International Finance (H) 4
ECON7059 Macroeconomics A (H) \# 4
ECON 7065 Public Economics (H) 4
ECON 7077 Economic Development (H) 4
ECON7104 Labour Economics (H) 4
ECON 7203 Econometrics (H) 4
6.1.5 ECON 7141 Challenges Facing Economic Policy Makers 4
\# These courses are requisites for students intending to transfer to the M.Ec. (Cswk) program
Note: The precise number of courses to be offered in any one year will be depend upon staff availability and student demand, and subject to such quotas as may need to be imposed.
6.1.6 Either
any combination of additional courses from 6.1.3 or 6.1.4 to the value of at least 12 units
or
ECON 7084 Master of Applied Economics Dissertation 12
ECON 7129 A/B Master of Applied Economics Dissertation
(Part-time)
6.2 Candidates are permitted to substitute an approved nonEconomics course for courses listed in 6.1.3 to the value of 3 units.
6.3 Candidates are permitted to substitute an approved nonEconomics course for courses listed in 6.1.3 to the value of 6 units, if undertaking the 'additional courses' option specified in 6.1.6.

Note: The maximum number of approved non-Economics courses that may be taken towards the program is 6 units.
6.4 In special circumstances, candidates may be given permission to substitute another course for courses listed in 6.1.1, 6.1.2, 6.1.3 and 6.1.4 above.
6.5 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 6.6 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 General

1.1 Each candidate will be required to undertake during university vacations such studies as may be prescribed.
1.2 A candidate for the degree of Doctor of Philosophy whose work is considered by the School to be not of sufficient merit may be awarded the degree of Master of Applied Economics (International).

## 2 Duration of program

2.1 (a) except by special permission of the School, the work of the degree for a full-time candidate shall be completed in not less than two semesters and not more than six semesters from the date of candidature accepted by the School.
(b) except by special permission of the School, the work of the degree for a part-time candidate shall be completed in not less than four semesters and not more than twelve semesters from the date of candidature accepted by the School.

## 3 Admission

3.1 The School may accept as a candidate for the degree any graduate who:
(a) has qualified for the degree Bachelor of Economics of the University of Adelaide at an average equivalent to a credit or better or
(b) has qualified for a degree of another university at an average equivalent to a credit or better, which degree the School regards as being equivalent to the degree of Bachelor of Economics of the University of Adelaide or
(c) has qualified for a joint degree in Economics of the University of Adelaide or its equivalent from another university, supplemented by the satisfactory completion of bridging coursework as the School may deem necessary (courses to be specified by the Dean of School or nominee or
(d) has qualified for a degree of the University of Adelaide or a degree of another institution accepted by the School for the purpose as equivalent to a degree of this University at an average equivalent to a credit or better and has obtained the approval of the School. The degree need not contain a major in Economics but must be supplemented by the satisfactory
completion of bridging coursework as the School may deem necessary (courses to be specified by the Head of School or nominee) or
(e) has qualified for either of the Graduate Diplomas in Applied or International Economics from the University of Adelaide or their equivalent from another university.
3.2 The School may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who, irrespective of whether or not the candidate is a university graduate, has given evidence satisfactory to the School of fitness to undertake work for the degree.

### 3.3 Status, exemption and credit transfer

A candidate who has completed a Bachelor's degree which includes a major in economics, or the Graduate Certificate in Economics or International Economics, or the Graduate Diploma in Applied Economics or International Economics, may be granted status in up to 12 units, as part of the qualification requirements specified in 6.1.2, towards the degree. A candidate who has completed the Professional Certificate in International Trade may be granted status up to 6 units, as part of the qualification requirements specified in 6.3 towards the degree. Results obtained in these courses must be of a standard deemed acceptable by the Head of the School for the purposes of granting status.

## 4 Enrolment

A candidate's program of study must be approved by the Head (or nominee) at enrolment each year.

## 5 Assessment and examinations

5.1 Students undertaking the dissertation option as specified in 6.1.5 shall lodge with the School three copies of the thesis or dissertation prepared in accordance with the directions given to candidates by the School.
5.2 Results of those who pass in any of the courses shall be published within the following classifications:
High Distinction, Distinction, Credit, Pass.
5.3 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to present for examination or final assessment shall be deemed to have failed the examination/final assessment.
(b) a candidate who fails a course and wishes to repeat the course shall again attend lectures and tutorials and satisfactorily do such written and practical work as the lecturer concerned may prescribe.
(c) a candidate who has failed twice the examination in any course or division of a course may not enrol for that course again except by special permission to be obtained in writing from the School and then only under such conditions as may be prescribed.

### 5.4 Review of academic progress

A candidate's progress shall be reviewed by the School at the end of each year. If in the opinion of the School a candidate is not making satisfactory progress the School may, with the consent of the Council, withdraw its approval of the candidature and the candidate shall cease to be enrolled for the degree.

6 Qualification requirements

### 6.1 Academic Program

To qualify for the degree of Master of Applied Economics (International), the candidate shall complete satisfactorily a program of study which shall consist of courses as follows, with a combined total of not less than 36 units:

### 6.1.1 Either

Econ 7072 International Trade IIID
and
ECON 7055 International Trade (H)
or
ECON7044 International Finance IIID
and
ECON7056 International Finance (H)
6.1.2 Three elective course not previously or otherwise completed (9 units) to be chosen from the following list
ECON7001 Applied Econometrics IIID\#
ECON7016 Resource \& Environmental Economics IIID
ECON7022 Econometrics IIID\# 3
ECON7032 Public Economics IIID 3
ECON 7044 International Finance IIID 3
ECON7050 International Economic History IIID 3
ECON7058 Development Economics IIID 3
ECON 7062 Strategic Thinking
for Decision Making IIID
ECON 7070 Labour Economics IIID 3
ECON 7072 International Trade IIID 3
ECON 7096 Economic Theory IIID\# 3
ECON7114 Money, Banking \& Financial Markets IIID

Note: Level IIID courses involve work and assessment in addition to that which is required in Level III courses.
6.1.3 One elective course not previously or otherwise completed (4 units) to be chosen from the following list
ECON7009 Mathematical Economics (H) 4
ECON7025 Microeconomics A (H) \#\# 4
ECON7053 Long Run Growth (H) 4
ECON 7055 International Trade (H) 4
ECON7056 International Finance (H) 4
ECON7059 Macroeconomics A (H) \#\# 4
ECON7065 Public Economics (H) 4
ECON7077 Economic Development (H) 4
ECON7104 Labour Economics (H) 4
ECON7203 Econometrics (H) 4
6.1.4 ECON 7141 Challenges Facing Economic Policy Makers 4
\# students are encouraged to take Economic Theory IIID and at least one Econometrics course.
\#\# These courses are requisites for students intending to transfer to the M.Ec. (Cswk) program.
Note: the precise number of courses to be offered in any one year will be depend upon staff availability and student demand, and subject to such quotas as may need to be imposed.

### 6.1.5 Either

any combination of additional courses from 6.1.2 or 6.1.3 to the value of at least 12 units
or
ECON 7126 Master of Applied Economics
(International) Dissertation
ECON 7127 A/B Master of Applied Economics (International) Dissertation (Part-time)
6.2 Candidates are permitted to substitute an approved nonEconomics course for courses listed in 6.1.2 to the value of 3 units.
6.3 Candidates are permitted to substitute an approved nonEconomics course for courses listed in 6.1.2 to the value of 6 units, if undertaking the 'additional courses' option specified in 6.1.5.
Note: The maximum number of approved non-Economics courses that may be taken towards the program is 6 units.
6.4 With the approval of the Head of School, students undertaking the additional courses option as specified in 6.1.6, may take up to 6 units of approved non-Economic postgraduate courses.
6.5 In special circumstances, candidates may be given permission to substitute another course for courses listed in 6.1.1, 6.1.2 and 6.1.3 above.
6.6 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 6.7 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 7 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Masters in Applied Economics - Graduate Attributes

## Program Objectives

- To provide students with analytical and econometric skills beyond the undergraduate level that will enable them to critically evaluate government reports, non-specialist economics journals such as The Journal of Economic Perspectives as well the popular financial press.


## Graduate Attributes

- To achieve the program objective students will require theoretical and analytical skills at least equivalent to those acquired at level IV coursework in the fields of macroeconomics, microeconomics and econometrics.
- For students with a Bachelors degree but no economics background bridging courses at level IID are required before level IIID and IV courses are attempted.

On successful completion of the program, students should be able to demonstrate the following attributes and skills:

- Explain, apply and critically evaluate the use of economic and basic econometric methods in the analysis of economic policies contained in government publications by the Central Bank, Departments of Treasury and Finance or the ACCC and other similar regulatory bodies.


## Generic Skills

On completion of the program students should be able to demonstrate;

- Mastery of windows software for basic econometric analysis.
- Apply the analytical skills obtained to provide precise written and oral reports.


## Mapping of Attributes to the Program

- Econometrics at levels IIID and IV provides students with the basic econometric theory and mastery of the appropriate software.
- Level IIID and IV courses in microeconomics and macroeconomics cover the required economic theory. There is some scope for specialisation in electives.
- The course Challenges facing economic policy makers is compulsory for all students on the program and applies the relevant theory to current issues facing policy makers around the word. Topics in monetary and fiscal policy are covered in addition to topics in the economics of regulation.
- Assessment is by examination and assignments with written and oral components that ensure that graduates reach an acceptable level of competency in the presentation of their analysis.


## Master of Economics

## Academic Program Rules

## 1 General

1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.
These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.
In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

## 2 Enrolment

2.1 Continuation of enrolment after the first twelve months of the degree will depend on overall academic progress including the satisfactory completion of the Core Component of the Structured Program within twelve months (or part time equivalent*) from the commencement of candidature.

* this rule supersedes general academic program rule 9.2
2.2 The Core Component of the Structured Program shall include the formulation of a research proposal and usually, its presentation at a seminar, together with any other elements as determined by the Faculty. For the Master of Economics degree this would normally include at least the following: ECON 7086 Advanced Macroeconomics and ECON 7087 Advanced Microeconomics. Master of Economics (Coursework)


## 1 General

Each candidate will be required to undertake, during university vacations, such studies as may be prescribed.

## 2 Duration of program

2.1 (a) except by special permission of the School, the work of the degree for a full-time candidate shall be completed in not less than one year and not more than two years from the date of candidature accepted by the School.
(b) except by special permission of the School, the work of the degree for a part-time candidate shall be completed in not less than two years and not more than six years from the date of candidature accepted by the School.

## 3 Admission

3.1 The School may accept as a candidate for the degree any graduate who:
(a) has qualified for the degree Bachelor of Economics with First or Second-Class Honours of the University of Adelaide or
(b) has qualified for an Honours degree of another university, which degree the School regards as being equivalent to a First or Second-Class Honours degree in Economics of the University of Adelaide or
(c) has qualified for the Graduate Diploma in Advanced Economics of the University of Adelaide or
(d) has shown satisfactory progress in the Master of Applied Economics or Master of Applied Economics (International) of the University of Adelaide, or its equivalent from another University, at a standard deemed by the School to be sufficient for admission to the program for the degree of Master of Economics.
3.2 The School may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who, irrespective of whether or not the candidate is a university graduate, has given evidence satisfactory to the School of fitness to undertake work for the degree.

## 4 Enrolment

A candidate's program of study must be approved by the School (or nominee) at enrolment each year.

5 Assessment and examinations
5.1 On completion of the work, the candidate shall lodge with the School three copies of the dissertation or project prepared in accordance with the directions given to candidates by the School.
5.2 Results of those who pass in any of the courses shall be published within the following classifications: High Distinction, Distinction, Credit, Pass.
5.3 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to present for examination or final assessment shall be deemed to have failed the examination/final assessment.
(b) a candidate who fails a course and wishes to repeat the course shall again attend lectures and tutorials and satisfactorily do such written and practical work as the lecturer concerned may prescribe.
(c) a candidate who has failed twice the examination in any course or division of a course may not enrol for that course again except by special permission to be obtained in writing from the School and then only under such conditions as may be prescribed.

### 5.4 Review of academic progress

A candidate's progress shall be reviewed by the School at the end of each year. If in the opinion of the School a candidate is not making satisfactory progress the School may, with the consent of the Council, withdraw its approval of the candidature and the candidate shall cease to be enrolled for the degree.

## 6 Qualification requirements

### 6.1 Academic program

To qualify for the degree of Master of Economics (Coursework), the candidate shall complete satisfactorily a program of study which shall comprise 24 units as follows.
6.1.1 ECON 7086 Advanced Macroeconomics ECON 7087 Advanced Microeconomics
6.1.2 One of the following quantitative courses:
ECON 7001 Applied Econometrics IIID\# ECON 7022 Econometrics IIID \#
6.1.3 Up to four other courses not previously or otherwise completed:
ECON 7001 Applied Econometrics IIID\# 3
ECON 7022 Econometrics IIID\# 3
ECON7067 Economic Development 3
ECON7100 International Finance IV 3
ECON7102 International Trade 3
ECON7103 Labour Economics 3
ECON7106 Long Run Growth 3
ECON7110 Mathematical Economics 3
ECON7115 Public Economics 3
ECON7117 Reading Topics A* 3
ECON7118 Reading Topics B* 3
ECON7121 Microeconomics IV* 3
ECON7122 Macroeconomics IV* 3
ECON7202 Advanced Econometrics 3
ECON7204 Econometrics IV 3
\# See 6.2 below.
*These courses are only available to students enrolled in the M.Ec.(Cswk) program by special permission of the School.
Note: the precise number of courses to be offered in any one year will depend upon staff availability and student demand.
6.1.4 Supervised Research Project ECON 7108 Master of Economics Research Project A6
or
ECON7134 A/B Master of Economics Research Project A (Part-time)
or
ECON7109 Master of Economics Research Project B
or
ECON7135 A/B Master of Economics Research Project B (Part-time)
6.2 Students may count only one of ECON 7001 Applied Econometrics IIID or ECON 7022 Econometrics IIID towards the Masters.
6.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
6.4 Where a candidate has completed coursework which has not been presented for another qualification and which is deemed by the School of Economics to be equivalent to the courses listed under 6.1, status may be granted up to a maximum of four such courses.
6.5 In special circumstances, candidates may be given permission to substitute another course for courses listed in 6.1 above.
6.5.1 Students enrolled in previous years should consult the Postgraduate Adviser for advice on qualification requirements.

### 6.6 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## $7 \quad$ Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Economics (Coursework) - Graduate Attributes

## Program Objectives

- To provide students with analytical and econometric skills that will enable them to perform as a professional economist in the public or private sectors.


## Graduate Attributes

- To achieve the Program objective students will require theoretical and analytical skills at least equivalent to those acquired at level V coursework in the fields of macroeconomics, microeconomics and econometrics.

On successful completion of the program, students should be able to demonstrate the following attributes and skills:

- Explain, apply and critically evaluate the use of economic theory and advanced econometric methods in the analysis of economic policies contained in government publications by the Central Bank, Departments of Treasury and Finance or the ACCC and other similar regulatory bodies.


## Generic Skills

On completion of the program students should be able to demonstrate;

- Mastery of software for advanced econometric analysis (Eviews or equivalent)
- Apply the analytical skills obtained to provide precise written and oral reports.
- The capacity to gain publication in ranked field journals.


## Mapping of Attributes to the Program

- Econometrics at level V provides students with the basic econometric theory and mastery of the appropriate software. Specialisation in time series or cross section/panel is possible.
- Level $V$ courses in microeconomics and macroeconomics cover the required economic theory. There is some scope for specialisation in electives at level IV.
- Assessment is by examination and assignments with written and oral components that ensure that graduates reach an acceptable level of competency in the presentation of their analysis.


## School of Education


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- Master of Education
- Master of Education (Mathematics and Technology)
- Master of Education (Science and Technology)
- Master of Educational Studies
- Doctor of Education


## Notes on Delegated Authority

1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2 Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

## Academic Program Rules

1 Duration of program
The Graduate Certificate is offered only on a part time basis. To qualify for the Graduate Certificate, a candidate shall satisfactorily complete the equivalent of one semester of full-time study over a period of not less than one year, and not more than 3 years, of part-time study.

2 Admission
2.1 An applicant for admission to the academic program for the Graduate Certificate in Education (Higher Education) shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 An applicant for admission must have relevant teaching experience in a tertiary institution.
2.3 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rules 2.1 and 2.2 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.
2.4 Status, exemption and credit transfer
2.4.1 Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for another award.
2.4.2 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean of the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

## 3 Assessment and examinations

3.1 There shall be one classification of pass in any course for the Graduate Certificate: Non-Graded Pass.
3.2 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

EDUC 4401 University Teaching
for Effective Student Learning
EDUC 4402 Curriculum Design, Assessment and Evaluation

EDUC 4403 Reflective Practice
in Learning and Teaching
EDUC 4404 Research Based Learning and Teaching

### 4.1 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Graduate Certificate in Education (Mathematics and Technology) Graduate Certificate in Education (Science and Technology) 

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete a program of study comprising one semester of full-time study or not more than two years of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Certificate in Education (Mathematics and Technology) or Graduate Certificate in Education (Science and Technology) shall:
(a) have qualified for a Bachelors degree in Science, Mathematics, Engineering or Technology, and have qualified for a Graduate Diploma in Education of the University or for an award accepted by the University as equivalent, plus have at least one year of full-time teaching experience, or
(b) have qualified for a Bachelor of Education (Secondary Science) or equivalent, plus have at least one year of full-time teaching experience.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.
2.3 Status, exemption and credit transfer
2.3.1 Except with the special permission of the Faculty, no candidate will be granted status towards the requirements of the Graduate Certificate on account of courses presented for any other award.
2.3.2 No candidate will be permitted to count for the award any course that, in the opinion of the Faculty, contains substantially the same material as any other course which he or she has already presented for another award.
2.3.3 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the

Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

3 Assessment and examinations
3.1 There shall be four classifications of pass at the final examination: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate in Education (Mathematics and Technology) or Graduate Certificate in Education (Science and Technology), a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

EDUC 5507A Innovations in Teaching, Learning and Assessment

EDUC 5506A Curriculum design and evaluation in Science, Mathematics and Technology
and
EDUC 5508A Issues in Science, Mathematics and Technology Education- (Mathematics \& Technology specialisation)
or

EDUC 5508A Issues in Science, Mathematics and Technology Education- (Science \& Technology specialisation)
4.2 Within each of these courses, candidates will focus on either mathematics or science, according to the program in which they are enrolled.
4.3 No candidate will be permitted to count towards the award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Graduate Certificate in Online Learning (Higher Education) 

## Academic Program Rules

## 1 Duration of program

The Graduate Certificate is offered only on a part time basis. This program is only offered fully online. To qualify for the Graduate Certificate, a candidate shall satisfactorily complete the equivalent of one semester of full-time study over a period of not less than one year, and not more than 3 years, of part-time study.

2 Admission
2.1 An applicant for admission to the academic program for the Graduate Certificate in Online Learning (Higher Education) shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 An applicant for admission must have teaching experience in a tertiary institution and have had some exposure to online learning management systems as a teacher and/or learner. Applicants should also be familiar with standard desktop software applications.
2.3 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rules 2.1 and 2.2 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for another award.
2.3.2 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially there from by the Executive Dean of the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

## 3 Assessment and examinations

3.1 There shall be one classifications of pass in any course for the Graduate Certificate: Non-Graded Pass.
3.2 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

4.1 To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

EDUC 4405 ICT Literacy in Higher Education
EDUC 4406 Online Learning Design, Assessment
and Evaluation
EDUC 4407 Online Learning Communities 3
EDUC 4408 The Changing Nature of Educational Research
4.2 No candidate will be permitted to count towards the award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Completion of this program satisfies the requirements for registration with the Teacher Registration Board of South Australia.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma a student shall satisfactorily complete a program of one year of full-time study, and in the case of part-time candidature, not more than six years from the date of candidature.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Diploma in Education shall have qualified for a degree of the University or for a degree of another institution accepted for the purpose by the University.

### 2.2 Status, exemption and credit transfer

2.2.1 No student may be granted more than twelve units of status toward the Graduate Diploma for other studies undertaken in the University or other institutions.
2.2.2 A candidate who has had practical teaching experience may, after enrolment, apply in writing to the School of Education for status in teaching practice.

### 2.3 Articulation with other awards

2.3.1 Students who have been admitted to the award of Graduate Certificate in Educational Studies who subsequently successfully complete the requirements of the Graduate Diploma in Education must surrender their first award before being admitted to the Graduate Diploma in Education.
2.3.2 Notwithstanding the above Rules a candidate who has been enrolled for the degree of Graduate Diploma in Education and who has completed the work prescribed herein for the Graduate Certificate in Educational Studies and who has not been awarded the Graduate Diploma shall, on written application to the Faculty, be awarded the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be one of two systems of classification of pass in individual courses for the Graduate Diploma: either NonGraded Pass, or Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.

### 3.2 Review of academic progress

3.2.1 A student who fails a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe.
3.2.2 A student who has twice failed a course may not enrol for that course again except by special permission to be obtained in writing from the Faculty and then only under such conditions as may be prescribed.
3.2.3 For the purposes of this clause a student who is refused permission to sit for an examination, or who does not, without a reason accepted by the Head of the School of Education as adequate, attend all or part of a final examination (or supplementary examination if granted) after having enrolled for at least two thirds of the normal period during which the course is taught, shall be deemed to have failed the examination.

4 Qualification requirements

### 4.1 Academic program

Students must successfully complete courses to the value of 24 units comprising 6 units of Teaching Practice courses, 6 units of Curriculum and Methodology courses and 12 units of Education Studies courses.

### 4.1.1 Teaching Practice

Teaching Practice courses to the value of 6 units
EDUC4050 Teaching Practice Part I
EDUC4051 Teaching Practice Part II

### 4.1.2 Curriculum and Methodology

Courses to a value of six units taken from:
Humanities
EDUC 4014 A/B Geography Curriculum and Methodology
EDUC4016 A/B History Curriculum \& Methodology 2
EDUC4026 A/B Legal Studies Curriculum \& Methodology 2
EDUC4034 A/B Studies of Society and Environment
2
Business

EDUC4001 A/B Accounting Curriculum \& Methodology 2
EDUC4004 A/B Business Studies Curriculum and Methodology
EDUC4009 A/B Economics Curriculum \& Methodology

## English

EDUC4013 A/B General English Curriculum and Methodology
EDUC 4032 A/B Senior English Curriculum
and Methodology

Languages other than English
EDUC4006 A/B Chinese Curriculum \& Methodology EDUC4010 A/B English as a Second Language
EDUC 4012 A/B French Curriculum \& Methodology
EDUC4015 A/B German Curriculum \& Methodology
EDUC4017 A/B Indonesian Curriculum \& Methodology2

EDUC4021 A/B Italian Curriculum and Methodology 2
EDUC 4022 A/B Japanese Curriculum \& Methodology
EDUC 4025 A/B Language Methodology
EDUC4036 A/B Spanish Curriculum \& Methodology
EDUC4038 A/B Other Languages Curriculum and Methodology
Educ 4043 A/B Vietnamese Curriculum and Methodology
EDUC 4087 A/B Modern Greek Curriculum and Methodology

## Mathematics

EDUC4018 A/B Information Technology Curriculum and Methodology
EDUC4023 A/B Junior Mathematics Curriculum and Methodology
EDUC 4033 A/B Senior Mathematics Curriculum and Methodology

## Music

EDUC4007 A/B Classroom Music Curriculum and Methodology
EDUC4019 A/B Instrumental Music Curriculum
and Methodology

Science
EDUC4003A/B Biology Curriculum \& Methodology 2
EDUC4005A/B Chemistry Curriculum \& Methodology 2
EDUC4024A/B Junior Science Curriculum and Methodology
EDUC 4028A/B Physics Curriculum \& Methodology

General
EDUC4002 A/B Adult Learner Curriculum \& Methodology 2
EDUC4011 A/B Extended Specialist Curriculum

### 4.1.3 Education Studies

Education Studies courses to a total value of 12 units as follows
EDUC4035 Families, Schools \& Students' Outcomes 2
EDUC4039 Educational Psychology A 2
EDUC4083 Curriculum Frameworks 2
EDUC4084 Curriculum Perspectives 2
EDUC4085 Educational Psychology B 2
EDUC4086 Culture, Education and Society 2
4.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Diploma in Education - Graduate Attributes

The Graduate Diploma in Education is a one year program undertaken by students who have completed an undergraduate degree. Students take courses at the University that interact with practical experiences pursued in schools. That is, the program is considered as a unified whole and the attributes of each course are those that are stated for the program. The attributes will form the basis of the evaluation procedures related to the Graduate Diploma in Education. At the completion of the program students are able to register as secondary school teachers in Australia and internationally.

The skills to be acquired by a student in the program include:

- A significant understanding of basic domains of knowledge - gained through the discipline-based undergraduate degree.
- A competence in constructing a pedagogical approach to teaching in the classroom.
- A capacity to integrate the particular and special concerns of families, peers and neighbourhoods into their teaching - gained from ongoing experiences in a variety of schools.
- An understanding of the existing school systems and the ability to explore how the next generation of schools might most appropriately be designed.

In particular, the Graduate Diploma in Education will contribute to the development of the following Graduate attributes:

- Knowledge and understanding of the students' chosen discipline areas
- Cognitive skills in analysing, evaluating and synthesising information
- The capacity for critical thinking and problem solving
- Interpersonal and communication skills of a high order
- The ability to fulfil leadership roles within the teaching profession and community at large
- Proficiency in the appropriate and responsible use of modern technologies
- A commitment to participate responsibly and critically within their discipline and their profession, as well as their local communities and the wider world
- A strong sense of social justice and commitment to moral standards and cultural diversity.


## 1 General

1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.

These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

## 2 Admission

2.1 Further to Rules 4.1-4.5 of the General Academic Program Rules, a candidate for the Master of Education degree would normally be expected to satisfy the following requirements:
(a) have qualified for at least a Class II honours degree of the University or of another University accepted for the purpose by the University, and have qualified for the Graduate Diploma in Education of the University or for a qualification accepted by the University as equivalent or
(b) have qualified for the degree of Master of Educational Studies of the University or another acceptable university.

### 2.2 Status, exemption and credit transfer

With the permission of the Research Education and Development Committee, students may be granted up to a maximum of six units worth of coursework status for other studies undertaken in the University or other institutions

### 2.3 Articulation with other awards

A student who holds the degree of Master of Educational Studies of the University of Adelaide and is granted 12 units of status shall surrender that degree before being admitted to the degree of Master of Education.

## 3 Enrolment

3.1 In addition to Rule 9.3 of the General Academic Program Rules, the Core Component of the Structured Program for the Master of Education degree would consist of:
(a) at least one research methodology course from those listed in the Master of Educational Studies program;
(b) another appropriate/relevant course from those offered in the Master of Educational Studies program;
(c) the formulation of a research proposal and its presentation to a departmental seminar.

# Master of Education (Mathematics and Technology) Master of Education (Science and Technology) 

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising two years of fulltime study or four years of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the degree of Master of Education (Science and Technology) or Master of Education (Mathematics and Technology) shall:
(a) have qualified for a Bachelors degree in Science, Mathematics, Engineering or Technology, and have qualified for a Graduate Diploma in Education of the University or for an award accepted by the University as equivalent, plus have at least one year of full-time teaching experience, or
(b) have qualified for a Bachelor of Education (Secondary Science) or equivalent, plus have at least one year of full-time teaching experience.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.
2.3 Status, exemption and credit transfer
2.3.1 Except with the special permission of the Faculty, no candidate will be granted status for any of the research methodology courses of the degree.
2.3.2 No candidate shall be granted status for courses with a total value of more than 8 units on account of courses presented for any other award, except the Bachelor of Educational Studies where up to 12 units on account of education courses may be awarded.
2.3.3 No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course which he or she has already presented for another award.
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with Other Awards

A candidate who has been admitted to the Graduate Certificate in Education (Mathematics and Technology) or Graduate Certificate in Education (Science and Technology) and who subsequently satisfies the requirements for the Master of Education (Science and Technology) or Master of Education (Mathematics and Technology) must surrender the Graduate Certificate before being admitted to the Master degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass at the final examination: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the degree of Master of Education (Science and Technology) or Master of Education (Mathematics and Technology), a candidate shall satisfactorily complete courses to the value of 48 units, as follows.

### 4.1.1 Research Methodology courses

8 units, selected from:
Educ 5019 Qualitative Approaches to Educational Research

EDUC 5020 Quantitative Educational Research
EDUC 5026 Introduction to Statistics
in Educational Research

### 4.1.2 Compulsory courses

20 units, as follows:

EDUC 5017 Mathematics Education
EDUC 5018 Multicultural Society \& Educational Policy
EDUC 5506A Curriculum design and evaluation in Science, Mathematics and Technology
EDUC 5507A Innovations in Teaching, Learning \& Assessment
and
EDUC 5508A Issues in Science, Mathematics and Technology Education (Mathematics \& Technology specialisation)
or
EDUC 5508A Issues in Science, Mathematics and Technology Education- (Science \& Technology specialisation)

### 4.1.3 Elective course

A 4 unit elective course, selected from
EDUC 5006 Education Directed Study 4
EDUC 5007 Education in Multilingual Settings 4
EDUC 5011 Families, Schools and Students' Outcomes 4
EDUC 5012 Gender, Education and Social Change 4
EDUC 5021 Religion, Education and Social Change 4
EDUC 5022 Classroom Voices, Context and Cultures 4
EDUC 5028 Neuroscience and Education 4
EDUC 5509 Measurement, Evaluation \& Assessment 4
EDUC 5510 Information \& Analysis of Frequency \& Count Data
EDUC 5511 Educational Inquiry 4
Note: Not all elective courses will be offered in any one calendar year.

### 4.1.4 Research

All candidates shall complete 16 units:
(i) a full year dissertation (16 units)
or
(ii) two self-directed research projects (8 units each).
4.1.5 For candidates to qualify for the degree of Master of Education (Science and Technology) the content choice of research dissertation or projects must focus on Science and Technology.
4.1.6 For candidates to qualify for the degree of Master of Education (Mathematics and Technology) the content choice of research dissertation/projects must focus on Mathematics and Technology.
4.2 No candidate will be permitted to count towards an award
any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Educational Studies

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising two semesters of full-time study or not more than six years of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the degree of Master of Educational Studies (Coursework) shall:
(a) have qualified for a degree of the University, or for a degree of another institution accepted for the purpose by the University and have qualified for a Graduate Diploma in Education of the University or for an award accepted by the University as equivalent or
(b) have qualified for a Bachelor of Education of another institution accepted for the purpose by the University.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with the special permission of the Faculty, no candidate will be granted status for any of the research methodology courses of the degree.
2.3.2 No candidate shall be granted status for courses with a total value of more than 8 units on account of courses presented for any other award.
2.3.3 No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course which he or she has already presented for another award.
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the degree of Master of Educational Studies (Coursework) who does not complete the requirements of the degree may be admitted to the Graduate Certificate in Education (Specialisation).
2.4.2 A candidate for the degree of Master of Educational Studies who does not complete the requirements of the degree may be admitted to the Bachelor of Educational Studies.

3 Assessment and examinations
3.1 There shall be four classifications of pass at the final examination in any course for the Master of Educational Studies (Coursework): Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the degree of Master of Educational Studies (Coursework), a candidate shall satisfactorily complete courses to the value of 24 units, as follows.

### 4.1.1 Research Methodology courses

All candidates shall complete one of the following research methodology courses:

EDUC5019 Qualitative Approaches to Educational Research
EDUC 5020 Quantitative Educational Research 4
EDUC 5511 Educational Inquiry

### 4.1.2 Elective courses

All candidates shall complete elective courses to the value of 16 units selected from the following:
EDUC5007 Education in Multilingual Settings 4
EDUC5017 Mathematics Education
EDUC5018 Multicultural Society \& Educational Policy 4
EDUC5022 Schools as Cultural Systems

EDUC5026 Introduction to Statistics in Educational Research
EDUC5028 Theories of Psychology in Education 4
EDUC 5506 Curriculum Design \& Evaluation 4
EDUC 5507 Innovations in Teaching, Learning \& Assessment

EDUC 5508 Issues in Science, Mathematics \& Technology Education
EDUC 5509 Measurement, Evaluation \& Assessment
EDUC 5510 Information \& Analysis of Frequency \& Count Data
and
Approved courses listed for any relevant coursework Masters program. Advice on appropriate options is available from the School of Education.

Transition Courses
EDUC5002 Education Directed Study (2 unit) 2
EDUC5005 Education Directed Study (3 unit) 3
EDUC5006 Education Directed Study (4 unit) 4
4.1.2.1 Students may take additional research methodology courses in lieu of elective courses.
4.1.3 Research Project

All Master of Educational Studies (Coursework) candidates shall complete the following:
EDUC5500 Education Minor Project
4.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Educational Studies - Graduate Attributes

The Master of Educational Studies degree aims to provide practising teachers and educators the opportunity to pursue advanced studies in Education relevant to their teaching or other professional activities, and also to provide a pathway for those interested in pursuing research in Education. Candidates examine educational studies related to their work situations and explore research approaches they may use in their own situations. The Master of Educational Studies degree contributes to the development of the following graduate attributes:

- A capacity to examine education-related studies and draw conclusions for everyday practice.
- The ability to integrate research findings from a number of disciplines such as psychology, sociology, measurement, history, and studies of curriculum in various subject areas.
- A capacity to write essays on eduction-related topics, that are both clear and demonstrate a high level of understanding.
- The ability to examine educational issues in group settings.
- The capacity to begin the planning of a research study on an education-related topic.
- The ability to apply education research in an international context.
- A commitment to continuous learning.
- The capacity to share and collaborate with fellow students, and an awareness and expertise in the collaborative practices of teachers with each other and with the broader educational community.
- A commitment to the highest standards of endeavour in teaching and student learning and the ability to take a leadership role in the educational community.


## 1 General

1.1 This document must be read in conjunction with:
(a) the Specific Academic Program Rules for the PhD (see under Adelaide Graduate Centre, p.3) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.

These documents explain procedures to be followed and contain guidelines on supervision and research for research doctorates at the University of Adelaide.

All students must comply with both the Specific Academic Program rules for the Doctor of Philosophy and the sub set of Specific Academic Program Rules for the Doctor of Education and with the policies and procedures outlined in the Code of Practice.
In addition to the Specific Academic Program Rules for the Doctor of Philosophy in this publication, the following rules apply to the Doctor of Education.

## 2 Academic standing

2.1 A candidate for the Doctor of Education would normally be expected to hold education qualifications, either in addition to the requirements laid down in 4.1 and 4.2 of the Specific Academic Program Rules for the PhD, or as part of the earlier awards, such as B Ed or M Ed Studies.
2.2 In addition, candidates would be expected to have at least three years of professional experience in an educational context.

## 3 Work for the degree

3.1 For the Doctor of Education, the research undertaken shall take the form of a portfolio of professional research comprising three research projects on a particular professional issue or context. References to 'thesis' in the Specific Academic Program rules for the Doctor of Philosophy should be interpreted as "portfolio of research" in the case of the Doctor of Education.
3.2 The portfolio will contain an abstract that summarises the main findings presented in each research project and indicates how the three projects, when considered together, demonstrate a significant contribution to professional knowledge in education.
3.3 The portfolio will include an introduction which succinctly describes the professional problem or issue to be investigated, provides a critical review of the relevant literature in the area (which may replicate literature cited in the subsequent research projects), identifies specific gaps in educational knowledge and understanding and outlines the aims of the three research projects and the specific educational contexts in which the investigations take place.
3.4 The portfolio will contain a conclusion showing the professional significance of the findings for educational theory and practice, making recommendations for their practical implementation in educational contexts and for future research.

4 Required program of activities at the commencement of candidature
4.1 The Core Component of the Structured Program for the Doctor of Education will include:
(a) two research methodology courses from those offered for the Master of Educational Studies degree or
(b) where appropriate, one research methodology course and one other relevant course from those offered for the Master of Educational Studies degree.

## 8

 Faculty of Engineering, Computerand Mathematical Sciences

www.ecms.adelaide.edu.au

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- Graduate Certificate in Computer Science
- Graduate Certificate in Engineering (Environmental Engineering)
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- Graduate Certificate in Engineering (Signal Processing)
- Graduate Certificate in Engineering (Structural Engineering)
- Graduate Certificate in Mathematical Signal and Information Processing
- Graduate Certificate in Project Management
- Graduate Certificate in Science and Technology Commercialisation
- Graduate Certificate of Sciences (Defence)
- Graduate Certificate of Sciences (Defence Signal Information Processing)
- Graduate Diploma in Applied Statistics
- Graduate Diploma in Computer Science
- Graduate Diploma in Engineering (Environmental Engineering)
- Graduate Diploma in Engineering (Fuels, Combustion \& Emission Control)
- Graduate Diploma in Engineering (Radio Frequency Engineering)
- Graduate Diploma in Engineering (Structural Engineering)
- Graduate Diploma in Mathematical Science
- Graduate Diploma in Science and Technology Commercialisation
- Graduate Diploma of Sciences (Defence)
- Graduate Diploma of Sciences (Defence Signal Information Processing)
- Master of Applied Science
- Master of Applied Project Management
- Master of Computer Science
- Master of Engineering (Chemical Engineering)
- Master of Engineering (Civil and Environmental Engineering)
- Master of Engineering (Civil and Structural Engineering)
- Master of Engineering (Electrical Engineering)
- Master of Engineering (Engineering Mathematics)
- Master of Engineering (Environmental Engineering)
- Master of Engineering (Fuels, Combustion \& Emission Control)
- Master of Engineering (Mechanical Engineering)
- Master of Engineering (Radio Frequency Engineering)
- Master of Engineering (Advanced) (Chemical Engineering - Energy and Combustion)
- Master of Engineering (Advanced) (Chemical Engineering - Environmental and Sustainability)
- Master of Engineering (Advanced)(Chemical Engineering - Food and BioProcessing)
- Master of Engineering (Advanced)(Civil and Environmental Engineering)
- Master of Engineering (Advanced)(Civil and Structural Engineering)
- Master of Engineering (Advanced)(Mechanical Engineering)
- Master of Engineering (Advanced)(Sensor Systems Signal processing)
- Master of Engineering (Advanced)(Telecommunications)
- Master of Engineering Science
- Master of Entrepreneurship
- Master of Information Technology
- Master of Mathematical Science
- Master of Mathematical Sciences (Signal and Information Processing)
- Master of Petroleum Business Management
- Master of Petroleum Engineering
- Master of Project Management
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- Master of Science in Mathematical and Computer Sciences
- Master of Sciences (Defence)
- Master of Sciences (Defence Signal Information Processing)
- Master of Software Engineering
- Master of Water Resources Management
- Doctor of Engineering
- Doctor of Science in the Faculty of Engineering, Computer and Mathematical Sciences


## Notes on Delegated Authority

1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2 Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

## Professional Certificate in Applied Statistics

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

Except with the special permission of the Faculty, the program for the Professional Certificate shall be completed in two semesters.

2 Admission
2.1 An applicant for admission to the program for the Professional Certificate in Applied Statistics shall have qualified for a degree of the University or another institution accepted by the University for the purpose as equivalent, or shall have had at least 3 years approved statistical work experience, and shall have demonstrated to the satisfaction of the University to have the capacity and experience to benefit from the program.
2.2 The Faculty may, subject to any conditions as it may see fit to impose in each case, accept as a candidate for the Professional Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Professional Certificate.
2.3 Status, exemption and credit transfer With the permission of the Faculty, status may be granted for courses, on written application from the candidate.

### 2.4 Articulation with other awards

A candidate who has been admitted to the Professional Certificate in Applied Statistics and who subsequently satisfies the requirements for the Graduate Diploma in Statistics must surrender the Professional Certificate before being admitted to the Graduate Diploma.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Professional Certificate: Pass with High Distinction; Pass with Distinction; Pass with Credit; and Pass
3.2 (a) a candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for the examination shall be deemed to have failed the examination.

## 4 Qualification requirements

4.1 Academic program

To qualify for the Professional Certificate, a candidate shall satisfactorily complete three courses, as listed below and a project.

STATS 5000 Descriptive Statistics and Probability
STATS 5001 Statistical Inference and Regression
STATS 5002 Time Series
and Survey Sampling Methods
STATS 5003 A/B Project
4.2 No candidate will be permitted to count for the Professional Certificate any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

Note: Postgraduate tuition fees apply to this program.
Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate a candidate shall satisfactorily complete a program of full-time study extending over at least six months or part-time study extending over at least one year. Except with the permission of the Faculty, the work for the Graduate Certificate shall be completed within two years.

## 2 Admission

2.1 Except as provided for in 2.2 below, a candidate for admission to the program of study for the Graduate Certificate shall have qualified for admission to a degree of the University or for a degree of another institution accepted for the purpose by the Faculty.
2.2 The Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not qualify for admission to the program under 2.1 above but has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

Except with the special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for another award. Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.

### 2.4 Articulation with other awards

A candidate for the Master of Entrepreneurship who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate in Business Enterprise (SME).

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in each course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails to pass in a course and desires to take the course again shall again undertake study and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
3.4 A candidate who has twice failed the examination in any course or division of a course may not enrol for the course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule, a candidate who is refused permission to sit for examination, or who fails to attend all or part of a final examination (or supplementary examination if granted) after being enrolled for at least two thirds of the normal period during which the course is taught, shall be deemed to have failed the examination.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate in Business Enterprise (SME), a candidate shall satisfactorily complete courses to the value of 12 units as given below:

TECHCOMM 5017 New Enterprise Financial Management 3
TECHCOMM 5018 Opportunity Assessment 3
TECHCOMM 5019 New Enterprise Marketing 3

TECHCOMM 5020 New Enterprise Operations 3

### 4.2 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate a candidate shall complete satisfactorily a program of full-time study extending over at least one semester or of part-time study extending over at least two semesters. A candidate shall take not more than six consecutive semesters to complete the requirements of the Certificate.

## 2 Admission

2.1 Except as provided in 2.2 below, an applicant for admission to the program for the Graduate Certificate shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of this University.
2.2 Subject to the approval of the Council, the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not hold a degree of a tertiary institution but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.
2.3 A knowledge of SACE Stage 2 Mathematics I or its equivalent is assumed.
2.4 A person who holds any of the following qualifications shall not be eligible for the award of the Graduate Certificate in Computer Science: a degree that includes a major in Computer Science or its equivalent; the Diploma in Computer Science, Master of Computer Science of the University of Adelaide, or equivalent qualifications in Computer Science.

### 2.5 Credit Transfer

2.5.1 A candidate who has passed courses in this or other educational institutions and who has not presented these courses towards an award may, on written application, be granted such exemption from the requirements of these rules as the Faculty shall determine. Status may be granted for a maximum of 3 units under 4.1 of the Academic Program Rules.
2.5.2 No candidate will be permitted to count for the Graduate Certificate any course that in the opinion of the School contains substantially the same material as any other course which he or she has presented already for another qualification.

## 3 Assessment and examination

3.1 There shall be four classifications of pass at an examination in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to present for examination or final assessment shall be deemed to have failed the examination/final assessment.
3.3 A candidate who has twice failed to pass the examination in any course or division of a course may not enrol for that course again except by special permission to be obtained in writing from the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate the candidate shall satisfactorily complete courses to the value of at least 12 units listed in 4.1 for the degree of Graduate Diploma in Computer Science.
4.2 No candidate will be permitted to count for the Graduate Certificate any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Graduate Certificate in Engineering (Environmental Engineering)

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

Except with the permission of the Faculty the work for the Graduate Certificate shall be completed in part-time study over not more than two years.

## 2 Admission

2.1 Except as provided in 2.2 below, an applicant for admission to the program of study for the Graduate Certificate shall have qualified for the degree of Bachelor of Engineering of the University of Adelaide or for an award accepted by the Faculty of Engineering, Computer and Mathematical Sciences as equivalent to that degree for the purpose of this Rule.
2.2 The Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate an applicant who does not qualify for admission under 2.1 above but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

 A candidate who desires that examinations passed in the University or elsewhere be counted for the Graduate Certificate in Engineering (Environmental Engineering) may on written application be granted such exemption from the requirements of these Rules as the Faculty may determine. Otherwise no course counted for any other award shall be counted as part of the requirements for the Graduate Certificate. In any case, if a course has a Conceded Pass classification for the purpose of another award, any such course passed with this classification shall not count towards the requirements for the Graduate Certificate.
### 2.4 Articulation with other awards

These Academic Program Rules notwithstanding, a candidate who has been enrolled for the Graduate Diploma in Engineering (Environmental Engineering), and who as such a candidate has completed the work prescribed herein for the Graduate Certificate and who has not been awarded the Graduate Diploma, shall on written application be awarded the Graduate Certificate, subject to the student discontinuing candidature for the Graduate Diploma.

## 3 Enrolment

Each candidate's program of study must be approved by the Head of the School at enrolment each year.

## 4 Assessment and examinations

4.1 There shall be four classifications of Pass in each course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
4.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
4.3 A candidate who fails in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom by the Faculty.
4.4 A candidate who has twice failed in any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 5 Qualification requirements

5.1 To qualify for a Graduate Certificate in Engineering (Environmental Engineering) a candidate shall satisfactorily complete all courses from Group A in 5.6 below plus courses from Group B totalling at least 9 units.
5.2 The courses presented shall not include any which is, in the opinion of the Faculty, substantially equivalent to another course presented for the Certificate or already counted towards another qualification.
5.3 Should any course in Group A be covered by 5.2 above then a course(s) with an equivalent units value from Group B may be substituted with the approval of the Head of the School.
5.4 Candidates wishing to enrol in courses for which they do not have the necessary preliminary knowledge may be required to take such bridging courses prior to the
commencement of their Certificate studies as may be deemed appropriate by the Head of the School. No academic credit toward the Certificate will be awarded for such studies.
5.5 To complete a program of study in a course a candidate shall, unless exempted by the Head of the School offering the course:
(a) regularly attend the prescribed lectures, tutorials, workshops and seminars and
(b) undertake such computing work, project work, practical work, field work and case studies, do such reading, written and oral work and pass such examinations as the Head of the School offering the course may prescribe.

### 5.6 Academic Program

The following shall be courses for the Graduate Certificate in Engineering (Environmental Engineering):

Group A - Compulsory Course
C\&ENVENG5064 Environmental Engineering and Design III

Group B - Elective Courses
CHEMENG 5000 Transport Processes
in the Environment
C\&ENVENG5061 Environmental Science and Policy 2
C¢ENVENG5066 Advanced Engineering Hydrology and Design 3

C\&ENVENG5067 Advanced Water Distribution Systems and Design

C\&ENVENG5068 Advanced Water Resources

Management and Design

C\&ENVENG5069 Advanced Water Resources
Planning and Design
ÇENVENG5070 Special Topics in
Water Engineering IV N
C\&ENVENG5071 Special Topics in Management
and Planning IV N
C\&ENVENG5072 Environmental Auditing \& Design 3
C\&ENVENG5074 Groundwater Resources, Contamination and Design 3

C\&Enveng 5075 Numerical Methods
in Environmental Engineering ..... 3
C\&ENVENG5078 Introduction to Environmental Law N ..... 3
C\&ENVENG7027 Wastewater Engineering and Design ..... 3
C\&ENVENG7028 Waste Management
Analysis \& Design ..... 3

C\&ENVENG 7029 Environmental Processes, Modelling and Design
ECON 5000 Environmental Economics E
5.7 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

6 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Graduate Certificate in Engineering (Fuels, Combustion and Emission Control) 

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

Except with the special permission of the Faculty, the program for the Graduate Certificate shall be completed in not less than one semester and not more than two semesters of full-time study, or not less than two and not more than four semesters of part-time study.

## 2 Admission

2.1 Except as provided for in 2.2 below, an applicant for admission to the program for the Graduate Certificate shall:
(a) have qualified in the University of Adelaide for the degree of Bachelor of Engineering (Chemical) or (Mechanical), or Honours degree of Bachelor of Engineering other than the Bachelor of Engineering (Chemical) or (Mechanical), or Honours degree of Bachelor of Science or
(b) have qualified for an award accepted by the Faculty of Engineering, Computer and Mathematical Sciences as being equivalent academically and professionally to one of the degrees described in 2.1 (a) above or
(c) have qualified in the University of Adelaide for the degree of Bachelor of Engineering or Bachelor of Science, or for an award accepted by the Faculty as being equivalent to one of those degrees, and have in addition successfully undertaken advanced studies and/or work in an appropriate area which is considered by the Faculty to be an adequate preparation for candidature.
2.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the Graduate Certificate, a person who does not qualify under 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status or exemption

A candidate may not present for credit towards the Graduate Certificate any course which has been presented as part of the requirements for any other award of this

University or other institution, or which in the opinion of the Faculty is substantially similar to such course.

### 2.4 Articulation with other awards

Notwithstanding these Academic Program Rules, a candidate who has been enrolled for the degree of Master of Engineering (Fuels, Combustion \& Emission Control) or Graduate Diploma in Engineering (Fuels, Combustion \& Emission Control), who as such a candidate has completed the work prescribed herein for the Graduate Certificate and who has not been awarded the degree of Master or Graduate Diploma, shall on written application be awarded the Graduate Certificate, subject to the student discontinuing candidature for the degree of Master of Engineering (Fuels, Combustion \& Emission Control ) or Graduate Diploma in Engineering (Fuels, Combustion \& Emission Control).

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in each course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom by the Faculty.
3.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule a candidate who is refused permission to sit for examination, or who without a reason accepted by the Executive Dean of the Faculty (or nominee) fails to attend all or part of a final examination (or supplementary examination if granted) after remaining enrolled for at least eight teaching weeks of that semester, shall be deemed to have failed the examination.

## 4 Qualification requirements

4.1 To qualify for a Graduate Certificate in Engineering (Fuels, Combustion \& Emission Control) a candidate shall satisfactorily complete all courses in Group A plus courses from Group B below, to the total value of at least 12 units.

## Notes

1 Each year the School of Chemical Engineering shall determine which of the elective courses in Group B will be offered and in which semester they will be offered.

2 With approval from the Head of the School of Chemical Engineering, a student may undertake a limited number of courses offered by other Schools or Faculties, or by other institutions, to replace some of the elective courses in Group B.

### 4.2 Academic Program

Group A: core courses
CHEM ENG5013 Fuels and Combustion Technology 2
CHEM ENG5016 Instrumentation and Control for Combustion Processes 2

CHEM ENG5017 Introduction to Combustion Phenomena 3
CHEM ENG5027 Fuels and Combustion Laboratory Projects I

Group B: elective courses
General
CHEM ENG5008 Combustion Heat Transfer
CHEM ENG5009 Combustion for High Temperature Processing2
CHEM ENG5010 Combustion Plant Safety and Management ..... 2
CHEM ENG5026 Combustion and Environment ..... 2

Coal

CHEM ENG5006 Coal Combustion in Furnaces 2
CHEM ENG5007 Coal Conversion Processes other than Combustion2

Gas and Oil
CHEM ENG 5019 Oil and Gas Combustion Technology2
4.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Certificate in Engineering (Signal Processing)

Note: Postgraduate tuition fees apply to this program. It is not anticipated that there will be an intake into this program in 2005.

## Academic Program Rules

## 1 Duration of program

Except with the permission of the Faculty the work for the Graduate Certificate shall be completed in not less than one semester of full-time work and not more than two years.

## 2 Admission

2.1 Except as provided in 2.2 below an applicant for admission to the program of study for the Graduate Certificate shall have qualified for the degree of Bachelor of Engineering of the University of Adelaide or for an award accepted by the Faculty of Engineering, Computer and Mathematical Sciences as equivalent to that degree for the purpose of this Rule.
2.2 The Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate an applicant who does not qualify for admission under 2.1 above but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

3 Enrolment
Each candidate's program of study must be approved by the Head of the School at enrolment each year.

4 Assessment and examinations
4.1 There shall be four classifications of pass in each course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
4.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
4.3 A candidate who fails in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
4.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
4.5 For the purpose of this Rule a candidate who is refused permission to sit for examination, or who without a reason accepted by the Executive Dean of the Faculty (or nominee) fails to attend all or part of a final examination (or supplementary examination if granted) after remaining enrolled for at least eight teaching weeks of that semester, shall be deemed to have failed the examination.

## 5 Qualification requirements

5.1 To qualify for a Graduate Certificate in Engineering (Signal Processing) a candidate shall satisfactorily complete courses from 5.5 below with an aggregate units value of at least 12, including at least 6 units from Group A.
5.2 The courses presented shall not include any which is, in the opinion of the Faculty, substantially equivalent to another course presented for the Certificate or already counted towards another qualification.
5.3 Candidates wishing to enrol in courses for which they do not have the necessary preliminary knowledge may be required to take such bridging courses prior to the commencement of their Certificate studies as may be deemed appropriate by the Head of the School. No academic credit toward the Certificate will be awarded for such studies.
5.4 To complete a program of study in a course a candidate shall, unless exempted by the Head of the School offering the course:
(a) regularly attend the prescribed lectures, tutorials, workshops and seminars and
(b) undertake such computing work, project work, practical work, field work and case studies, do such reading, written and oral work and pass such examinations as the Head of the School offering the course may prescribe.

### 5.5 Academic Program

The following shall be courses for the Graduate Certificate in Engineering (Signal Processing):

Group A: core courses
ELEC ENG5000 Neural Networks
ELEC ENG5001 Introduction to Multisensor Data Fusion
ELEC ENG5002 Radar Imaging 2
ELEC ENG5003 Wavelet Transforms 2
ELEC ENG5004 Computer Vision 2
ELEC ENG5005 Estimation Theory 2
ELEC ENG5006 Digital Signal Processing Techniques 2
Group B: elective courses
ELEC ENG5021 Introduction to Surveillance Sensors and Systems

Other relevant courses offered for Graduate Diploma and Graduate Certificate programs at the University of Adelaide, the University of South Australia and the Flinders University of South Australia, as may be approved by the Head of the School of Electrical and Electronic Engineering.

### 5.6 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Certificate in Engineering

(Structural Engineering)

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate a candidate shall satisfactorily complete a program of full-time study extending over at least one semester or its part-time equivalent. Except with the permission of the Faculty the work for the Graduate Certificate shall be completed within two years.

## 2 Admission

2.1 Except as provided in Regulation 2.2 below, an applicant for admission to the program of study for the Graduate Certificate shall either:
(i) have qualified for the degree of Bachelor of Engineering (Civil and Environmental) of the University of Adelaide or
(ii) hold a qualification accepted by the Faculty of Engineering, Computer and Mathematical Sciences as being equivalent to the degree of Bachelor of Engineering (Civil and Environmental) of the University of Adelaide.
2.2 The Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate an applicant who does not qualify for admission under 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status and exemption

A candidate who desires that examinations which he or she has passed in the University or elsewhere be counted for the Graduate Certificate in Engineering (Structural Engineering) may on written application be granted such exemption from the requirements of these regulations as the Faculty may determine.Otherwise, no course counted for any other award of this University or other institution shall be counted as part of the requirements for the Graduate Certificate.

## 3 Enrolment

Each candidate's program of study must be approved by the Head of the School at enrolment each year.

4 Assessment and examinations
4.1 There shall be four classifications of pass in each course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. If a course has a Conceded Pass classification for the purpose of another award, any such course passed with this classification shall not count towards the requirements for the Graduate Certificate.
4.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
4.3 A candidate who fails (or obtains a conceded pass) in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
4.4 A candidate who has twice failed or obtained conceded passes in any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 5 Qualification requirements

5.1 To qualify for the Graduate Certificate in Engineering (Structural Engineering) a candidate shall satisfactorily complete all courses from Group A plus courses from Group B to a value of at least 6 units.
5.2 The courses presented shall not include any which are, in the opinion of the Faculty, substantially equivalent to other courses presented for the Certificate or already counted towards another qualification.
5.3 Should any course in Group A be covered by 5.2 above then course/s with an equivalent units value from Group B
may be substituted with the approval of the Head of School.
5.4 Candidates wishing to enrol in courses for which they do not have the necessary preliminary knowledge may be required to take such bridging courses prior to the commencement of their Certificate studies as may be deemed appropriate by the Head of the School. No academic credit toward the Certificate will be awarded for such studies.
5.5 To complete a program of study in a course a candidate shall, unless exempted by the Head of the School offering the course:
(a) regularly attend the prescribed lectures, tutorials, workshops and seminars and
(b) undertake such computing work, project work, practical work, field work and case studies, do such reading, written and oral work and pass such examinations as the Head of the School offering the course may prescribe.

### 5.6 Academic Program

The following shall be courses for the Graduate Certificate in Engineering (Structural Engineering):

Group A - Compulsory Courses
C\&ENVENG5062 Structural Design III (Concrete) 3
CধENVENG5063 Structural Design III (Steel) 3
Group B - Elective Courses
C\&ENVENG5056 Computer Methods
of Structural Analysis and Design
C\&ENVENG5059 Special Topics
in Structural Engineering IV N
C\&ENVENG7032 Design of Composite Structures 3
C\&ENVENG7033 Earthquake Engineering \& Design 3
ÇENVENG7038 Design of Concrete Structures N 3
C\&ENVENG7041 Fundamental Steel Design 3

### 5.7 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

6 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Certificate in

Mathematical Signal and Information Processing

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

1.1 A candidate shall:
(a) complete any preliminary work which may be prescribed;
(b) undertake an approved program of advanced part-time study which extends over not less than one and not more than two years.

2 Admission
2.1 Except as provided for in 2.2 an applicant for admission to the program of study for the Graduate Certificate shall:
have qualified for an Honours degree of Bachelor of Science in either Mathematics or Physics or a degree of Bachelor of Engineering (Electrical and Electronic) with Honours of the University of Adelaide, or for an equivalent degree of another tertiary institution accepted for the purpose by the University or
2.2 have qualified for a degree with Honours in other areas of Engineering, or an Honours degree in a related scientific area acceptable for the purpose to the Board of Studies. A person admitted under this sub-rule will normally be required satisfactorily to complete some initial bridging studies as deemed necessary by the Faculty, in addition to satisfying the requirements of the Graduate Certificate.
2.3 subject to the approval of the Council, the Board of Studies may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Certificate a person who does not qualify for admission under 2.1 or 2.2 but who has given evidence satisfactory to the Board of fitness to undertake work for the Certificate.

## 3 Assessment and examination

### 3.1 Review of academic progress

If in the opinion of the Board of Studies a candidate for the Graduate Certificate is not making satisfactory progress, the Faculty may, with the consent of the Council, terminate the candidature.

## 4 Qualification requirements

4.1 To qualify for the degree a candidate shall:
(a) comply with conditions as prescribed in the Academic Program Rules and
(b) pass such examinations on the candidate's program of advanced study as may be required by the Board of Studies.

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Academic Program

4.3.1 A candidate for the Graduate Certificate shall regularly attend lectures and tutorials, do such written and practical work as may be prescribed, and satisfactorily complete courses to the value of at least 12 units as defined in 4.3.2.
4.3.2 The program of study to the value of at least 12 units shall consist of courses selected from:

SIP 7001 Information Theory 3
SIP 7002 Kalman Filtering and Tracking 3
SIP 7003 Error Control Coding 3

SIP 7004 Mobile Communications 3
SIP 7005 Multisensor Data Fusion 3
SIP 7007 Image Processing 3
SIP 7009 Speech Processing 3
SIP 7011 Signal Processing Applications 3
SIP 7012 Detection, Estimation and Classification 3
SIP 7013 Introduction to Discrete Linear Systems
SIP 7015 Signal Synthesis and Analysis 3
SIP 7017 Specialised Studies A 3
SIP 7018 Specialised Studies B 3
SIP 7019 Specialised Studies C 3
SIP 7020 Specialised Studies D
SIP 7023 Satellite Communications 3
SIP 7024 Adaptive Signal Processing 3
SIP 7025 Beamforming and Array Processing 3
SIP 7026 Mathematical Coding and Cryptology 3
Specialised Studies may consist of directed readings or approved short courses as approved by the Faculty. The content and assessment of these courses will be determined in each case by the academic coordinator of the program in consultation with the student's supervisor and the student.

Note: Intending students should consult the program coordinator early in the year in which they plan to study in order to ascertain whether particular courses will be available in that year and in which semester courses will be taught.
4.3.3 Candidates who have been granted exemption from one or more of the courses listed in 4.3.2 may select in their place relevant courses from other courses offered by the University of Adelaide or other tertiary institutions in South Australia as may be approved by the Board of Studies.
4.3.4 The availability of all courses is conditional on there being adequate staffing levels and resources.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the Board of Studies special circumstances exist, the Council, on the recommendation of the Board in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Syllabuses

Prospective students should consult the program coordinator early in the year in which the program is being offered regarding the content of the courses that are to be offered in that year.

## Graduate Certificate in Project Management

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

The Graduate Certificate in Project Management can be completed in a minimum of 1 semester or participants can study at their own pace so long as the 4 courses are completed within 2 years.

2 Admission
2.1 An applicant for admission to the academic program for the Graduate Certificate in Project Management shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate in Project Management a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

Candidates who have previously passed courses in postgraduate awards or equivalent at the University of Adelaide or another university and who wish to count such courses towards the Graduate Certificate in Project Management may, on written application to the Faculty, be granted such status as the Faculty shall determine, to a maximum aggregate value of six (6) units.

### 2.4 Articulation with other awards

A candidate for the Master of Project Management who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate may be admitted to that degree as appropriate.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction; Pass with Distinction; Pass with Credit; and Pass.
3.2 A candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails a course and wishes to repeat that course, shall, unless exempted partially there from by the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.
3.4 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

## 4 Qualification requirements

4.1 To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units comprising 9 units from the list of core courses and 3 units of elective courses:

### 4.1.1 Core courses

TECHCOMM 5004 Managing Risk
TECHCOMM 5015 Project Finance and Accounting 3
TECHCOMM 5021 Applied Project Management 1
4.1.2 Elective courses

TECHCOMM 5002 Managing Product Design
and Development
TECHCOMM 5008 Leading and Managing 3
TECHCOMM 5009 Business and Contract Management 3
TECHCOMM 5010 Technology Project Management
TECHCOMM 5012 Integrated Logistic Support 3
TECHCOMM 5013 Systems Engineering 3
TECHCOMM 5014 Project and Management Techniques 3
TECHCOMM 5016 Entrepreneurship and Innovation
TECHCOMM 5018 Opportunity Assessment 3
TECHCOMM 5024 Project Management Project (3 units) 3
TECHCOMM 5026 Applied Project Management 23
TECHCOMM 5027 Business and Project Creation 3
Note: students should discuss their choice of courses with the Program Coordinator

### 4.2 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Certificate in

## Science and Technology Commercialisation

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

The Graduate Certificate may be completed in a minimum of one semester, or participants can study at their own pace provided the four courses are completed within two years.

## 2 Admission

2.1 An applicant for admission to the program for the Graduate Certificate in Science and Technology Commercialisation shall have qualified for the degree of the University or another institution accepted by the University for the purpose as equivalent, shall have had at least 5 years approved professional work experience, and shall have demonstrated to the satisfaction of the University to have the capacity and experience to benefit from the program.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

Candidates who have previously passed courses in postgraduate awards or equivalent in the University of Adelaide or another university and who wish to count such courses towards the Graduate Certificate in Science and Technology Commercialisation may, on written application to the Faculty, be granted such status as the Faculty shall determine, to a maximum aggregate value of three (3) units.

### 2.4 Articulation with other awards

A candidate for the Graduate Diploma in Science and Technology Commercialisation who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate in Science and Technology Commercialisation.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction; Pass with Distinction; Pass with Credit; and Pass.
3.2 A candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails a course and wishes to repeat that course, shall, unless exempted partially therefrom by the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.
3.4 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units of which at least 9 are core courses.

### 4.1.1 Core courses

TECHCOMM 5001 Marketing Technological Innovation 3

TECHCOMM 5002 Managing Product Design and Development
TECHCOMM 5003 Strategic Analysis for Technology Commercialisation 3

TECHCOMM 5005 Financing Commercialisation 3
TECHCOMM 5006 Technology Management and Transfer

TECHCOMM 5007 Legal Issues of the Commercialisation Process

TECHCOMM 5011 Internationalisation of Technology 3
4.1.2 Elective courses

TECHCOMM 5004 Managing Risk 3
TECHCOMM 5009 Business and Contract Management 3
TECHCOMM 5012 Integrated Logistics Support 3
TECHCOMM 5021 Applied Project Management 13
4.2 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Certificate in Sciences (Defence)

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

Except with permission of the Board of Studies, the program for the Graduate Certificate in Sciences (Defence) shall be completed in one semester of full-time study, or up to six semesters of part-time study.

## 2 Admission requirements

2.1 Except as provided for in 2.2 below, an applicant for admission to the program shall:
(a) have qualified for a degree from the University of Adelaide in a discipline related to the proposed field of study
(b) have qualified for an award accepted by the Board of Studies as being equivalent to a degree from the University of Adelaide in a discipline related to the proposed field of study and
shall have had at least 18 months' employment experience in a defence-related industry.
2.2 The Board of Studies may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the award of Graduate Certificate in Sciences (Defence), a person who does not qualify under 2.1 above, but has given evidence satisfactory to the Board of fitness to undertake work for the degree.

### 2.3 Status or exemption

A candidate may not present for credit towards the award any course which has been presented as part of the requirements for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate in Sciences (Defence): Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. Courses passed with a conceded pass classification may not be counted towards the requirements for the award of Graduate Diploma in Sciences (Defence).
3.2 To satisfy the requirements of the Diploma, a candidate must obtain a weighted average taken over the best results in eligible courses which together amount to the required number of units, of at least $55 \%$.
3.3 A candidate shall not be eligible to attend for examination unless any prescribed coursework has been completed to the satisfaction of the teaching staff concerned.
3.4 A candidate who fails in a course and desires to take the course again shall again attend the course and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Board of Studies for such exemption.
3.5 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Board of Studies and then only under such conditions as may be prescribed.
3.6 For the purpose of this Rule, a candidate who is refused permission to sit for the assessment for a given course, or who without a reason accepted by the Convenor of the Board of Studies (or nominee) fails to attend all or part of the assessment, shall be deemed to have failed that course.

## 4 Qualification requirements

4.1 To qualify for the award of Graduate Certificate in Sciences (Defence), a candidate shall satisfactorily complete courses from the following list to a total value of at least 12 units. These must include the 3 -unit core course from Group A.
4.2 Candidates may present courses offered by other universities from a register of approved courses maintained by the Board of Studies, but the total value of these external courses must not exceed 6 units (including the core course).

Candidates must have their proposed program of studies approved by the Convenor of the Board of Studies or nominee at enrolment.

## Group A : Core course

This course is offered by the University of South Australia
Systems Engineering for Complex Problem Solving 3
Group B : Defence Technology Stream
DEFSCI 7004 Aerospace Navigation \& Guidance
DEFSCI 7005 Principles of Control Systems 3
DEFSCI 7006 Antennas and Propagation 3
DEFSCI 7007 Principles of RF Engineering 3
DEFSCI 7008 RF Measurements and Testing 3
DEFSCI 7018 Electromagnetism IIID 3
DEFSCI 7203 Photonics IV-D 3
DEFSCI 7204 Photonics III-D 3
DEFSCI 7205 Experimental Methods IV-D 3
DEFSCI 7206 Physical Optics III-D 3
\# Note: special conditions apply to choosing courses with a Photonics theme. There is a preferred sequence within these courses, and candidates should seek guidance on their enrolment pattern. Electromagnetics III contains material which is assumed knowledge in the remaining courses, and should be taken by candidates without this specialist undergraduate Physics background. From time to time further Photonics options may also become available.
Group B : Information and Communication Technology Stream
DEFSCI 7000 Cognitive Science:
Minds, Brains and Computers 3
DEFSCI 7001 Decision Making in a Real Environment 3
DEFSCI 7002 Distributed Systems 3
DEFSCI 7003 Artificial Intelligence 3
DEFSCI 7013 Knowledge Representation 3
DEFSCI 7014 Parallel Computation 3
The availability of all elective courses is conditional on the availability of staff and facilities and sufficient enrolments.

Other relevant courses may be presented towards the requirements of the Graduate Certificate in Sciences (Defence) with the written approval of the Convenor of the Board of Studies.

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of Board of Studies, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the Board of Studies special circumstances exist, the Council, on the recommendation of the Board in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Certificate in Sciences

## (Defence Signal and Information Processing)

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

A candidate shall:
(a) complete any preliminary work which may be prescribed
(b) undertake an approved program of advanced part-time study which extends over not less than one and not more than two years.

## 2 Admission

2.1 Except as provided for in 2.2 an applicant for admission to the program of study for the Graduate Certificate shall have qualified for an Honours award in Mathematics, Physics or in Electrical and Electronic Engineering; or a Bachelor award that includes a major in either Mathematics or Physics, or for an equivalent degree accepted for the purpose by the University, plus some experience in the Defence industry.
2.2 The Board of Studies may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not qualify under 2.1 but who has given evidence satisfactory to the Board of fitness to undertake work for the degree.

### 2.3 Credit Transfer

2.3.1 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
2.3.2 Candidates may present courses offered by other universities from a register of approved courses maintained by the Board of Studies, but the total value of these external courses must not exceed 3 units under 4.2.1 (i) and 3 units under 4.2.1(ii) and (iii) of the Academic Program Rules.

3 Assessment and examination

### 3.1 Review of academic progress

If in the opinion of the Board of Studies a candidate for the degree is not making satisfactory progress, the Faculty may terminate the candidature.

## 4 Qualification requirements

4.1 To qualify for the degree a candidate shall:
(a) comply with conditions as prescribed in the Academic Program Rules
(b) satisfy examiners in courses of study as prescribed in the Academic Program Rules
(c) do such written and practical work as may be prescribed, and satisfactorily complete a total of at least 12 units as defined in 5.2.1

### 4.2 Academic program

4.2.1 The program of study and project work to the value of at least 12 units shall consist of:
(i) Compulsory courses

Engineering for Complex Problem Solving
(ii) courses to the value of at least 6 units selected from:

DEFSCI 7010 Beamforming and Array Processing 3

DEFSCI 7011 Adaptive Signal Processing 3
DEFSCI 7012 Multisensor Data Fusion 3
DEFSCI 7029 Kalman Filtering and Tracking 3
DEFSCI 7032 Image Processing 3
DEFSCI 7035 Detection, Estimation and Classification

DEFSCI 7036 Introduction to Discrete Linear Systems
(iii) courses to the value of at least 3 units selected from: either
(a) courses listed in 5.2 .1 (ii)
or
(b) from the following courses

DEFSCI 7015 Mathematical Coding \& Cryptology

DEFSCI 7024 Specialised Studies A 3
DEFSCI 7025 Specialised Studies B 3
DEFSCI 7026 Specialised Studies C 3
DEFSCI 7028 Information Theory 3

DEFSCI 7030 Error Control Coding
DEFSCI 7031 Mobile Communications 3
DEFSCI 7033 Speech Processing
DEFSCI 7034 Signal Processing Applications 3
DEFSCI 7037 Signal Synthesis and Analysis 3
DEFSCI 7038 Specialised Studies D 3
DEFSCI 7039 Satellite Communications 3
Specialised Studies may consist of directed readings or approved short courses as approved by the Faculty. The content and assessment of these courses will be determined in each case by the academic coordinator of the course in consultation with the student's supervisor and the student.
(c) other relevant courses as approved by the Board of Studies from other postgraduate programs of the University.
4.2.2 Students who are required to undertake preliminary work will normally enrol in one of the following courses
SIP 7027 A/B Qualifying Studies
in Mathematics Part 1 \& 2
SIP 7028 Qualifying Studies in Mathematics 12
On satisfactory completion of this work the student will proceed to study as outlined in 5.2.1 above.
4.2.3 Candidates who are granted exemption from one or more of the courses listed in 5.2.1 (ii) on the basis of previous studies may select in their place other relevant courses offered by the University of Adelaide or other tertiary institutions in South Australia as may be approved by the Faculty.
4.2.4 The availability of all courses is conditional on there being adequate staffing and resources.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the Board of Studies special circumstances exist, the Board in each case may vary any of the provisions of the Academic Program Rules for any particular award.

## Syllabuses

Prospective students should consult the program coordinator early in the year in which the program is being offered regarding the content of the specific courses that are to be offered in that year.

## textbooks

Information on appropriate textbooks will be provided by the course coordinator at the commencement of each course.

## examinations

For each course students may obtain from the course coordinator details of the examination in that course including the relevant weight given to the components (eg. such as the following as are relevant: assessments, semester or mid-semester tests, essays or other written or practical work, final written examinations, viva voce examinations).

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

Except with permission of the Faculty, the program for the Graduate Certificate in Water Resources Management shall be completed:
(i) in the case of a full-time candidate, not less than one semester
(ii) in the case of a part-time candidate, not less than three semesters.

## 2 Admission

2.1 Except as provided for in 3.2 below, an applicant for admission to the program shall have qualified for:
(a) a Bachelor degree with Honours from the University of Adelaide in an Engineering or Science discipline related to the proposed field of study, or a degree of another institution accepted by the Faculty of Engineering, Computer and Mathematical Sciences as being equivalent or
(b) at least a three-year degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a three-year (or more) degree of the University and have professional work experience to an appropriate level as assessed at the discretion of the Faculty.
2.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the degree of Graduate Certificate in Water Resources Management, a person who does not qualify in 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status or exemption

A candidate may not present for credit towards the award any course which has been presented as part of the requirements for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate in Water Resources Management: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. Courses passed with a Conceded Pass classification may not be counted towards the requirements for the degree of Graduate Certificate in Water Resources Management.
3.2 A candidate shall not be eligible to attend for examination unless any prescribed coursework has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails in a course and desires to take the course again shall again attend the course and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
3.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule, a candidate who is refused permission to sit for the assessment for a given course, or who without a reason accepted by the Executive Dean of the Faculty (or nominee) fails to attend all or part of the assessment, shall be deemed to have failed that course.

4 Qualification requirements
4.1 To qualify for the degree of Graduate Certificate in Water Resources Management, a candidate shall satisfactorily complete studies to a total value of at least 12 units.
Candidates must have their program of studies approved by the Postgraduate Coordinator or nominee at enrolment.

### 4.2 Academic program

## Core courses

A candidate shall undertake and complete satisfactorily each of the following:
WRM 7000 Global Water Systems I (Natural Water Cycle)
WRM 7002 Global Water Systems II (Engineered Water Cycle)
WRM 7003 Water Resources and Society 3
WRM 7004 Water Resources Planning \& Management

### 4.3 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Diploma in Applied Statistics

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma a candidate shall satisfactorily complete a program of full-time study extending over at least one year or of part-time study extending over at least two years.

2 Admission
2.1 Except as provided for in 2.2 a candidate for admission to the program for the Graduate Diploma shall have qualified for admission to a degree of the University or to a degree of another university accepted for the purpose by the University and have obtained the approval of the Faculty.
2.2 Subject to the approval of the Council the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not hold a degree of a university but has given evidence satisfactory to the Faculty of his fitness to undertake work for the diploma.

3 Assessment and examinations
3.1 There shall be four classifications of pass at an annual examination in any course for the diploma; Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 A candidate who fails to pass in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the professor or lecturer concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
3.3 A candidate who has twice failed to pass the examination in any course or division of a course may not enrol for that course again except by special permission to be obtained in writing from the Faculty and then only under such conditions as may be prescribed.
3.4 For the purpose of this Rule a candidate who is refused permission to sit for examination, or who fails, without a reason accepted by the Head of the School of Applied Mathematics as adequate, to attend all or part of a final examination (or supplementary examination if remaining enrolled for at least eight teaching weeks of that semester), shall be deemed to have failed to pass the examination.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma, a candidate shall regularly attend lectures and tutorials, do such written work as may be prescribed, and pass examinations in a selection of courses chosen from the following list, to an aggregate value of at least 18 units, with at most 6 units from Level II.

### 4.1.1 Level II Statistics courses STATS 6002 Introduction to Mathematical Statistics II 2

STATS 6003 Statistical Practice II 2
STATS 7054 Statistical Modelling 2
4.1.2 Level III Statistics courses

APP MTH 7066 Life Contingencies III 3
STATS 6001 Statistical Modelling III 3
STATS 6005 Time Series III 3
STATS 6006 Mathematical Statistics III 3
STATS 6008 Biostatistics III 3
STATS 6010 Experimental Design III 3
STATS 6014 Sampling Theory and Practice III 3
STATS 6016 Industrial Statistics III 2
STATS 6018 Bioinformatics III 3
4.1.3 at most, two of the Level III Applied Mathematics courses:

APP MTH 7056 Telecommunications
Systems Modelling III 3

APP MTH 7065 Applied Probability III 3
APP MTH 7067 Mathematical Programming III 3
APP MTH 7076 Mathematical Biology III 3
4.1.4 Statistics courses listed in 5.3.1 for the degree of Master of Mathematical Sciences.
4.1.5 Other Statistics courses which may be offered from time to time by the School of Mathematical Sciences and the Biometry Section (Waite Campus) of the University of Adelaide.

### 4.1.6 Compulsory project

STATS 6017 Statistics Project
In addition to the course work each student will be expected to complete a project chosen in consultation with and supervised by a supervisor from either the Biometry Section (Waite Campus) or the School of Applied Mathematics.
4.2 On the recommendation of the Head of the School of Applied Mathematics, the Faculty may exempt a candidate from the need to satisfy the prerequisites prescribed for the course.

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma a candidate shall satisfactorily complete a program of study extending over at least one year.

## 2 Admission

2.1 Except as provided for in 2.2 a candidate for admission to the program for the Graduate Diploma shall have qualified for admission to a degree of the University in a field other than Computer Science, or to a degree of another university accepted for the purpose by the University and have obtained the approval of the School of Computer Science.
2.2 Subject to the approval of the Council the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not hold a degree of a university but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status and Credit Transfer

2.3.1 Subject to 2.4.1 below, no candidate will be permitted to count for the Graduate Diploma in Computer Science any course that in the opinion of the School contains substantially the same material as any other course which the candidate has presented already for another qualification.
2.3.2 A candidate who has passed courses in other educational institutions may, on written application, be granted such exemption from the requirements of these rules as the Faculty shall determine. Status may be granted for a maximum of 3 units under 4.1.1 of the Academic Program Rules.

### 2.4 Articulation with other awards

2.4.1 A candidate who has been enrolled for the Graduate Certificate at the University of Adelaide and who has not been awarded the Graduate Certificate shall, on written application, be permitted to transfer all equivalent courses towards the Graduate Diploma degree.
2.4.2 A candidate who holds the Graduate Certificate in Computer Science from the University of Adelaide shall surrender the Graduate Certificate before being awarded the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass at an examination in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 A candidate who fails to pass in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the professor or lecturer concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
3.3 A candidate who has twice failed to pass the examination in any course or division of a course may not enrol for that course again except by special permission to be obtained in writing from the Faculty and then only under such conditions as may be prescribed.
3.4 For the purpose of this Rule a candidate who is refused permission to sit for examination, or who fails, without a reason accepted by the Head of the School of Computer Science as adequate, to attend all or part of a final examination (or supplementary examination if granted) after remaining enrolled for at least eight teaching weeks of that semester, shall be deemed to have failed to pass the examination

## 4 Qualification requirements

### 4.1 Academic Program

A candidate for the Graduate Diploma shall regularly attend lectures and tutorials, do such written work as shall be prescribed, and pass examinations in courses offered by the School of Computer Science to the value of at least 24 units comprising at least 9 units of Level II and at least 9 units of Level III courses including COMPSCI 7015 Software Engineering and Project.

Level II courses:
COMPSCI7080 Computer Science Concepts 3
COMPSCI7081 Computer Systems 3
COMPSCI 7082 Data Structures and Algorithms 3
COMPSCI7083 Database and Information Systems 3
COMPSCI 7084 Introduction to Software Engineering
COMPSCI7085 Numerical Methods ..... 3
COMPSCI7088 Systems Programming in C and $\mathrm{C}++$ ..... 3
Level III courses:
COMPSCI7006 Programming Techniques ..... 3
COMPSCI7026 Computer Architecture ..... 3
COMPSCI7031 Advanced Programming Paradigms ..... 3
COMPSCI7039 Computer Networks \& Applications ..... 3
COMPSCI7041 Compiler Construction and Project ..... 3
COMPSCI7055 Numerical Analysis ..... 3
COMPSCI7059 Artificial Intelligence ..... 3
COMPSCI7064 Operating Systems ..... 3
COMPSCI7075 Knowledge Representation ..... 3
COMPSCI7076 Distributed Systems ..... 3
COMPSCI7089 Event Driven Computing ..... 3
COMPSCI7090 Computer Graphics ..... 3
Subject to permission from the Head of the School of Computer Science (or nominee) a student may also undertake a selection of courses from the Academic Program Rules for the degree of Master of Computer Science.
4.2 On the recommendation of the Head of the School of Computer Science, the Faculty may exempt a candidate from the need to satisfy the prerequisites prescribed for the course.

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Diploma in Engineering

(Environmental Engineering)

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma a candidate shall satisfactorily complete a program of full-time study extending over at least one year or of part-time study over at least two years. Except with the permission of the Faculty the work for the Graduate Diploma shall be completed within three years.

## 2 Admission

2.1 Except as provided in 2.2 below, an applicant for admission to the program of study for the Graduate Diploma shall:
(a) have qualified for the degree of Bachelor of Engineering of the University of Adelaide or
(b) hold a qualification accepted by the Faculty of Engineering, Computer and Mathematical Sciences as being equivalent to the degree of Bachelor of Engineering of the University of Adelaide or
(c) have been admitted to the program of study for the Graduate Certificate in Engineering (Environmental Engineering). Courses passed for the Graduate Certificate will then be counted for the Graduate Diploma.
2.2 The Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma an applicant who does not qualify for admission under 2.1 above but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

3 Enrolment
Each candidate's program of study must be approved by the Head of the School at enrolment each year.

4 Assessment and examinations
4.1 If a course has a Conceded Pass classification for the purpose of another award, any such course passed with this classification shall not count towards the requirements for the Graduate Diploma.
4.2 There shall be four classifications of pass in each course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
4.3 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
4.4 A candidate who fails in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
4.5 A candidate who has twice failed in any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 5 Qualification requirements

5.1 To qualify for a Graduate Diploma in Engineering (Environmental Engineering) a candidate shall satisfactorily complete all courses from Group A in 5.6 below plus courses from Group $B$ in 5.6 below to a value of at least 21 units.
5.2 The courses presented shall not include any which is, in the opinion of the Faculty, substantially equivalent to another course presented for the Diploma or already counted towards another qualification.
5.3 Should any course in Group A be covered by 5.2 above then a course/s with an equivalent units value from Group B may be substituted with the approval of the Head of School.
5.4 Candidates wishing to enrol in courses for which they do not have the necessary preliminary knowledge may be required to take such bridging courses prior to the commencement of their Diploma studies as may be deemed appropriate by the Head of the School. No academic credit toward the Diploma will be awarded for such studies.
5.5 To complete a program of study in a course a candidate shall, unless exempted by the Head of the School offering the course:
(a) regularly attend the prescribed lectures, tutorials, workshops and seminars and
(b) undertake such computing work, project work, practical work, field work and case studies, do such reading, written and oral work and pass such examinations as the Head of the School offering the course may prescribe.

### 5.6 Academic program

The following shall be courses for the Graduate Diploma in Engineering (Environmental Engineering).

Group A - Compulsory Course

C\&ENVENG5064 Environmental Engineering
and Design III

## Group B - Elective Courses <br> CHEM ENG 5000 Transport Processes in the Environment

C\&ENVENG5061 Environmental Science and Policy2
CGENVENG5066 Advanced Engineering Hydrology and Design ..... 3
CধENVENG5067 Advanced Water Distribution Systems and Design ..... 3
C\&ENVENG5068 Advanced Water Resources
Management and Design ..... 3
CধENVENG5069 Advanced Water Resources Planning and Design ..... 3
CGENVENG5070 Special Topics in
Water Engineering IV N ..... 3
C\&ENVENG5071 Special Topics in Management and Planning IV N ..... 3
CGENVENG5072 Environmental Auditing \& Design ..... 3
C\&ENVENG5074 Groundwater Resources, Contamination and Design ..... 3
CGEnveng 5075 Numerical Methods in Environmental Engineering ..... 3
CGENVENG5078 Introduction to Environmental Law N ..... 3
ECON 5000 Environmental Economics E ..... 3
C\&ENVENG7027 Wastewater Engineering and Design ..... 3
C\&ENVENG7028 Waste Management Analysis \& Design ..... 3C\&ENVENG 7029 Environmental Processes, Modellingand Design3

### 5.7 Transfer from Graduate Certificate

A candidate who holds the Graduate Certificate in Engineering (Environmental Engineering) shall surrender the Graduate Certificate before being awarded the Graduate Diploma.

### 5.8 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

6 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

Except with the special permission of the Faculty, the program for the Graduate Diploma shall be completed in not less than two semesters and not more than four semesters of full-time study, or not less than four and not more than eight semesters of part-time study.

## 2 Admission

2.1 Except as provided for in 2.2 below, an applicant for admission to the program for the Graduate Diploma shall:
(a) have qualified in the University of Adelaide for the degree of Bachelor of Engineering (Chemical) or (Mechanical), or Honours degree of Bachelor of Engineering other than the Bachelor of Engineering (Chemical) or (Mechanical), or Honours degree of Bachelor of Science or
(b) have qualified for an award accepted by the Faculty of Engineering, Computer and Mathematical Sciences as being equivalent academically and professionally to one of the degrees described in clause 2.1.(a) above or
(c) have qualified in the University of Adelaide for the degree of Bachelor of Engineering or Bachelor of Science, or for an award accepted by the Faculty as being equivalent to one of those degrees, and have in addition successfully undertaken advanced studies and/or work in an appropriate area which is considered by the Faculty to be an adequate preparation for candidature.
2.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the Graduate Diploma, a person who does not qualify under 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status or exemption

A candidate may not present for credit towards the Graduate Diploma any course which has been presented as part of the requirements for any other award of this

University or other institution, or which in the opinion of the Faculty is substantially similar to such course.

### 2.4 Articulation with other awards

Notwithstanding these Academic Program Rules, a candidate who has been enrolled for the degree of Master of Engineering (Fuels, Combustion \& Emission Control), who as such a candidate has completed the work prescribed herein for the Graduate Diploma and who has not been awarded theMaster degree, shall on written application be awarded the Graduate Diploma, subject to the student discontinuing candidature for the degree of Master of Engineering (Fuels, Combustion \& Emission Control).

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in each course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom by the Faculty.
3.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule a candidate who is refused permission to sit for examination, or who without a reason accepted by the Executive Dean of the Faculty (or nominee) fails to attend all or part of a final examination (or supplementary examination if granted) after remaining enrolled for at least eight teaching weeks of that semester, shall be deemed to have failed the examination.

## 4 Qualification requirements

4.1 To qualify for a Graduate Diploma in Engineering (Fuels, Combustion and Emission Control) a candidate shall satisfactorily complete all courses in Group A plus courses from Group B below, to the total value of at least 24 units.

## Notes

1 Each year the School of Chemical Engineering shall determine which of the elective courses in Group B will be offered and in which semester they will be offered.
2 With approval from the Head of School of Chemical Engineering, a student may undertake a limited number of courses offered by other schools or faculties, or by other institutions, to replace some of the elective courses in Group B.

### 4.2 Academic program <br> Group A: Core courses

CHEM ENG5008 Combustion Heat Transfer
CHEM ENG5013 Fuel and Combustion Technology 2
CHEM ENG5016 Instrumentation and Control for Combustion Processes

CHEM ENG5017 Introduction to
Combustion Phenomena
CHEM ENG6006 Chemical Reactions and Pollutant Formation 2
CHEM ENG6009 Fuels and Combustion
Laboratory Projects II
CHEM ENG6010 Fuel and Combustion Seminars
Group B: Elective course
General
CHEM ENG5009 Combustion for
High Temperature Processing
CHEM ENG5010CombustionPlant Safety and Management2
CHEM ENG6002 Combustion Emission Control ..... 2
CHEM ENG6005 Introduction to
Combustion Aerodynamics ..... 2
Coal
CHEM ENG5006 Coal Combustion in Furnaces ..... 2
CHEM ENG5007 Coal Conversion Processes other than Combustion ..... 2
CHEM ENG6007 Coal Properties and Characterisation ..... 2
Gas and OilCHEM ENG5019 Oil and Gas Combustion Technology2
CHEM ENG6008 Energy Management \& Conversion ..... 2
4.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Graduate Diploma in Engineering (Radio Frequency Engineering) 

Note: Postgraduate tuition fees apply to this program. It is not expected that there will be an intake into the program in 2005.

## Academic Program Rules

## 1 Duration of program

The program for the Graduate Diploma shall be offered on a part-time basis only. It is expected that candidates will be able to complete the program in a minimum of six semesters of part-time study.

## 2 Admission

2.1 Except as provided in 2.2 below, an applicant for admission to the program for the Graduate Diploma shall:
(a) have qualified in the University of Adelaide for the degree of Bachelor of Engineering in Electrical \& Electronic or Computer Systems Engineering or
(b) have qualified for an award accepted by the Faculty of Engineering, Computer and Mathematical Sciences as being equivalent academically and professionally to the degree of Bachelor of Engineering in Electrical \& Electronic or Computer Systems Engineering at the University of Adelaide.
2.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the Graduate Diploma, a person who does not qualify under 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status or exemption

A candidate may not present for credit towards the Graduate Diploma any course which has been presented as part of the requirements for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course.

### 2.4 Articulation with other awards

Notwithstanding these Academic Program Rules, a candidate who has been enrolled for the degree of Master of Engineering (Radio Frequency Engineering) who as such a candidate has completed the work prescribed herein for the Graduate Diploma and who has not been awarded the Masters degree, shall on written application be awarded the Graduate Diploma, subject to the student discontinuing
candidature for the degree of Master of Engineering (Radio Frequency Engineering).

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in each core course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. The Directed Readings shall be assessed on a satisfactory/unsatisfactory basis.
3.2 A candidate shall not be eligible to attend for examination where relevant unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
3.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule a candidate who is refused permission to sit for examination, or who without a reason accepted by the Executive Dean of the Faculty (or nominee) fails to attend all or part of a final examination (or supplementary examination if granted) after remaining enrolled for at least eight teaching weeks of that semester, shall be deemed to have failed the examination.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for a Graduate Diploma in Engineering (Radio Frequency Engineering) a candidate shall satisfactorily complete the courseslisted below, to the total value of 24 units:
Core courses
ELEC ENG6000 Antennas and Propagation ..... 3
ELEC ENG6001 CAD of RF Circuits and Systems ..... 3
ELEC ENG6002 Introduction to RF Design ..... 4
ELEC ENG6005 RF Measurements and Testing ..... 3
ELEC ENG6006 Transmission Lines and Waveguides ..... 3
Directed readings
ELEC ENG6003 Readings in RF Engineering 2 ..... 4
ELEC ENG6004 Readings in RF Engineering 1 ..... 4

### 4.2 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Diploma in Engineering (Structural Engineering)

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma a candidate shall satisfactorily complete a program of full-time study extending over at least one year or its part-time equivalent. Except with the permission of the Faculty the work for the Graduate Diploma shall be completed within three years.

2 Admission
2.1 Except as provided in 2.2 below, an applicant for admission to the program of study for the Graduate Diploma shall:
(i) have qualified for the degree of Bachelor of Engineering (Civil \& Environmental) of the University of Adelaide or
(ii) hold a qualification accepted by the Faculty of Engineering, Computer and Mathematical Sciences as being equivalent to the degree of Bachelor of Engineering (Civil \& Environmental) of the University of Adelaide or
(iii) have been admitted to the program of study for the Graduate Certificate in Engineering (Structural Engineering). Courses passed for the Graduate Certificate will then be counted for the Graduate Diploma.
2.2 The Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma an applicant who does not qualify for admission under 2.1 above but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status and exemption

A candidate who desires that examinations which he or she has passed in the University or elsewhere be counted for the Graduate Diploma in Engineering (Structural Engineering) may on written application be granted such exemption from the requirements of these rules as the Faculty may determine. Otherwise, no course counted for any other award of this University or other institution shall be counted as part of the requirements for the Graduate Diploma.

## 3 Enrolment

Each candidate's program of study must be approved by the Head of the School at enrolment each year.

4 Assessment and examinations
4.1 There shall be four classifications of pass in each course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. If a course has a Conceded Pass classification for the purpose of another award, any such course passed with this classification shall not count towards the requirements for the Graduate Diploma.
4.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
4.3 A candidate who fails (or obtains a conceded pass) in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
4.4 A candidate who has twice failed or obtained conceded passes in any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 5 Qualification requirements

5.1 To qualify for the Graduate Diploma in Engineering
(Structural Engineering) a candidate shall satisfactorily complete all courses from Group A below plus courses from Group B to a value of at least 12 units.
5.2 The courses presented shall not include any course which is, in the opinion of the Faculty, substantially equivalent to another course presented for the Diploma or already counted towards another qualification
5.3 Should any course in Group A be covered by 5.2 above then course(s) with an equivalent units value from Group B may be substituted with the approval of the Head of School.
5.4 Candidates wishing to enrol in courses for which they do not have the necessary preliminary knowledge may be required to take such bridging courses prior to the commencement of their Diploma studies as may be deemed appropriate by the Head of the School. No academic credit toward the Diploma will be awarded for such studies.
5.5 To complete a program of study in a course a candidate shall, unless exempted by the Head of the School offering the course:
(a) regularly attend the prescribed lectures, tutorials, workshops and seminars and
(b) undertake such computing work, project work, practical work, field work and case studies, do such reading, written and oral work and pass such examinations as the Head of the School offering the course may prescribe.

### 5.6 Academic program

The following shall be courses for the Graduate Diploma in Engineering (Structural Engineering):

Group A - Compulsory Courses
C\&ENVENG5062 Structural Design III (Concrete) 3
C\&ENVENG5063 Structural Design III (Steel) 3
C\&ENVENG6020 A/B Advanced Structural Investigation 6
Group B - Elective Courses
C\&ENVENG5056 Computer Methods
of Structural Analysis and Design
C\&ENVENG5059 Special Topics
in Structural Engineering IV N3

C\&ENVENG7032 Design of Composite Structures 3
C\&ENVENG7033 Earthquake Engineering \& Design 3
C\&ENVENG7041 Fundamental Steel Design 3
C\&ENVENG7042 Design of Concrete Structures N 3

### 5.7 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Diploma in Mathematical Science

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma a candidate shall satisfactorily complete a program of full-time study extending over at least one year or of part-time study extending over at least two years. Except with the permission of the Faculty, the work for the Graduate Diploma shall be completed within four years.

## 2 Admission

2.1 Except as provided for in 2.2 an applicant for admission to the program of study for the Graduate Diploma shall:
(a) have qualified for a degree of the University or for a degree of another institution accepted for the purpose by the University.
(b) have obtained the approval of the Faculty of Engineering, Computer and Mathematical Sciences.
2.2 Subject to the approval of the Council the Faculty may, in special cases subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not hold a degree of a university but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in each course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails to pass in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
3.4 A candidate who has twice failed the examination in any course or division of a course may not enrol for that course again except by special permission to be obtained in
writing from the Faculty and then only under such conditions as may be prescribed.

For the purpose of this Rule a candidate who is refused permission to sit for examination, or who without a reason accepted by the Faculty fails to attend all or part of a final examination (or supplementary examination if granted) after remaining enrolled for at least eight teaching weeks of that semester, shall be deemed to have failed the examination.

## 4 Qualification requirements

4.1 To qualify for the Graduate Diploma, a candidate shall satisfactorily complete work to the value of at least 24 units, of which 18 units must be from studies within Applied Mathematics, Pure Mathematics and/or Statistics. Of these 18 units at least 12 units must be chosen from the following:
(a) Level III courses in Applied Mathematics, Pure Mathematics and Statistics
(b) Courses listed in 5.3 .1 (c) for the degree of Master of Mathematical Science
(c) Project option.

This option may comprise up to 4 units of the work for the award. The topics and level of such project work will be decided in consultation with a supervisor appointed by the Faculty. The project options are:
APPMTH 6001 Applied Mathematics Diploma Project A
APPMTH 6010 Applied Mathematics Diploma Project B

PURE MTH 6007 Pure Mathematics Diploma Project A
PURE MTH 6000 Pure Mathematics Diploma Project A

STATS 6012 Statistics Diploma Project A
STATS 6013 Statistics Diploma Project B
In addition to courses listed in (a), (b) and (c), courses may be chosen from:
(d) those listed in the Calendar for any degree of the University approved for the purpose by the Faculty. Such courses must not comprise more than 8 units of Level II studies and must be approved as relevant to the program of study by the Postgraduate Coordinator.
4.2 Formal approval of enrolment must be obtained from the Program Coordinator.

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Syllabuses

## textbooks

Information on appropriate textbooks will be provided by the relevant school and at the preliminary lecture in Orientation Week.

## examinations

Details of these are made available at the relevant lectures during orientation week.

## assumed knowledge

Applicants for the Graduate Diploma will be expected to have a knowledge of mathematics equivalent to that which would be obtained by passing 4 level II courses offered by the Schools of Applied and Pure Mathematics (ie. 8 units).
The Faculty offers the Graduate Diploma in Mathematical Science as a full-time or part-time program to cater for a number of different demands:
(a) It is designed for graduates with some mathematical training who wish to extend their mathematical knowledge for professional (eg. teachers) or other reasons. The Graduate Diploma allows a flexible program to suit the background of the individual. Thus it may
(i) extend a modest knowledge of mathematics to say the level attained by a graduate with a degree of Bachelor of Mathematical and Computer Sciences or
(ii) at the other extreme provide a program comparable to the level of the Honours degree.
(b) Graduates of a University or other institution who have an interest in proceeding to research in some area of the mathematical sciences but lack the preparation necessary may enrol for the Graduate Diploma in Mathematical Science with the view to gaining the background to begin a program at the Masters level either by coursework or by research.

Graduates wishing to enrol may consult the Program Coordinator for details of the courses offered preferably in the December of the year preceding their enrolment.

The program is normally one year of full-time study or two years part-time. The Graduate Diploma requires a satisfactory performance in approved courses totalling 24 units. Provision is made in the schedules for candidates to remedy deficiencies in preparation through inclusion of courses at level II. Up to 4 units may be in the form of supervised project work. Students will be allocated a supervisor at the time of enrolment.

## Graduate Diploma in Science and

Technology Commercialisation

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

The Graduate Diploma can be completed in one year or participants can study at their own pace provided the eight courses are completed within 4 years.

2 Admission
2.1 An applicant for admission to the program for the Graduate Diploma in Science and Technology Commercialisation shall have qualified for the degree of the University or another institution accepted by the University for the purpose as equivalent, shall have had at least 5 years approved professional work experience, and shall have demonstrated to the satisfaction of the University to have the capacity and experience to benefit from the program.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

 With the exception of the Graduate Certificate in Science and Technology Commercialisation (see 2.4 below), candidates who have previously passed courses in postgraduate awards or equivalent at the University of Adelaide or another university and who wish to count such courses towards the Graduate Diploma in Science and Technology Commercialisation may, on written application to the Faculty, be granted such status as the Faculty shall determine, to a maximum aggregate value of six (6) units.
### 2.4 Articulation with other awards

2.4.1 A candidate who has been admitted to the Graduate Certificate in Science and Technology Commercialisation and who wishes to count courses presented for the Graduate Certificate toward the Graduate Diploma must surrender the Graduate Certificate before being admitted to the Graduate Diploma in Science and Technology Commercialisation.
2.4.2 A candidate for the degree of Master of Science and Technology Commercialisation who satisfies the requirements for Graduate Diploma but who does not complete the requirements for the Masters degree may be admitted to the Graduate Diploma in Science and Technology Commercialisation.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction; Pass with Distinction; Pass with Credit; and Pass. The Diploma Project shall be assessed on a Satisfactory/Unsatisfactory basis.
3.2 A candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails a course and wishes to repeat that course, shall, unless exempted partially therefrom by the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.
3.4 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to the value of 24 units of which at least 18 units are core courses.

### 4.1.1 Core courses

TECHCOMM 5001 Marketing Technological Innovation
TECHCOMM 5002 Managing Product Design and Development
TECHCOMM 5003 Strategic Analysis for Technology Commercialisation ..... 3
TECHCOMM 5005 Financing Commercialisation ..... 3
TECHCOMM 5006 Technology Management and Transfer ..... 3
TECHCOMM 5007 Legal Issues of the Commercialisation Process ..... 3
TECHCOMM 5008 Leading and Managing ..... 3
TECHCOMM 5011 Internationalisation of Technology ..... 3
4.1.2. Elective courses
TECHCOMM 5004 Managing Risk ..... 3
TECHCOMM 5009 Business and Contract Management ..... 3
TECHCOMM 5012 Integrated Logistics Support ..... 3
TECHCOMM 5021 Applied Project Management 1 ..... 3
4.2 Unacceptable combination of coursesNo candidate will be permitted to count towards an awardany course, together with any other course, which, in theopinion of the Faculty concerned, contains a substantialamount of the same material; and no course or portion of acourse may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Diploma in Sciences (Defence)

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

Except with permission of the Board of Studies, the program for the Graduate Diploma in Sciences (Defence) shall be completed in two semesters of full-time study, or up to eight semesters of part-time study.

## 2 Admission requirements

2.1 Except as provided for in 2.2 below, an applicant for admission to the program shall:
(a) have qualified for a degree from the University of Adelaide in a discipline related to the proposed field of study
(b) have qualified for an award accepted by the Board of Studies as being equivalent to a degree from the University of Adelaide in a discipline related to the proposed field of study and
(c) shall have had at least 18 months' employment experience in a defence-related industry.
2.2 The Board of Studies may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the award of Graduate Diploma in Sciences (Defence), a person who does not qualify under 2.1 above, but has given evidence satisfactory to the Board of fitness to undertake work for the degree.

### 2.3 Status or exemption

A candidate may not present for credit towards the award any course which has been presented as part of the requirements for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course.

### 2.4 Articulation with other awards

2.4.1 A candidate who has been enrolled for the Graduate Certificate in Sciences (Defence) at the University of Adelaide and who has not been awarded the Graduate Certificate shall, on written application, be permitted to transfer all equivalent courses towards the Diploma degree.
2.4.2 A candidate who holds the Graduate Certificate in Sciences (Defence) from the University of Adelaide shall surrender the Graduate Certificate before being awarded the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma in Sciences (Defence): Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. Courses passed with a conceded pass classification may not be counted towards the requirements for the award of Graduate Diploma in Sciences (Defence).
3.2 To satisfy the requirements of the Diploma, a candidate must obtain a weighted average taken over the best results in eligible courses which together amount to the required number of units, of at least $55 \%$.
3.3 A candidate shall not be eligible to attend for examination unless any prescribed coursework has been completed to the satisfaction of the teaching staff concerned.
3.4 A candidate who fails in a course and desires to take the course again shall again attend the course and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Board of Studies for such exemption.
3.5 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Board of Studies and then only under such conditions as may be prescribed.
3.6 For the purpose of this Rule, a candidate who is refused permission to sit for the assessment for a given course, or who without a reason accepted by the Convenor of the Board of Studies (or nominee) fails to attend all or part of the assessment, shall be deemed to have failed that course.

## 4 Qualification requirements

4.1 To qualify for the award of Graduate Diploma in Sciences (Defence), a candidate shall satisfactorily complete courses from the following list to a total value of at least 24 units. These must include the two core courses from Group A to the value of 6 units.
4.2 Candidates may present courses offered by other universities from a register of approved courses maintained by the Board of Studies, but the total value of these
external courses must not exceed 9 units (including the core courses in Group A).

Candidates must have their proposed program of studies approved by the Convenor of the Board of Studies or nominee at enrolment.

## Group A : Core courses

Both of these courses are offered by the University of South Australia

Research Methods in a Multidisciplinary Environment
Systems Engineering for Complex Problem Solving
Group B: Defence Technology Stream
DEFSCI7004 Aerospace Navigation \& Guidance
DEFSCI7005 Principles of Control Systems 3
DEFSCI7006 Antennas and Propagation 3
DEFSCI7007 Principles of RF Engineering 3
DEFSCI7008 RF Measurements and Testing 3
DEFSCI7018 Electromagnetism IIID 3
DEFSCI7203 Photonics IV-D 3
DEFSCI7204 Photonics III-D 3
DEFSCI7205 Experimental Methods IV-D 3
DEFSCI7206 Physical Optics III-D 3
\# Note: special conditions apply to choosing courses with a Photonics theme. There is a preferred sequence within these courses, and candidates should seek guidance on their enrolment pattern. Electromagnetics III contains material which is assumed knowledge in the remaining courses, and should be taken by candidates without this specialist undergraduate Physics background. From time to time further Photonics options may also become available.

Group C : Information and Communication Technology Stream
DEFSCI7000 Cognitive Science:
Minds, Brains and Computers
DEFSCI7001 Decision Making in a Real Environment 3
DEFSCI7002 Distributed Systems 3
DEFSCI7003 Artificial Intelligence 3
DEFSCI7013 Knowledge Representation 3
DEFSCI7014 Parallel Computation 3
The availability of all elective courses is conditional on the availability of staff and facilities and sufficient enrolments.

Other relevant courses may be presented towards the requirements of the Graduate Diploma in Sciences (Defence) with the written approval of the Convenor of the Board of Studies.

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of Board of Studies, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the Board of Studies special circumstances exist, the Council, on the recommendation of the Board in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Diploma in Sciences

(Defence Signal Information Processing)

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

A candidate shall:
(a) complete any preliminary work which may be prescribed
(b) satisfactorily complete a program of study extending over at least one year.

2 Admission
2.1 Except as provided for in 2.2 an applicant for admission to the program of study for the Graduate Diploma shall have qualified for an Honours award in Mathematics, Physics or in Electrical and Electronic Engineering; or a Bachelor award that includes a major in either Mathematics or Physics, or for an equivalent degree accepted for the purpose by the University, plus some experience in the Defence industry.
2.2 The Board of Studies may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not qualify under 2.1 but who has given evidence satisfactory to the Board of fitness to undertake work for the degree.

### 2.3 Articulation with other awards

2.3.1 A candidate who has been enrolled for the Graduate Certificate in Signal Information Processing at the University of Adelaide and who has not been awarded the Graduate Certificate shall, on written application, be permitted to transfer all equivalent courses towards the Diploma degree.
2.3.2 A candidate who holds the Graduate Certificate in Signal Information Processing from the University of Adelaide shall surrender the Graduate Certificate before being awarded the Graduate Diploma.

### 2.4 Credit Transfer

2.4.1 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
2.4.2 Candidates may present courses offered by other universities from a register of approved courses maintained by the Board of Studies, but the total value of these external courses must not exceed 6 units under 4.2.1 (i) and 3 units under 4.2.1 (ii) and (iii) of the Academic Program Rules.

## 3 Assessment and examination

### 3.1 Review of academic progress

If in the opinion of the Board of Studies a candidate for the degree is not making satisfactory progress, the Faculty may terminate the candidature.

4 Qualification requirements
4.1 To qualify for the degree a candidate shall:
(a) comply with conditions as prescribed in the Academic Program Rules;
(b) satisfy examiners in courses of study as prescribed in the Academic Program Rules;
(c) do such written and practical work as may be prescribed, and satisfactorily complete a total of at least 24 units as defined in 5.2 .

### 4.2 Academic program

4.2.1 The program of study and project work to the value of at least 24 units shall consist of:
(i) Compulsory courses

Systems Engineering for Complex Problem Solving 3
Research Methods in a Multidisciplinary Environment
(ii) courses to the value of at least 12 units selected from:
DEFSCI 7010 Beamforming and Array Processing
DEFSCI 7011 Adaptive Signal Processing 3
DEFSCI 7012 Multisensor Data Fusion 3
DEFSCI 7029 Kalman Filtering and Tracking 3
DEFSCI 7032 Image Processing 3

DEFSCI 7035 Detection, Estimation and Classification 3
DEFSCI 7036 Introduction to Discrete Linear Systems
(iii) courses to the value of at least 6 units selected from: either
(a) courses listed in 5.2 .1 (ii)
or
(b) from the following courses

DEFSCI 7015 Mathematical Coding
\& Cryptology
DEFSCI 7024 Specialised Studies A 3
DEFSCI 7025 Specialised Studies B 3
DEFSCI 7026 Specialised Studies C 3
DEFSCI 7028 Information Theory 3
DEFSCI 7030 Error Control Coding 3
DEFSCI 7031 Mobile Communications 3
DEFSCI 7033 Speech Processing 3
DEFSCI 7034 Signal Processing Applications 3
DEFSCI 7037 Signal Synthesis and Analysis 3
DEFSCI 7038 Specialised Studies D 3
DEFSCI 7039 Satellite Communications 3
Specialised Studies may consist of directed readings or approved short courses as approved by the Faculty. The content and assessment of these courses will be determined in each case by the academic coordinator of the course in consultation with the student's supervisor and the student.
(c) other relevant courses as approved by the Board of Studies from other postgraduate programs of the University.
4.2.2 Students who are required to undertake preliminary work will normally enrol in one of the following courses:
SIP 7027 A/B Qualifying Studies
in Mathematics Part 1 \& 24
SIP 7028 Qualifying Studies in Mathematics 12
On satisfactory completion of this work the student will proceed to study as outlined in 5.2.1 above.
4.2.3 Candidates who are granted exemption from one or more of the courses listed in 5.2 .1 (ii) on the basis of previous studies may select in their place other relevant courses offered by the University of Adelaide or other tertiary institutions in South Australia as may be approved by the Board of Studies.
4.2.4 The availability of all courses is conditional on there being adequate staffing and resources.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the Board of Studies special circumstances exist, the Board in each case may vary any of the provisions of the Academic Program Rules for any particular award.

## Syllabuses

Prospective students should consult the program coordinator early in the year in which the program is being offered regarding the content of the specific courses that are to be offered in that year.

## textbooks

Information on appropriate textbooks will be provided by the course coordinator at the commencement of each course.

## examinations

For each course students may obtain from the course coordinator details of the examination in that course including the relevant weight given to the components (eg. such as the following as are relevant: assessments, semester or mid-semester tests, essays or other written or practical work, final written examinations, viva voce examinations).

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

Except with permission of the Faculty, the program for the Graduate Diploma in Water Resources Management shall be completed:
(i) in the case of a full-time candidate, not less than two semesters
(ii) in the case of a part-time candidate, not less than three semesters.

## 2 Admission

2.1 Except as provided for in 3.2 below, an applicant for admission to the program shall have qualified for:
(a) a Bachelor degree from the University of Adelaide in an Engineering or Science discipline related to the proposed field of study, or a degree of another institution accepted by the Faculty of Engineering, Computer and Mathematical Sciences as being equivalent or
(b) a four-year degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a four-year degree of the University and have professional work experience to an appropriate level as assessed at the discretion of the Program Director.
2.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the degree of Graduate Diploma in Water Resources Management, a person who does not qualify in 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Articulation with other awards

2.3.1 A candidate who has been enrolled for the Graduate Certificate in Water Resources Management at the University of Adelaide and who has not been awarded the Graduate Certificate shall, on written application, be given consideration by the Faculty to transfer all equivalent courses towards the Graduate Diploma.
2.3.2 A candidate who holds the Graduate Certificate in Water Resources Management from the University of Adelaide shall surrender the Graduate Certificate before being awarded the Graduate Diploma.

### 2.4 Status or exemption

Candidates who have previously passed courses in other postgraduate awards at the University of Adelaide or another university and who wish to count such courses towards the degree may, on written application to the Faculty, be granted such status as the Faculty shall determine, to a maximum aggregate value of six (6) units. No such status will be granted for courses in 4.3 (a). However, candidates may, on written application to the Faculty, be granted permission to substitute courses listed in 4.3 (a) with elective courses to a maximum aggregate value of six (6) units.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma in Water Resources Management: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. Courses passed with a Conceded Pass classification may not be counted towards the requirements for the degree of Graduate Diploma in Water Resources Management.
3.2 A candidate shall not be eligible to attend for examination unless any prescribed coursework has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails in a course and desires to take the course again shall again attend the course and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
3.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule, a candidate who is refused permission to sit for the assessment for a given course, or who without a reason accepted by the Executive Dean of the Faculty (or nominee) fails to attend all or part of the assessment, shall be deemed to have failed that course.

4 Qualification requirements
4.1 To qualify for the degree of Graduate Diploma in Water Resources Management, a candidate shall satisfactorily complete studies to a total value of at least 24 units comprising:
(a) 12 units of core courses in 4.3 (a); and
(b) 12 units taken from 4.3(b), (c).
4.2 At least 12 units of study must be undertaken from courses offered by the University of Adelaide.

Candidates must have their program of studies approved by the Postgraduate Coordinator or nominee at enrolment.

### 4.3 Academic program

(a) Core courses

A candidate shall undertake and complete satisfactorily each of the following:

WRM 7000 Global Water Systems I
(Natural Water Cycle)
WRM 7002 Global Water Systems II (Engineered Water Cycle)

WRM 7003 Water Resources and Society 3
WRM 7004 Water Resources Planning \& Management
(b) Electives

A candidate shall undertake and complete satisfactorily four of the following courses (12 units), at least three courses ( 9 units) must be taken from one of the streams:

## Management of Water Infrastructure

University of Adelaide
WRM 7010 Wastewater Engineering \& Design
WRM 7011 Environmental Modelling, Management and Design
WRM 7012 Water Resources Optimisation and Modelling ..... 3
WRM 7013 Water Distribution Systems \& Design ..... 3
WRM 7014 Coastal Engineering and Design ..... 3
WRM 7021 GIS for Environmental Management ..... 3
WRM 7022 Analysis of Rivers and Sediment Transport ..... 3
WRM 7023 Water Resources Sustainability and Design ..... 3
University of South Australia
BUSS 5256 Strategic Asset Management ..... 3
BUIL 5017 Facilities and Asset Performance ..... 3
BUIL 5022 Engineering Infrastructure Management ..... 3
CIVE 5048 Advanced Water Quality and Wastewater Management ..... 3
GEOE 5001 Introduction Geographic Information Systems ..... 3
Deakin University
SEN724 Water Resources Systems Analysis ..... 3
SEN740 Water Treatment Processes and Design ..... 3
SEN741 Wastewater Treatment Processes and Design ..... 3
SEN743 Water Resources Engineering ..... 3
SEN745 Wastewater Reclamation and Reuse ..... 3
SEN744 Environmental Systems ..... 3
SEN752 Engineering Management \& the Environment ..... 3
SEV710 Risk and Environmental Sustainability ..... 3
Public Health
University of Adelaide
WRM 7015 Epidemiology of Infectious Disease ..... 3
WRM 7016 Introduction to Epidemiology and Biostatistics ..... 3
WRM 7017 Biostatistics ..... 3
WRM 7018 Epidemiological Research Methods ..... 3
WRM 7019 Foundations in Public Health ..... 3
WRM 7020 Industrial Toxicology ..... 3
Flinders University
ENVH 8001 Research Paradigms in Environmental Health3
ENVH 8002 Key Disciplines in Risk Assessment ..... 3
ENVH 8003 Principles of Risk Assessment and Effective Communication ..... 3The following streams are not offered at the University ofAdelaide:
Aquatic Ecosystem Management
Groundwater Hydrology
Sustainable Catchment and Water Management/SurfaceHydrology
(c) Other coursesWith permission from the Faculty, the following course maybe presented in lieu of an elective course :
WRM 7007 Research Methodology ..... 3
WRM 7009 Specialised Studies I ..... 3Note: this course is a prerequisite for Projects available in theMaster of Water Resources Management.

Other relevant courses may be presented towards the requirements of the degree with the approval of the Faculty.

### 4.4 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Applied Project Management

Note: Postgraduate tuition fees apply to this program.
Academic Program Rules

## 1 Duration of program

The Master of Applied Project Management can be completed in a minimum of 3 semesters or participants can study at their own pace so long as the 36 units are completed within 4 years.

2 Admission
2.1 An applicant for admission to the academic program for the Master of Applied Project Management shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University, provided that:
(a) in the case of an undergraduate degree of 4 years duration, or equivalent, no industrial experience will be required
(b) in the case of an undergraduate degree of 3 years duration, or equivalent, an additional 3 years of relevant industrial experience will be required.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Master of Applied Project Management a person who does not satisfy the requirements of Rule 1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Master of Applied Project Management.

### 2.3 Status, exemption and credit transfer

Candidates who have previously passed courses in postgraduate awards or equivalent at the University of Adelaide or another university and who wish to count such courses towards the Master of Applied Project Management may, on written application to the Faculty, be granted such status as the Faculty shall determine, to a maximum aggregate value of twelve (12) units.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Applied Project Management who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate of Project Management may be admitted to that award as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Project Management and who subsequently satisfies the requirements for the Master of Applied Project Management must surrender the Graduate Certificate before being admitted to the Master degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction; Pass with Distinction; Pass with Credit; and Pass.
3.2 A candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails a course and wishes to repeat that course, shall, unless exempted partially there from by the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.
3.4 A candidate who has failed a course twice may not reenroll in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

4 Qualification requirements
To qualify for the Masters degree, a candidate shall satisfactorily complete courses to the value of 36 units consisting of:
(a) 24 units of coursework of which at least 18 are from core courses
(b) 12 units of Project

Note: students should discuss their choice of courses with the Program Coordinator

### 4.1.1. Core courses

TECHCOMM 5004 Managing Risk 3
TECHCOMM 5009 Business \& Contract Management TECHCOMM 5014 Project Management Techniques

3
TECHCOMM 5015 Project Finance and Accounting ..... 3
TECHCOMM 5021 Applied Project Management 1 ..... 3
TECHCOMM 5022 Applied Project Management 2 * ..... 3

* Candidates must undertake either Applied Project Management2 or Systems Engineering
4.1.2 Project
TECHCOMM 5013 Systems Engineering ..... 12
4.1.3 Elective courses
TECHCOMM 5008 Leading and Managing ..... 3
TECHCOMM 5010 Technology Project Management ..... 3
TECHCOMM 5012 Integrated Logistic Support ..... 3
TECHCOMM 5016 Entrepreneurship \& Innovation ${ }^{+}$ ..... 3
TECHCOMM 5018 Opportunity Assessment ${ }^{+}$ ..... 3
TECHCOMM 5023 Business \& Project Creation ${ }^{+}$ ..... 3+ Candidates cannot undertake Opportunity Assessment orEntrepreneurship and Innovation in conjunction with Business andProject Creation
4.2 Unacceptable combinations of coursesNo candidate will be permitted to count towards an awardany course, together with any other course, which, in theopinion of the Faculty concerned, contains a substantialamount of the same material; and no course or portion of acourse may be counted twice towards an award.
4.3 Project Management TechniquesProject Management Techniques is the intermediate corecourse between Applied Project Management 1 andApplied Project Management 2. Therefore Applied ProjectManagement 1 must be a pre or corequisite to ProjectManagement Techniques; furthermore, Applied ProjectManagement 1 must be a prerequisite to Applied ProjectManagement 2, and Project Management Techniques mustbe either be a pre or corequisite to Applied ProjectManagement 2.


### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 General

1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.
These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

## 2 Admission

2.1 In addition to General Academic Program Rule 4.1 on Admission, applicants for admission to candidature for the Master of Applied Science must hold:
(a) an Honours degree of Bachelor of Science, Applied Science or Agricultural Science or
(b) a qualification accepted by the Research Education and Development Committee as being equivalent to the Honours degree of Bachelor of Science, Applied Science or Agricultural Science or
(c) a degree of Bachelor of Science, Applied Science or Agricultural Science or a qualification accepted by the Committee as being equivalent. Candidates admitted under this Rule may not be awarded the degree before the expiration of two years from the date of qualification for candidature and will be required to undertakequalifying work as specified in General Program Rule 5.2.

### 2.2 Mode of study

Further to General Academic Program Rule 7.1, subject to such conditions as it may determine in each case, the Research Education and Development Committee may
permit project work to be undertaken outside the University provided that it can be satisfied:
(a) that this will result in mutual academic benefit to the candidate and the candidate's supervising school
(b) that there will be adequate contact and interaction between the candidate and the candidate's supervising school and
(c) that the supervisor's access to any experimental work, the candidate's availability for seminars and other discussions, and the publication of results will not thereby be prejudiced.

### 2.3 Program of Study

In addition to General Academic Program Rule 19.1, a program of study for the Master of Applied Science may contain a combination of coursework and project work. Currently two options are offered.

To qualify for the degree, a candidate shall satisfactorily complete a program of study consisting of one of the following approved options:
(a) an all-research work program comprising Supervised Project Work to be completed and the thesis submitted not less than one year full-time equivalent or more than two years full-time equivalent from the date of commencement of candidature or
(b) a three-quarters research program comprising coursework to the value of 12 units and Supervised Project Work. All coursework is to be completed and the thesis submitted not less than one year full-time equivalent or more than two years full-time equivalent from the date of commencement of candidature.

### 2.4 Classification of courses

Courses forming part of any coursework component for the degree shall be classified as follows:

## Group A: Postgraduate courses

These are courses offered at a postgraduate level either in the Faculty of Engineering, Computer and Mathematical Sciences, in another faculty or school, or at another Institution. These include postgraduate courses in the Faculty of Engineering, Computer and Mathematical Sciences, Honours and approved postgraduate diploma courses in the Faculty of Sciences and postgraduate courses at Flinders University or the University of South Australia.

## Group B: Advanced level courses

These are courses in Engineering which have been designated as 'Advanced Level' by the School concerned. They are courses which reach an advanced level of expertise in the course material.

Subject to the approval of the Faculty, courses from outside Engineering may also be included in this category.

## Group C: Ordinary level courses

These are courses at either Level III or Level IV in the Faculty of Engineering, Computer and Mathematical Sciences which are not designated 'Advanced Level', or courses at Level III in the Faculty of Sciences, or approved final year undergraduate courses from other Faculties or institutions.

### 2.5 Coursework requirements

2.5.1 A candidate seeking to enrol in a program of study with a coursework component shall, after consulting the Head of the school (or nominee) in which the majority of the candidate's work falls, submit the proposed program to the Faculty for approval.
2.5.2 The program for a three-quarters research and one-quarter coursework degree may not contain more than a total of 6 units of courses from Groups B and C and may not contain more than 6 units of courses from outside the discipline of Engineering.

* For the purposes of this policy, the discipline of Engineering is deemed to include all Centres and joint ventures of which the discipline, or its constituent schools, is a formal partner.
2.5.3 There shall be four classifications of pass in each course for the Master of Applied Science: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. If a course has a Conceded Pass classification for the purpose of another award, any such course passed with this classification shall not count towards the requirements for the degree of Master of Applied Science.
2.5.4 A course shall be eligible to be counted for credit towards the coursework requirements of the degree if:
(a) In Groups $A$ and $B$ the grade obtained is at Pass standard ( $50 \%$ ) or higher
(b) In Group C the grade obtained is $60 \%$ or higher.
2.5.5 To satisfy the coursework requirements of the degree, a candidate must obtain a weighted average, taken over the best results in eligible courses which together amount to the required number of units, of at least $55 \%$.
2.5.6 Courses which have been presented as part of the requirements for any other award of this University or other institution or courses which in the opinion of the Faculty are substantially similar to such courses, will not be
permitted to count for credit towards the coursework requirements of this degree.


### 2.6 Program of study

The program of study for the Master of Applied Science is the same as for the Master of Engineering Science.

## Master of Computer Science

Note: Postgraduate tuition fees apply to this program.
Academic Program Rules

1 General
A candidate who fulfils the foregoing requirements shall on the recommendation of the Faculty of Engineering, Computer and Mathematical Sciences be admitted to the degree of Master of Computer Science.

2 Duration of program
A candidate may proceed to the degree by full-time study or, with the approval of the School of Computer Science and subject to any conditions imposed in the particular case, by part-time study or as an external student. Except by permission of the Faculty, the work for the degree shall be completed:
(a) in the case of a full-time candidate, not less than two years from the date of candidature accepted by the Faculty
(b) in the case of a part-time or external candidate, not less than four years from the date of candidature accepted by the Faculty
(c) in the case of a candidate with an Honours degree in Computer Science, or equivalent, in not less than one year of full-time study or two years of part-time study.

## 3 Admission

3.1 The Faculty may accept as a candidate for the degree any person who has completed one of the following at the University of Adelaide:

Graduate Diploma in Computer Science
A bachelor degree that includes a major in Computer Science.
3.2 The Faculty may accept as a candidate for the degree any person who has completed studies at another institution where those studies are accepted by the University as equivalent to studies specified in 3.1 above.
3.3 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not qualify under 3.1, but who has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

## 4 Assessment and examination

### 4.1 Review of academic progress

If in the opinion of the Faculty a candidate for the degree is not making satisfactory progress, the Faculty may, with the consent of the Council, terminate the candidature and the candidate shall cease to be enrolled for the degree.

## 5 Qualification requirements

5.1 To qualify for the degree a candidate shall:
(a) satisfy examiners in courses of study as prescribed in the Academic Program Rules
(b) comply with conditions as prescribed in the Academic Program Rules and
(c) present a satisfactory written report and seminar on a supervised project on a course approved by the School of Computer Science.

### 5.2 Academic program

Note: intending students should consult the School of Computer Science early in the year in which they plan to study in order to ascertain whether particular courses will be available in that year, in which semester they will be taught and their precise content.
5.2.1 A candidate for the degree shall complete satisfactorily a total of at least 48 units.
5.2.2 A candidate for the degree shall regularly attend lectures and tutorials, do such written and practical work as may be prescribed, and pass examinations in at least 30 units of courses offered by the School of Computer Science at the Honours or Masters level. Other courses may be included, subject to the approval of the Head of the School. Courses which may be offered by the School of Computer Science are:
COMP SCI 7004 Concurrent and Distributed Systems 3

COMP SCI 7006 Programming Techniques 3

COMP SCI 7009 Modern Heuristic Methods 3
COMP SCI 7015 Software Engineering and Project 3
COMP SCI 7022 Computer Vision 3
COMP SCI 7023 Software Process Improvement 3
COMP SCI 7026 Computer Architecture 3

COMP SCI 7031 Advanced Programming Paradigms
COMP SCI 7035 Computer Graphics ..... 3
COMP SCI 7036 Software Engineering in Industry ..... 3
COMP SCI 7037 Advanced Programming Language Concepts ..... 3
COMP SCI 7039 Computer Networks and Applications ..... 3
COMP SCI 7041 Compiler Construction and Project ..... 3
COMP SCI 7044 Computer System Security ..... 3
COMP SCI 7045 Distributed High Performance Computing ..... 3
COMP SCI 7050 Parallel Computation ..... 3
COMP SCI 7053 Advanced Operating Systems ..... 3
COMP SCI 7054 High Integrity Software Engineering ..... 3
COMP SCI 7055 Numerical Analysis ..... 3
COMP SCI 7059 Artificial Intelligence ..... 3
COMP SCI 7064 Operating Systems ..... 3
COMP SCI 7076 Distributed Systems ..... 3
COMP SCI 7077 System Modelling and Simulation ..... 3
COMP SCI 7089 Event Driven Computing ..... 3
COMP SCI 7090 Computer Graphics ..... 3
COMP SCI 7091 Commercialising IT Research ..... 3
COMP SCI 7092 Mobile and Wireless Networks ..... 3
COMP SCI 7093 Evolutionary Computation ..... 3
5.2.3 A candidate shall also satisfactorily undertake and complete at least 12 units and not more than 18 units of Masters Project courses, under the guidance of a supervisor, and provide a public seminar and written report on the investigation. The Masters Project courses are:
COMP SCI 7011 Master Project B ..... 3
COMP SCI 7013 Master Project E ..... 3
COMP SCI 7019 Master Project C ..... 3
COMP SCI 7025 Master Project D ..... 3
COMP SCI 7056 Master Project A ..... 3
COMP SCI 7060 Master Project F ..... 3
5.2.4 In the case of a candidate with an Honours degree in Computer Science, the number of units required for the award of the Master's degree may be reduced, subject to permission of the Faculty.

### 5.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

6 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Syllabuses

Prospective students should consult the School early in the year in which the program is being offered to obtain advice as to the content of the program. The field of study of the project can also be determined at that time.

# Master of Engineering (Chemical Engineering) <br> Master of Engineering <br> (Civil \& Environmental Engineering) <br> Master of Engineering (Civil \& Structural Engineering) <br> Master of Engineering <br> (Electrical \& Electronic Engineering) <br> Master of Engineering (Engineering Mathematics) <br> Master of Engineering (Mechanical Engineering) 

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

1 General
The Master of Engineering shall be available in the disciplines of:

- Chemical
- Civil \& Environmental
- Civil \& Structural
- Electrical \& Electronic
- Engineering Mathematics
- Mechanical.

2 Duration of program
Except with permission of the Faculty, the program for the Master of Engineering shall be completed in two semesters of full-time study, or up to eight semesters of part-time study.

3 Admission
3.1 Except as provided for in 3.2 below, an applicant for admission to the program shall:
(a) have qualified for the degree of Bachelor of Engineering with Honours from the University of Adelaide in a discipline related to the proposed field of study
(b) have qualified for an award accepted by the Faculty of Engineering, Computer and Mathematical Sciences as being equivalent to the degree of Bachelor of Engineering with Honours in a discipline related to the proposed field of study.
3.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the degree of Master of Engineering, a person who does not qualify 3.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 3.3 Status or exemption

A candidate may not present for credit towards the degree any course which has been presented as part of the requirements for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course.

4 Assessment and examinations
4.1 There shall be four classifications of pass in any course for the Master of Engineering: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. Courses passed with a Conceded Pass classification may not be counted towards the requirements for the degree of Master of Engineering.
4.2 A candidate shall not be eligible to attend for examination unless any prescribed coursework has been completed to the satisfaction of the teaching staff concerned.
4.3 A candidate who fails in a course and desires to take the course again shall again attend the course and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
4.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
4.5 For the purpose of this Rule, a candidate who is refused permission to sit for the assessment for a given course, or who without a reason accepted by the Executive Dean of the Faculty (or nominee) fails to attend all or part of the assessment, shall be deemed to have failed that course.

## 5 Qualification requirements

5.1 To qualify for the degree of Master of Engineering, a candidate shall satisfactorily complete courses to a total value of at least 24 units including core courses from Group $A$ to the value of 9 units and elective courses from Group $B$ in one of the specified disciplines, to a value of at least 12 units. No more than 3 units can be selected from the Management electives under Group B.
Candidates must have their program of studies approved by the Head of School or nominee at enrolment.

### 5.2 Academic program

Group A: Core courses
ENTRSHIP 5021 Applied Project Management I 3
STATS 7053 Statistics in Engineering 3
and either
APP MTH 7054 System Modelling $\&$ Simulation 3 or

COMPSCI 7077 System Modelling \& Simulation
Group B: Elective courses
Chemical Engineering
CHEM ENG 7000 Minerals Processing 3
CHEM ENG 7004 Biochemical Engineering 3
CHEM ENG 7005 Reaction Engineering 3
CHEM ENG 7007 Particulate Technology 3
CHEM ENG 7008 Combustion Processes 3
CHEM ENG 7009 Plant \& Safety Engineering 3
CHEM ENG 7010W Winery Engineering 3
CHEM ENG 7011 Industrial Rheology 3
CHEM ENG 7012 Environmental Engineering 3
CHEM ENG 7021 Special Studies in Chemical Engineering 3
CHEM ENG 7022 Chemical Engineering Management and Optimisation
CHEM ENG 7023 Chemical Process \& Simulation 3
CHEM ENG 7024 Process Synthesis \& Integration
CHEM ENG 7026 Process Design Project
CHEM ENG 7027 Transport Processesin the Environment3
CHEM ENG 7030 Process Modelling and Control ..... 3
Civil \& Environmental Engineering
C\&ENVENG 7027 Wastewater Engineering \& Design ..... 3
C\&ENVENG 7028 Waste Management Analysis \& Design ..... 3
C\&ENVENG 7029 Environmental Management \& Design ..... 3
C\&ENVENG 7034 Deep Foundation Engineering \& Design ..... 3
C\&ENVENG 7035 Expansive Soils \& Footing Design ..... 3
C\&ENVENG 7036 Water Resources Optimisation \& Modelling ..... 3
C\&ENVENG 7037 Water Distribution Systems \& Design ..... 3
C\&ENVENG 7038 Coastal Engineering \& Design ..... 3
C\&ENVENG 7047 Analysis of Rivers \& Sediment Transport ..... 3
C\&ENVENG 7048 Water Resources Sustainability ..... 3
Civil \& Structural Engineering
CধENVENG 7032 Design of Composite Structures ..... 3
C\&ENVENG 7033 Earthquake Engineering \& Design ..... 3
C\&ENVENG 7034 Foundation Engineering \& Design ..... 3
C\&ENVENG 7035 Footing Design \& Soil Variability ..... 3
C\&ENVENG 7036 Water Resources Management \& Design ..... 3
C\&ENVENG 7037 Water Distribution Systems \& Design ..... 3
C\&ENVENG 7038 Coastal Engineering \& Design ..... 3
C\&ENVENG 7041 Fundamental Steel Design ..... 3
C\&ENVENG 7042 Design of Concrete Structures N ..... 3
C\&ENVENG 7046 FRP Retrofitting of Concrete Structures ..... 3
C\&ENVENG 7047 Analysis of Rivers and Sediment Transport ..... 3
C\&ENVENG 7048 Water Resources Sustainability ..... 3
Electrical \& Electronic Engineering
APP MTH 7026 Communication Network Design ..... 3
APP MTH 7056 Telecommunications Systems Modelling III ..... 3
ELEC ENG 7015 Adaptive Signal Processing ..... 3
ELEC ENG 7017 Beamforming \& Array Processing ..... 3
ELEC ENG 7033 Principles of RF Engineering ..... 3
ELEC ENG 7044 Multimedia Communications ..... 3
ELEC ENG 7045 Photonics for Communications ..... 3
ELEC ENG 7046 Power Quality \& Fault Diagnostics ..... 3
ELEC ENG 7047 Studies in Electrical \& Electronic Engineering A ..... 3
ELEC ENG 7049 Power Electronics Systems ..... 3
ELEC ENG 7050 Microelectronic Testingand Design for Test
ELEC ENG 7051 Microelectronic Datapaths and Arithmetic ..... 3
ELEC ENG 7052 Electromagnetic Theory and RFID Applications ..... 3
ELEC ENG 7053 Analog Microelectronic Systems ..... 3
ELEC ENG 7054 Detection and Estimation Theory ..... 3
ELEC ENG 7055 Antennas and Propogation ..... 3
ELEC ENG 7056 RFMeasurement and Testing ..... 3
ELEC ENG 7057 Engineering Communication \& Critical Thinking ..... 3
ELEC ENG 7059 Radar Principles and Systems ..... 3
ELEC ENG 7060 Image Sensors and Processing ..... 3
SIP 7001 Information Theory ..... 3
Engineering Mathematics
APP MTH 7011 Transform Methodsand Signal Processing3
APP MTH 7018 Aerodynamics ..... 3
APP MTH 7026 Communication Network Design (Masters) ..... 3
APP MTH 7052 Computational Fluid Dynamics (Engineering) ..... 3
APP MTH 7056 Telecommunications Systems Modelling III ..... 3
APP MTH 7057 Special Studies
in Engineering Mathematics ..... 3
APP MTH 7074 Modelling Telecommunication Traffic ..... 3
APP MTH 7078 Information Theory ..... 3
ELEC ENG 7015Adaptive Signal Processing ..... 3
Management
No more than 3 units selected from:
ENTRSHIP 5008 Leading and Managing ..... 3
ENTRSHIP 5025 Commercialisation: Process and Strategy ..... 3
PETROENG 7045 Decision Risk Analysis ..... 3
Mechanical Engineering
APP MTH 7018 Aerodynamics ..... 3
APP MTH 7052 Computational Fluid Dynamics (Engineering) ..... 3
ELEC ENG 7057 Engineering Communication \& Critical Thinking ..... 3
MECH ENG 7018 High-Speed Aerodynamics ..... 3
MECH ENG 7020 Materials Selection \& Failure Analysis ..... 3
MECH ENG 7021 Combustion Technology \& Emissions Control ..... 3
MECH ENG 7023 Fracture Mechanics ..... 3
MECH ENG 7024 Robotics M ..... 3
MECH ENG 7025 Topics in Welded Structures ..... 3
MECH ENG 7026 Advanced Topics in Fluid Mechanics ..... 3
MECH ENG 7027 Engineering Acoustics ..... 3
MECH ENG 7028 Advanced Automatic Control ..... 3
MECH ENG 7029 Airconditioning ..... 3
MECH ENG 7030 Advanced Vibrations ..... 3
MECH ENG 7031 Aerospace Navigation \& Guidance ..... 3
MECH ENG 7034 Mechatronics ..... 3
MECH ENG 7036 Environmental \& Architectural Acoustics ..... 3
MECH ENG 7037 Aerospace Propulsion ..... 3
MECH ENG 7038 Aerospace Propulsion B ..... 3
MECH ENG 7039 Automotive NVH \& Aerodynamics ..... 3
MECH ENG 7040 Advanced Manufacturing \& Quality Systems ..... 3

The availability of all elective courses is conditional on the availability of staff and facilities and sufficient enrolments.

Other relevant courses may be presented towards the requirements of the Master of Engineering with the approval of Faculty.

### 5.3 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Master of Engineering (Advanced) <br> (Chemical Engineering - Energy \& Combustion) <br> Master of Engineering(Advanced) <br> (Chemical Engineering - Environmental \& Sustainability) <br> Master of Engineering (Advanced) <br> (Chemical Engineering - Food \& Bio Processing) <br> Master of Engineering (Advanced) <br> (Civil \& Environmental Engineering) <br> Master of Engineering (Advanced) <br> (Civil \& Structural Engineering) <br> Master of Engineering (Advanced)(Mechanical Engineering) <br> Master of Engineering (Advanced) <br> (Sensor Systems and Signal Processing) <br> Master of Engineering (Advanced)(Telecommunications) 

Note: Postgraduate tuition fees apply to this program.
Academic Program Rules

## General

The Master of Engineering (Advanced) shall be available in the disciplines of:
(Chemical)
(Civil and Environmental)
(Civil and Structural)
(Mechanical)
(Sensor Systems and Signal Processing)
(Telecommunications)

## Duration of program

Except with permission of the Faculty, the program for the Master of Engineering (Advanced) shall be completed in four semesters of full-time study, or up to sixteen semesters of part-time study.

3 Admission
3.1 Except as provided for in 3.2 below, an applicant for admission to the program shall have:
(a) qualified for the degree of Bachelor of Engineering with Honours from the University of Adelaide in a discipline related to the proposed field of study.
(b) qualified for an award accepted by the Faculty of Engineering, Computer and Mathematical Sciences as being equivalent to the degree of Bachelor of Engineering with Honours in a discipline related to the proposed field of study.
3.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the degree of Master of Engineering (Advanced), a person who does not hold the qualifications specified in 3.1. above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 3.3 Status or exemption

A candidate may not present for credit towards the degree any course which has been presented as part of the requirements for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course.

### 3.4 Articulation with other awards

3.4.1 A candidate who has been enrolled in the Master of Engineering from the University of Adelaide and who has not been awarded the Master of Engineering shall, on written application, be permitted to transfer all equivalent courses towards the Master of Engineering (Advanced) degree.
3.4.2 A candidate who holds the Master of Engineering from the University of Adelaide shall surrender the Master of Engineering before being awarded the degree of Master of Engineering (Advanced)

## 4 Assessment and examinations

4.1 There shall be four classifications of pass in any course for the Master of Engineering (Advanced): Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. Courses passed with a Conceded Pass classification may not be counted towards the requirements for the degree of Master of Engineering (Advanced).
4.2 A candidate shall not be eligible to attend for examination unless any prescribed coursework has been completed to the satisfaction of the teaching staff concerned.
4.3 A candidate who fails in a course and desires to take the course again shall again attend the course and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
4.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
4.5 For the purpose of this Rule, a candidate who is refused permission to sit for the assessment for a given course, or who without a reason accepted by the Executive Dean of the Faculty (or nominee) fails to attend all or part of the assessment, shall be deemed to have failed that course.

5 Qualification requirements
5.1 To qualify for the degree of Master of Engineering (Advanced), a candidate shall satisfactorily complete 48 units of study comprising:
(a) coursework to a total value of at least 36 units including core courses from Group A to the value of 9
units, and elective courses from Group B in one of the specified disciplines, to a value of at least 27 units. No more than 3 units may be selected from the Management electives under Group B
(b) a research project from Group C in one of the specified disciplines to the value of 12 units.
Candidates must have their program of studies approved by the Head of School or nominee at enrolment.

### 5.2 Academic program

Group A: Core courses
ENTRSHIP 5021 Applied Project Management I
STATS 7053 Statistics in Engineering and either

APP MTH 7054 System Modelling \& Simulation or
COMP SCI 7077 System Modelling \& Simulation
Group B: Elective courses
Chemical Engineering
Energy and Combustion:
CHEM ENG 7031 Communications \& Management

CHEM ENG 7032 Principles of Sustainability

\& Decision Making

3

CHEM ENG 7033 Chemometrics 3
CHEM ENG 7034 Environmental Modelling 3
CHEM ENG 7036 Air Pollution Engineering 3
CHEM ENG 7037 Combustion Engineering 3
CHEM ENG 7039 Pinch Analysis 3
CHEM ENG 7040 Thermal \& Separation Processes 3
CHEM ENG 7041 Rheology 3
CHEM ENG 7042 Advanced \& Molecular
Thermodynamics
CHEM ENG 7044 Food Engineering 3
CHEM ENG 7045 Advanced Fluid Mechanics 3
Environment and Sustainability:
CHEM ENG 7031 Communications \& Management 3
CHEM ENG 7032 Principles of Sustainability
\& Decision Making
3
CHEM ENG 7033 Chemometrics 3
CHEM ENG 7034 Environmental Modelling 3
CHEM ENG 7035 Wastewater Treatment 3
CHEM ENG 7036 Air Pollution Engineering 3
CHEM ENG 7037 Combustion Engineering 3
CHEM ENG 7038 Process Plant Safety \& Risk
Assessment
CHEM ENG 7039 Pinch Analysis ..... 3
CHEM ENG 7040 Thermal \& Separation Processes ..... 3
CHEM ENG 7041 Rheology ..... 3
CHEM ENG 7042 Advanced \& Molecular Thermodynamics ..... 3
Food and BioProcessing:
CHEM ENG 7031 Communications \& Management ..... 3
CHEM ENG 7032 Principles of Sustainability \& Decision Making ..... 3
CHEM ENG 7033 Chemometrics ..... 3
CHEM ENG 7034 Environmental Modelling ..... 3
CHEM ENG 7035 Wastewater Treatment ..... 3
CHEM ENG 7039 Pinch Analysis ..... 3
CHEM ENG 7045 Advanced Fluid Mechanics ..... 3
CHEM ENG 7040 Thermal \& Separation Processes ..... 3
CHEM ENG 7041 Rheology ..... 3
CHEM ENG 7043 Bioreaction and Bioseparation Engineering ..... 3
CHEM ENG 7044 Food Engineering ..... 3
Civil and Environmental Engineering
C\&ENVENG 7027 Wastewater Engineering \& Design ..... 3
C\&ENVENG 7028 Waste Management Analysis \& Design ..... 3
C\&ENVENG 7029 Environmental Modelling, Management \& Design ..... 3
C\&ENVENG 7034 Deep Foundation Engineering \& Design ..... 3
C\&ENVENG 7035 Expansive Soils \& Footing Design ..... 3
C\&ENVENG 7036 Water Resources Optimisation and Modelling ..... 3
C\&ENVENG 7037 Water Distribution Systems \& Design ..... 3
C\&ENVENG 7038 Coastal Engineering \& Design ..... 3
C\&ENVENG 7047 Analysis of Rivers and Sediment Transport ..... 3
C\&ENVENG 7048 Water Resources Sustainability ..... 3
Civil and Structural Engineering
C\&ENVENG 7027 Wastewater Engineering \& Design ..... 3
C\&ENVENG 7029 Environmental Modelling, Management and Design ..... 3
C§ENVENG 7032 Composite Steel and Concrete Bridges and Buildings ..... 3
C\&ENVENG 7033 Structural Dynamics due to Wind and Earthquake ..... 3
C\&ENVENG 7034 Deep Foundation Engineering \& Design ..... 3
C\&ENVENG 7035 Expansive Soils \& Footing Design ..... 3
C\&ENVENG 7036 Water Resources Optimisation and Modelling ..... 3
C\&ENVENG 7037 Water Distribution Systems \& Design ..... 3
C\&ENVENG 7038 Coastal Engineering \& Design ..... 3
C\&ENVENG 7041 High Rise \& Long Span Steel Structures ..... 3
C\&ENVENG 7042 Prestressed Concrete Structures ..... 3
C\&ENVENG 7046 FRP Retrofitting of Concrete Structures ..... 3
C\&ENVENG 7047 Analysis of Rivers and SedimentTransport3
C\&ENVENG 7048 Water Resources Sustainability ..... 3
Management
No more than 3 units selected from:
ENTRSHIP 5008 Leading and Managing ..... 3
ENTRSHIP 5021 Commercialisation: Process \& Strategy ..... 3
PETROENG 7045 Decision Risk Analysis ..... 3
Mechanical Engineering
APP MTH 7018 Aerodynamics ..... 3
APP MTH 7052 Computational Fluid Dynamics ..... 3
ELEC ENG 7057 Engineering Communication and Critical Thinking ..... 3
MECH ENG 7018 High-Speed Aerodynamics ..... 3
MECH ENG 7020 Materials Selection \& Failure Analysis ..... 3
MECH ENG 7021 Combustion Technology \& Emissions Control ..... 3
MECH ENG 7023 Fracture Mechanics ..... 3
MECH ENG 7024 Robotics M ..... 3
MECH ENG 7025 Topics in Welded Structures ..... 3
MECH ENG 7026 Advanced Topics in Fluid Mechanics ..... 3
MECH ENG 7027 Engineering Acoustics ..... 3
MECH ENG 7028 Advanced Automatic Control ..... 3
MECH ENG 7029 Airconditioning ..... 3
MECH ENG 7030 Advanced Vibrations ..... 3
MECH ENG 7031 Aerospace Navigation and Guidance ..... 3
MECH ENG 7034 Mechatronics ..... 3
MECH ENG 7036 Environmental \& Architectural Acoustics ..... 3
MECH ENG 7037 Aerospace Propulsion ..... 3
MECH ENG 7038 Aerospace Propulsion 2 ..... 3
MECH ENG 7039 Automotive NVH \& Aerodynamics ..... 3
MECH ENG 7040 Advanced Manufacturing\& Quality Systems3

| Sensor Systems Signal Processing |  |
| :---: | :---: |
| APP MTH 7011 Transform Methods \& Signal Processing | 3 |
| ELEC ENG 7015 Adaptive Signal Processing | 3 |
| ELEC ENG 7017 Beamforming \& Array Processing | 3 |
| ELEC ENG 7033 Principles of RF Engineering | 3 |
| ELEC ENG 7051 Microelectronic Datapaths \& Arithmetic | 3 |
| ELEC ENG 7052 EM Theory \& RFID | 3 |
| ELEC ENG 7053 Analog Microelectronic Systems | 3 |
| ELEC ENG 7054 Detection \& Estimation Theory | 3 |
| ELEC ENG 7055 Antennas and Propagation | 3 |
| APP MTH 7056 Telecommunications Systems Modelling | 3 |
| ELEC ENG 7057 Engineering Communication and Critical Thinking | 3 |
| ELEC ENG 7059 Radar Principles and Systems | 3 |
| ELEC ENG 7060 Image Sensors and Processing | 3 |
| PURE MTH 7041 Mathematical Coding \& Cryptology | 3 |
| SIP 7001 Information Theory | 3 |
| Telecommunications |  |
| APP MTH 7011 Transform Methods \& Signal Processing | 3 |
| APP MTH 7026 Communication Network Design | 3 |
| APP MTH 7056 Telecommunications Systems Modelling | 3 |
| APP MTH 7074 Modelling Telecommunications Traffic | 3 |
| ELEC ENG 7015 Adaptive Signal Processing | 3 |
| ELEC ENG 7017 Beamforming \& Array Processing | 3 |
| ELEC ENG 7033 Principles of RF Engineering | 3 |
| ELEC ENG 7044 Multimedia Communications | 3 |
| ELEC ENG 7045 Photonics for Communications | 3 |
| ELEC ENG 7051 Microelectronic Datapaths \& Arithmetic | 3 |
| ELEC ENG 7052 Electromagnetic Theory and RFID Applications | 3 |
| ELEC ENG 7053 Analog Microelectronic Systems | 3 |
| ELEC ENG 7054 Detection and Estimation Theory | 3 |
| ELEC ENG 7055 Antennas and Propagation | 3 |
| ELEC ENG 7057 Engineering Communication and Critical Thinking | 3 |
| PURE MTH 7041 Mathematical Coding \& Cryptology | 3 |
| SIP 7001 Information Theory | 3 |
| Group C Research Project |  |
| C\&ENVENG 7049A/B Masters Civil \& Structural Engineering Poject | 12 |
| C\&ENVENG 7050A/B Masters Civil \& Environmental Engineering Project | 12 |
| CHEM ENG 7046A/B Masters Project | 12 |

ELEC ENG 7050A/B Masters Project
MECH ENG 7041A/B Masters Project
The availability of all elective courses is conditional on the availability of staff and facilities and sufficient enrolments.

Other relevant courses may be presented towards the requirements of the Master of Engineering (Advanced) with the approval of the Head of the relevant discipline.

### 5.3 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Master of Engineering <br> (Fuels, Combustion and Emission Control) 

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

Except with the special permission of the Faculty, the program for the Master of Engineering (Fuels, Combustion and Emission Control) shall be completed in not less than three semesters and not more than six semesters of fulltime study, or not less than six and not more than twelve semesters of part-time study.

2 Admission
2.1 Except as provided for in 2.2 below, an applicant for admission to the program shall:
(a) have qualified in the University of Adelaide for the degree of Bachelor of Engineering (Chemical) or (Mechanical), or Honours degree of Bachelor of Engineering other than the Bachelor of Engineering (Chemical) or (Mechanical), or Honours degree of Bachelor of Science or
(b) have qualified for an award accepted by the Faculty of Engineering, Computer and Mathematical Sciences as being equivalent academically and professionally to one of the degrees described in clause 2.1. (a) above or
(c) have qualified in the University of Adelaide for the degree of Bachelor of Engineering or Bachelor of Science, or for an award accepted by the Faculty as being equivalent to one of those degrees, and have in addition successfully undertaken advanced studies and/or work in an appropriate area which is considered by the Faculty to be an adequate preparation for candidature.
2.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the degree of Master of Engineering (Fuels, Combustion and Emission Control), a person who does not qualify under 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status or exemption

A candidate may not present for credit towards the degree any course which has been presented as part of the requirements for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in each course for the Master of Engineering: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
3.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule a candidate who is refused permission to sit for examination, or who without a reason accepted by the Executive Dean of the Faculty (or nominee) fails to attend all or part of a final examination (or supplementary examination if granted) after remaining enrolled for at least eight teaching weeks of that semester, shall be deemed to have failed the examination.

## 4 Qualification requirements

4.1 To qualify for the degree of Master of Engineering (Fuels, Combustion and Emission Control), a candidate shall satisfactorily complete all courses in Group A plus courses from Group B in one of three modules below, to the total value of at least 36 units.

## Notes

1 Each year the School of Chemical Engineering shall determine which of the elective courses in Group B will be offered and in which semester they will be offered.
2 With approval from the Head of School of Chemical Engineering, a student may undertake a limited number of courses offered by
other Schools or Faculties, or by other institutions, to replace some of the elective courses in Group B.

### 4.2 Academic program <br> Group A: Core courses <br> CHEM ENG5008 Combustion Heat Transfer <br> CHEM ENG5013 Fuels and Combustion Technology <br> CHEM ENG5016 Instrumentation and Control for Combustion Processes

CHEM ENG5017 Introduction to Combustion Phenomena
CHEM ENG6006 Chemical Reactions and Pollutant Formation ..... 2
CHEM ENG6009 Fuels and Combustion Laboratory Projects II ..... 5
CHEM ENG6010 Fuels and Combustion Seminars ..... 2
CHEM ENG7001 Advanced Combustion Aerodynamics ..... 2
CHEM ENG7002 Advanced Research/Design Projects ..... 12
Group B: Elective courses
General
CHEM ENG5009 Combustionfor High Temperature Processing2
CHEM ENG5010 Combustion Plant Safety and Management ..... 2
CHEM ENG7003 Advanced Combustion Diagnostic Techniques ..... 2
CHEM ENG7019 Advanced Combustion
Emission Control ..... 2
CHEM ENG7020 New and Alternative Fuels ..... 2
Coal
CHEM ENG5006 Coal Combustion in Furnaces ..... 2
CHEM ENG5007 Coal Conversion Processes other than Combustion ..... 2
CHEM ENG6007 Coal Properties and Characterisation ..... 2
Gas and Oil
CHEM ENG 5019 Oil and Gas Combustion Technology ..... 2
CHEM ENG6008 Energy Management \& Conversion ..... 2
4.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Engineering <br> (Radio Frequency Engineering)

Note: Postgraduate tuition fees apply to this program. It is not expected that there will be an intake into the program in 2006.

## Academic Program Rules

## 1 Duration of program

The program for the Master of Engineering (Radio Frequency Engineering) shall be offered on a part-time basis only. It is expected that candidates will be able to complete the program in a minimum of six semesters of part-time study.

## 2 Admission

2.1 Except as provided in 2.2 below, an applicant for admission to the program shall:
(a) have qualified in the University of Adelaide for the degree of Bachelor of Engineering in Electrical \& Electronic or Computer Systems Engineering or
(b) have qualified for an award accepted by the Faculty of Engineering, Computer and Mathematical Sciencesas being equivalent academically and professionally to the degree of Bachelor of Engineering in Electrical \& Electronic or Computer Systems Engineering at the University of Adelaide.
2.2 Subject to the approval of the Council, the Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the Master of Engineering (Radio Frequency Engineering), a person who does not qualify under 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the Master of Engineering.

### 2.3 Status or Exemption

A candidate may not present for credit towards the Master of Engineering any course which has been presented as part of the requirements for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course.

3 Assessment and examinations
3.1 There shall be four classifications of pass in each core course for the Master of Engineering: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. The Directed Readings and Research Project shall be assessed on a satisfactory/unsatisfactory basis.
3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
3.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule a candidate who is refused permission to sit for examination, or who without a reason accepted by the Executive Dean of the Faculty (or nominee) fails to attend all or part of a final examination (or supplementary examination if granted) after remaining enrolled for at least eight teaching weeks of that semester, shall be deemed to have failed the examination.
3.6 The Research Project shall be approved by the Head of Electrical and Electronic Engineering and be conducted under the supervision of a member of the academic staff of the University of Adelaide.
3.7 The Faculty may permit the Research Project to be undertaken outside the University provided there will be adequate contact and interaction between the candidate and the candidate's supervisor.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Master of Engineering (Radio Frequency Engineering) a candidate shall satisfactorily complete the courses listed below, to a total value of 36 units:

### 4.1.1 Core courses

ELEC ENG6000 Antennas and Propagation
ELEC ENG6001 CAD of RF Circuits and Systems
ELEC ENG6002 Introduction to RF Design

ELEC ENG6005 RF Measurements and Testing
ELEC ENG6006 Transmission Lines \& Waveguides 3

### 4.1.2 Directed readings

ELEC ENG6003 Readings in RF Engineering 24
ELEC ENG6004 Readings in RF Engineering 14
4.1.3 Research project

ELEC ENG7019 RF Engineering Research Project 12

### 4.2 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 General

1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.
These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.
All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

## 2 Admission

2.1 In addition to General Academic Program Rule 4.1 on Admission, applicants for admission to candidature for the Master of Engineering Science must hold
(a) a degree of Bachelor of Engineering in the Honours grade from the University of Adelaide or
(b) a qualification accepted by the Research Education and Development Committee as being equivalent to a degree of Bachelor of Engineering in the Honours grade from the University of Adelaide or
(c) a degree of Bachelor of Engineering in the Pass grade or a qualification accepted by the Committee as being equivalent to the degree of Bachelor of Engineering in the Pass grade from the University of Adelaide, and who has, in addition, successfully undertaken advanced studies and/or work in engineering practice which is considered by the Committee to be an adequate preparation for candidature. Candidates admitted under this Rule may be required to undertake qualifying work as prescribed by the Board.

### 2.2 Mode of study

In addition to General Academic Program Rule 7.1, subject to such conditions as it may determine in each case, the Research Education and Development Committee may permit project work to be undertaken outside the University provided that it can be satisfied:
(a) that this will result in mutual academic benefit to the candidate and the candidate's supervising school
(b) that there will be adequate contact and interaction between the candidate and the candidate's supervising school and
(c) that the supervisor's access to any experimental work, the candidate's availability for seminars and other discussions, and the publication of results will not thereby be prejudiced.

### 2.3 Program of Study

In addition to General Academic Program Rule 19.1, a program of study for the Master of Engineering Science may contain a combination of coursework and project work. Currently two options are offered:
To qualify for the degree, a candidate shall satisfactorily complete a program of study consisting of one of the following approved options:
(a) an all-research work program comprising Supervised Project Work be completed and the thesis submitted in not less than one year full-time equivalent or more than two years full-time equivalent from the date of commencement of candidature or
(b) a three-quarters research program comprising coursework to the value of 12 units and Supervised Project Work. All coursework is to be completed and the thesis submitted in not less than one year full-time equivalent or more than two years full-time equivalent from the date of commencement of candidature.

### 2.4 Classification of courses

Courses forming part of any coursework component for the degree shall be classified as follows:

## Group A: Postgraduate courses

These are courses offered at a postgraduate level either in the Faculty of Engineering, Computer and Mathematical Sciences, in another faculty or school, or at another Institution. These include postgraduate courses in the

Faculty of Engineering, Computer and Mathematical Sciences, Honours and approved postgraduate diploma courses in the Faculty of Sciences and postgraduate courses at Flinders University or the University of South Australia.

## Group B: Advanced level courses

These are courses in Engineering which have been designated as 'Advanced Level' by the School concerned. They are courses which reach an advanced level of expertise in the course material.

Subject to the approval of the Faculty, courses from outside Engineering may also be included in this category.

Group C: Ordinary level courses
These are courses at either Level III or Level IV in the Faculty of Engineering, Computer and Mathematical Sciences which are not designated 'Advanced Level', or courses at Level III in the Faculty of Sciences, or approved final year undergraduate courses from other Faculties or institutions.

### 2.5 Coursework requirements

2.5.1 A candidate seeking to enrol in a program of study with a coursework component shall, after consulting the Head of the school (or nominee) in which the majority of the candidate's work falls, submit the proposed program to the Committee for approval.
2.5.2 The program for a three-quarters research and one-quarter coursework may not contain more than a total of 6 units of courses from Groups B and C and may not contain more than 6 units of courses from outside the discipline of Engineering.

* For the purposes of this policy, the discipline of Engineering is deemed to include all Centres and joint ventures of which the discipline, or its constituent schools, is a formal partner.
2.5.3 There shall be four classifications of pass in each course for the Master of Engineering Science: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. If a course has a Conceded Pass classification for the purpose of another award, any such course passed with this classification shall not count towards the requirements for the degree of Master of Engineering Science.
2.5.4 A course shall be eligible to be counted for credit towards the coursework requirements of the degree if:
(a) in Groups $A$ and $B$ the grade obtained is at Pass standard ( $50 \%$ ) or higher
(b) in Group C the grade obtained is $60 \%$ or higher.
2.5.5 To satisfy the coursework requirements of the degree, a candidate must obtain a weighted average, taken over the best results in eligible courses which together amount to the required number of units, of at least $55 \%$.
2.5.6 Courses which have been presented as part of the requirements for any other award of this University or other institution or courses which in the opinion of the Faculty are substantially similar to such courses, will not be permitted to count for credit towards the coursework requirements of this degree.


### 2.6 Academic program

The following shall be the courses for the Master of Engineering Science:

## Group A: Postgraduate courses

Chemical Engineering
CHEM ENG 7000Minerals Processing
CHEM ENG 7004 Biochemical Engineering
CHEM ENG 7005 Reaction Engineering
CHEM ENG 7007 Particulate Technology
CHEM ENG 7008 Combustion Processes
CHEM ENG 7009 Plant \& Safety Engineering
CHEM ENG 7010W Winery Engineering
CHEM ENG 7011 Industrial Rheology
CHEM ENG 7012 Environmental Engineering
CHEM ENG 7021 Special Studies
in Chemical Engineering
3
CHEM ENG 7022 Chemical Engineering Management
and Optimisation
CHEM ENG 7023 Chemical Process \& Simulation 3
CHEM ENG 7024 Process Synthesis \& Integration 3
CHEM ENG 7026 Process Design Project 3
CHEM ENG 7027 Transport Processes in the Environment
CHEM ENG 7030 Process Modelling and Control
Civil \& Environmental Engineering
C\&ENVENG 7027 Wastewater Engineering \& Design 3
C\&ENVENG 7028 Waste Management
Analysis \& Design
3
C\&ENVENG 7029 Environmental Processes, Modelling \& Design

3
C\&ENVENG 7030 Steel Design 3
C\&ENVENG 7031 Concrete Design 3
C\&ENVENG 7032 Design of Composite Structures 3
C\&ENVENG 7033 Earthquake Engineering \& Design 3
C\&ENVENG 7034 Foundation Engineering \& Design 3
C\&ENVENG 7035 Footing Design \& Soil Variability 3
C\&ENVENG 7036 Water Resources
Management \& Design
C\&ENVENG 7037 Water Distribution Systems \& Design
C\&ENVENG 7038 Coastal Engineering \& Design ..... 3
CধENVENG 7039 Special Studies in Civil Engineering ..... 3
C\&ENVENG 7040 Special Studies in Environmental Engineering ..... 3
CGENVENG 7041 Fundamental Steel Design ..... 3
C\&ENVENG 7042 Design of Concrete Structures N ..... 3
Electrical \& Electronic Engineering
ELEC ENG 7015 Adaptive Signal Processing ..... 3
ELEC ENG 7017 Beamforming \& Array Processing ..... 3
ELEC ENG 7033 Principles of RF Engineering ..... 3
ELEC ENG 7044 Multimedia Communications ..... 3
ELEC ENG 7045 Photonics for Communications ..... 3
ELEC ENG 7046 Power Quality and Fault Diagnostics ..... 3
ELEC ENG 7047 Special Studies in Electrical Engineering ..... 3
ELEC ENG 7049 Power Electronics Systems ..... 3
ELEC ENG 7050 Microelectronic Testing and Design for Test ..... 3
ELEC ENG 7051 Microelectronic Datapaths and Arithmetic ..... 3
ELEC ENG 7052 Electromagnetic Theory and RFID Applications ..... 3
ELEC ENG 7053 Analog Microelectronic Systems ..... 3
ELEC ENG 7054 Detection and Estimation Theory ..... 3
ELEC ENG 7055 Antennas and Propogation ..... 3
ELEC ENG 7056 RFMeasurement and Testing ..... 3
Education Centre for Innovation \& Commercialisation ..... (ECIC)
ENTRSHIP 5008 Leading and Managing ..... 3
ENTRSHIP 5016 Entrepreneurship \& Innovation ..... 3
ENTRSHIP 5017 New Enterprise Financial Management ..... 3
ENTRSHIP 5018 Opportunity Assessment ..... 3
ENTRSHIP 5019 New Enterprise Marketing ..... 3
ENTRSHIP 5020 New Enterprise Operations ..... 3
ENTRSHIP 5021 Applied Project Management 1 ..... 3
Mathematical and Computer Sciences
APP MTH 7014 Modelling Telecommunication Traffic ..... 2
APP MTH 7026 Communication Network Design (Masters) ..... 3
APP MTH 7043 Transform Methods \& Signal Processing ..... 2
APP MTH 7050 Aerodynamics ..... 3
APP MTH 7052 Computational Fluid Dynamics (Engineering) ..... 3
APP MTH 7056 Telecommunications Systems Modelling III ..... 3
APP MTH 7057 Special Studies in Engineering Mathematics ..... 3
APP MTH 7078 Information Theory ..... 3
PURE MTH 7041 Mathematical Coding \& Cryptology ..... 2
Mechanical Engineering
MECH ENG 7019 Automotive Engineering ..... 3
MECH ENG 7020 Materials Selection \& Failure Analysis ..... 3
MECH ENG 7021 Combustion Technology \& Emissions Control ..... 3
MECH ENG 7022 Fundamentals of Non-Linear Computational Mechanics ..... 3
MECH ENG 7023 Fracture Mechanics ..... 3
MECH ENG 7024 Robotics M ..... 3
MECH ENG 7025 Topics in Welded Structures ..... 3
MECH ENG 7026 Advanced Topics in Fluid Mechanics ..... 3
MECH ENG 7027 Engineering Acoustics ..... 3
MECH ENG 7028 Advanced Automatic Control ..... 3
MECH ENG 7029 Airconditioning ..... 3
MECH ENG 7030 Advanced Vibrations ..... 3
MECH ENG 7031 Aerospace Navigation and Guidance ..... 3
MECH ENG 7032 Introduction to Biomechanics ..... 3
Petroleum Engineering and Management PETROENG7001 Petrophysics ..... 2
PETROENG7002 Reservoir Engineering ..... 2
PETROENG7003 Production and Facilities Engineering ..... 2PETROENG7006 Economic Evaluation
PETROENG 7009 Decision-Making Under Uncertainty ..... 3
PETROENG 7010 Portfolio \& Strategic Management ..... 2
PETROENG 7012 Oil and Gas Resources and Reserves ..... 2
PETROENG7023 Project Management ..... 2
PETROENG 7024 People and Organisational Skills Development ..... 2
PETROENG7031 Reservoir Characterisation and Modelling ..... 3
PETROENG7032 Integrated Reservoir Management ..... 3
PETROENG7035 Fundamentals of Numerical Reservoir Simulation ..... 3
PETROENG 7037 Structural Geology \& Seismic Methods ..... 3
PETROENG7038 Well Testing
and Pressure Transient Analysis3
PETROENG7039 Production Optimisation \& Project ..... 3
PETROENG7040 Enhanced Oil Recovery

Group B: Advanced courses
Level IV Engineering courses, which have been designated as 'Advanced Level' by the School concerned; details available from the Schools.

Group C: Ordinary Level courses
Level III and IV courses (not included above) in the Faculties of Engineering, Computer and Mathematical Sciences, and Sciences.

Notwithstanding the above, the availability of all courses is conditional on the availability of staff and facilities and sufficient enrolments.

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

To qualify for the Master of Entrepreneurship a candidate shall satisfactorily complete a program of full-time study extending over at least one year or part-time study extending over at least two years. Except with the permission of the Faculty, the work for the Master of Entrepreneurship shall be completed within four years.

2 Admission
2.1 Except as provided for in 2.2 below, a candidate for admission to the program of study for the Master of Entrepreneurship shall have qualified either for the Graduate Certificate in Business Enterprise (SME); or for a degree of the University or another institution accepted by the University for the purpose as equivalent, and shall have had at least 5 years approved professional work experience.
2.2 The Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not qualify for admission to the program under 2.1 above but has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

Except with the special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for another award other than the Graduate Certificate in Business Enterprise (SME) (see 2.4 below). Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.

### 2.4 Articulation with other awards

A candidate who has been admitted to the Graduate Certificate in Business Enterprise (SME) and who has been granted status toward the Master of Entrepreneurship for courses presented for the Graduate Certificate must surrender the Graduate Certificate before being admitted to the Master of Entrepreneurship.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in each course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails to pass in a course and desires to take the course again shall again undertake study and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
3.4 A candidate who has twice failed the examination in any course or division of a course may not enrol for the course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule, a candidate who is refused permission to sit for examination, or who fails to attend all or part of a final examination (or supplementary examination if granted) after being enrolled for at least two thirds of the normal period during which the course is taught, shall be deemed to have failed the examination.

## 4 Qualification requirements

4.1 To qualify for the Master of Entrepreneurship, a candidate shall satisfactorily complete courses to the total value of 24 units, comprising five core courses to the value of 15 units plus elective courses to the value of at least 9 units as given below.

### 4.1.1 Core courses

TECHCOMM 5016 Entrepreneurship and Innovation
TECHCOMM 5017 New Enterprise
Financial Management
TECHCOMM 5018 Opportunity Assessment
TECHCOMM 5019 New Enterprise Marketing
TECHCOMM 5020 New Enterprise Operations
4.1.2 Elective courses
TECHCOMM 5002 Managing Product Design
and Development ..... 3
TECHCOMM 5004 Managing Risk ..... 3
TECHCOMM 5007 Legal Issues of the Commercialisation Process ..... 3
TECHCOMM 5008 Leading and Managing ..... 3
TECHCOMM 5021 Applied Project Management 1 ..... 3
TECHCOMM 5025 Commercialisation:
Process \& Strategy ..... 3
TECHCOMM 5028 A/B Project in Entrepreneurship ..... 9
TECHCOMM 5029 Project in Entrepreneurship (6 units) ..... 6
TECHCOMM 5030 Project in Entrepreneurship (3 units) ..... 3
4.2 Unacceptable combination of coursesNo candidate will be permitted to count towards an awardany course, together with any other course, which, in theopinion of the Faculty concerned, contains a substantialamount of the same material; and no course or portion of acourse may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

Except with permission of the Faculty, the program for the Master of Geostatistics shall be completed:
(i) in the case of a full-time candidate, not less than two semesters
(ii) in the case of a part-time candidate, not less than three semesters.

2 Admission
2.1 Except as provided for in $2 . .2$ below, an applicant for admission to the program shall have qualified for a Bachelor degree with Honours from the University of Adelaide in a discipline related to the proposed field of study, or a degree of another institution accepted by the Faculty of Engineering, Computer and Mathematical Sciences as being equivalent.
2.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the degree of Master of Geostatistics, a person who does not qualify in 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status or exemption

(a) A candidate may not present for credit towards the degree any course which has been presented for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course.
(b) A candidate who has passed courses in this or other educational institutions and who has not presented these courses towards an award may, on written application to the Faculty, be granted such exemption from the requirements of these Rules as the Faculty shall determine. Status may be granted for a maximum of 9 units under Clause 4.2 of the Academic Program Rules.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Master Geostatistics: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. Courses passed with a Conceded Pass classification may not be counted towards the requirements for the degree of Master of Geostatistics.
3.2 A candidate shall not be eligible to attend for examination unless any prescribed coursework has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails in a course and desires to take the course again shall again attend the course and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
3.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule, a candidate who is refused permission to sit for the assessment for a given course, or who without a reason accepted by the Executive Dean of the Faculty (or nominee) fails to attend all or part of the assessment, shall be deemed to have failed that course.

4 Qualification requirements
4.1 To qualify for the degree of Master of Geostatistics, a candidate shall satisfactorily complete courses to a total value of at least 36 units including core courses to the value of 24 units and supervised project work and seminar presentation to the value of 12 units.
Candidates must have their program of studies approved by the Postgraduate Coordinator or nominee at enrolment.

### 4.2 Academic program

Core courses
C\&ENVENG 7043 Introduction to Geostatistics
C\&ENVENG 7054 Computing for Geostatistics
C\&ENVENG 7055 Selection and Recoverability
C\&ENVENG 7056 Linear Geostatistics

C\&ENVENG 7057 Non-stationarity 2
C\&ENVENG 7053 Non-linear Geostatistics 3
C\&ENVENG 7052 Geostatistical Simulation 3
STATS 7061 Statistical Analysis 3
STATS 7062 Multivariate Geostatistics 3
Project
A candidate shall undertake and complete satisfactorily a Project under the guidance of a supervisor, and provide a public seminar and written dissertation on the investigation.
CGENVENG 7051 Project and Dissertation

### 4.3 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Information Technology

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

A candidate shall:
(a) complete any additional compulsory work as the Faculty may determine
(b) except with the permission of the Faculty, the work for the degree shall be completed:
(i) in the case of a full-time candidate, not less than one year
(ii) in the case of a part-time candidate, not less than one and a half years.

## 2 Admission

2.1 The Faculty may accept as a candidate for the degree any person who has completed one of the following at the University of Adelaide:

Graduate Certificate in Computer Science
Graduate Diploma in Computer Science
Bachelor degree that includes a major in Computer Science.
2.2 The Faculty may accept as a candidate for the degree any person who has completed studies at another institution, where those studies are accepted by the University as equivalent to studies specified in 2.1 above.
2.3 Subject to the approval of Council, the Faculty may, in special cases accept as a candidate for the degree a person who does not hold the qualifications specified in 2.1 or 2.2.
2.4 A candidate admitted under 2.3 above will be required to undertake such additional compulsory work as the Faculty may determine. This additional work will not exceed 12 units of study and may be taken concurrently with the Master's study.
2.5 Admission to the program of study for the degree of Master of Information Technology will be based on a combination of results in university studies, other achievements, and the outcome of an interview.

### 2.6 Credit transfer

A candidate who has passed courses in this or other educational institutions and who has not presented these courses towards any award may, on written application to
the Faculty, be granted such exemption from the requirements of these rules as the Faculty shall determine. Status may be granted for a maximum of 9 units under 4.2.2 of the Academic Program Rules.

## 3 Assessment and examinations

3.1 No material presented for any other degree within this or any other institution shall be submitted unless otherwise permitted by the Head of School or nominee.
3.2 There shall be four classifications of Pass in each course for the degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.3 If a course has a Conceded Pass classification for the purpose of another award any such course passed with this classification shall not count towards the requirements for the degree.
3.4 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
3.5 A candidate who fails in a course, and desires to take the course again, shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for exemption.
3.6 A candidate who has twice failed in any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.

### 3.7 Review of academic progress

If in the opinion of the Faculty a candidate for the degree is not making satisfactory progress, the Faculty may with the consent of Council, terminate the candidature and the candidate shall cease to be enrolled for the degree.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the degree a candidate shall:
(i) satisfactorily complete any additional compulsory work which may be prescribed and
(ii) satisfy examiners in courses of study prescribed in these rules.

### 4.2 Courses of study and project work

4.2.1 The program consists of 36 units of study which shall normally extend over one and a half years of full-time study, and consists of two components:
(a) computer science courses and
(b) management courses
4.2.2 To qualify for the degree a candidate shall satisfactorily complete a program of study comprising courses as follows:
(a) at least 20 units selected from
(i) courses listed in Academic Program Rule 5.2 of the Master of Computer Science and
(ii) non-project based courses listed in Academic Program Rule 5.5 of the Master of Software Engineering;
(b) the balance made up of any of the following:
(i) information technology related courses as offered at Level IV, Level V, Honours and postgraduate courses drawn from Engineering, and Mathematical and Computer Sciences. Students must have the appropriate prerequisites for the courses selected
(ii) management courses selected from those offered by the Adelaide Graduate School of Business or the Centre for Innovation and Commercialisation as approved by the Postgraduate Coordinator
(iii) other courses to the value of up to 6 units may be included subject to the approval of the Postgraduate Coordinator.
4.2.3 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
4.2.4 To complete a program of study in a course a candidate shall, unless exempted by the Postgraduate Coordinator offering the course:
(a) regularly attend the prescribed lectures, tutorials, workshops and seminars and
(b) undertake such computing work, project work, practical work, field work and case studies, do such reading, written and oral work and pass such examinations as the head of the school offering the course may prescribe.
4.2.5 Each candidate's program of study must be approved by the Postgraduate Coordinator (or nominee) at enrolment each year.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Syllabuses

Prospective students should consult the course coordinator early in the year in which the program is being offered regarding the content of courses to be offered in that year.

## Notes:

1 not all electives will necessarily be offered in any one year
2 students may be interviewed to assess their suitability for course choices.

## Master of Mathematical Science

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

1 General
1.1 The Faculty shall appoint one or more supervisors to guide a candidate's work.
1.2 A candidate may not count a course or closely related course or part of a course already presented for another degree or diploma.
1.3 A candidate who fulfils the requirements of these Rules may, on the recommendation of the Faculty, be admitted to the degree of Master of Mathematical Science.

2 Duration of program

## A candidate shall:

(a) complete any preliminary work which may be prescribed
(b) undertake an approved program of advanced study and project work under the direction of a supervisor or supervisors extended over one year if taken full-time or not less than two and not more than four years if taken part-time.

## 3 Admission

3.1 The following may be accepted as a candidate for the degree:
(a) a person who has qualified in the the University of Adelaide for the Honours degree of Bachelor of Mathematical and Computer Sciences or the Honours degree of Bachelor of Engineering or the Honours degree of Bachelor of Science in Mathematical Physics, or holds another academic qualification accepted by the Faculty as equivalent.
(b) a person who has qualified in the the University of Adelaide for the degree of Bachelor of Engineering, Science or Applied Science or holds another academic qualification accepted for the purpose by the Faculty. A person admitted under this sub-Rule will normally be required satisfactorily to complete sufficient work of Honours standard as is deemed necessary by the Faculty in addition to satisfying the requirements of the Master's degree.
3.2 Subject to the approval of the Council the Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not qualify under 3.1 above but who has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 3.3 Preliminary work

3.3.1 A person whose qualifications have been accepted under 3.1 (a) shall be deemed to have satisfied the requirements of this schedule.
3.3.2 A candidate admitted under either 3.1 (b) or 3.2 shall completethe requirements of this Rule by undertaking, and satisfying the examiners in, such programs of study and/or other work as may in his or her case be prescribed by the Faculty. The purpose of this schedule is that the person should demonstrate the ability to perform at Honours standard.

## 4 Enrolment

### 4.1 Review of academic progress

If in the opinion of the Faculty a candidate is not making satisfactory progress the Faculty may, with the consent of the Council, terminate the candidature.

## 5 Qualification requirements

5.1 To qualify for the degree a candidate shall:
(a) pass such examination on the candidate's program of advanced study as may be required by the Faculty and
(b) present a satisfactory dissertation on the candidate's project.

### 5.2 Project work

Subject to such conditions as it may determine, the Faculty may permit project work to be undertaken outside the University provided that it can be satisfied:
(a) that this will result in mutual academic benefit to the candidate and the supervising school
(b) that there will be adequate contact and interaction between the candidate and the supervising school
and
(c) that the supervisor's access to any experimental work, the candidate's availability for seminars and other discussions, and the publication of results will not thereby be prejudiced.

### 5.3 Academic program

5.3.1 The program of study and project work to the value of at least 24 units shall consist of:
(a) supervised project work and seminar presentation from one of the following:

APP MTH 7007 Masters Applied Mathematics
Project
PHYSICS 7023 Masters Mathematical Physics
Project

PURE MTH 7008 Masters Pure Mathematics
Project
6
STATS 7001 Masters Statistics Project
Note: intending students should consult the relevant school early in the year in which they plan to study in order to ascertain whether particular courses will be available in that year, which semester they will be taught and their precise content
(b) courses chosen from the following list

Applied Mathematics
APP MTH 7000 Applied Mathematics Topic D 3
APP MTH 7006 Variational Methods for PDEs 3
APP MTH 7011 Transform Methods and Signal
Processing (Masters)
APP MTH 7018 Aerodynamics 3
APP MTH 7020 Advanced Hydrodynamics 3
APP MTH 7026 Communication Network
Design (Masters)
APP MTH 7028 Finite Difference Methods for PDEs 3
APP MTH 7029 Mathematical Economics (Masters) 3
APP MTH 7032 Tidal Models 3
APP MTH 7044 Applied Mathematics Topic C 3
APP MTH 7045 Applied Mathematics Topic B 3
APP MTH 7046 Foundations of Financial Economics 3
APP MTH 7048 Applied Mathematics Topic A 3
APP MTH 7052 Computational Fluid Dynamics (Eng) 3
APP MTH 7054 System Modelling \& Simulation 3
APP MTH 7056 Telecommunication System
Modelling
3
APP MTH 7073 Modelling Telecommunication Traffic
APP MTH 7078 Information Theory ..... 3
MECH ENG 4009 Robotics ..... 3
Mathematical Physics
PHYSICS 7004 Advanced Electromagnetism ..... 3
PHYSICS 7006 Cosmology ..... 3
PHYSICS 7008 Gauge Theory ..... 3
PHYSICS 7009 General Relativity ..... 3
PHYSICS 7014 Relativistic Quantum
Mechanics and Particle Physics ..... 3
PHYSICS 7015 Statistical Mechanics/ Many-Body Theory ..... 3
PHYSICS 7024 Topics in Mathematical Physics A ..... 3
PHYSICS 7025 Topics in Mathematical Physics B ..... 3
Pure Mathematics
PURE MTH 7002 Pure Mathematics Topic B ..... 3
PURE MTH 7003 Geometry 1 ..... 3
PURE MTH 7010 Algebra 3 ..... 3
PURE MTH 7019 Algebra 2 ..... 3
PURE MTH 7021 Algebra 1 ..... 3
PURE MTH 7023 Pure Mathematics Topic D ..... 3
PURE MTH 7024 Geometry 2 ..... 3
PURE MTH 7028 Topology 3 ..... 3
PURE MTH 7030 Analysis 3 ..... 3
PURE MTH 7032 Analysis 2 ..... 3
PURE MTH 7033 Galois Theory ..... 3
PURE MTH 7038 Pure Mathematics Topic A ..... 3
PURE MTH 7041 Mathematical Coding and Cryptology ..... 3
PURE MTH 7047 Pure Mathematics Topic C ..... 3
PURE MTH 7049 Real Analysis 3 ..... 3
PURE MTH 7050 Fields and Geometry 3 ..... 3
PURE MTH 7051 Fractal Geometry 3 ..... 2
PURE MTH 7052 Logic 3 ..... 2
PURE MTH 7053 Number Theory 3 ..... 2
PURE MTH 7054 Complex Analysis 2 ..... 2
PURE MTH 7055 Topology and Analysis 3 ..... 2
PURE MTH 7056 Discrete Mathematics 2 ..... 2
PURE MTH 7057 Pure Mathematics Diploma Project A ..... 3
PURE MTH 7058 Pure Mathematics Diploma Project B ..... 3
PURE MTH 7059 Groups and Rings 3 ..... 3
PURE MTH 7060 Multivariable Calculus 2 ..... 2Statistics
STATS 7004 Statistics Topic A ..... 3
STATS 7008 Statistics Topic D ..... 3
STATS 7014 Statistics Topic B ..... 3
STATS 7016 Statistics Topic C ..... 3
STATS 7019 Advanced Inference ..... 3
STATS 7054 Statistical Modelling ..... 3
STATS 7055 Bioinformatics ..... 3
STATS 7056 Biostatistics ..... 3
STATS 7057 Sampling Theory and practice ..... 3
STATS 7058 Time Series ..... 3
STATS 7059 Mathematical Statistics ..... 3
STATS 7060 Industrial Statistics ..... 3
(c) other courses offered by the University of Adelaide or other tertiary institutions in South Australia which are accepted by the Faculty as being equivalent to those listed above.
(d) Students may present other relevant courses or work, to the value of at most six units, as may be approved by the Faculty.
5.3.2 The availability of all courses in any year is conditional on there being adequate staffing levels.

### 5.4 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 5.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Syllabuses

Prospective students should consult the Program Coordinator early in the year in which the program is being offered to obtain advice as to the specific content of the program. The field of study of the major and minor projects can also be determined at that time.

## Master of Mathematical Sciences

## (Signal and Information Processing)

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 General

A candidate who fulfils the foregoing requirements shall, on the recommendation of the Board of Studies, be admitted to the degree of Master of Mathematical Sciences (Signal and Information Processing).

2 Duration of program
A candidate shall:
(a) complete any preliminary work which may be prescribed
(b) undertake an approved program of advanced study which extends over one and a half years if taken fulltime or not less than three and not more than six years if taken part-time.

## 3 Admission

3.1 The following may be accepted as a candidate for the degree:

Any person who has qualified for an Honours degree of Bachelor of Science in either Mathematics or Physics or a degree of Bachelor of Engineering (Electrical and Electronic) with Honours of the the University of Adelaide, or for an equivalent degree of another tertiary institution accepted for the purpose by the University.
3.2 Graduates with Honours in other areas of Engineering, or in related scientific areas, may be accepted at the discretion of the Faculty.
3.3 Subject to the approval of the Council, the Board of Studies may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not qualify under 3.1 or 3.2 but who has given evidence satisfactory to the Board of fitness to undertake work for the degree.

### 3.4 Status and credit transfer

A candidate who has passed courses in this or other educational institutions and who has not presented these courses towards any award may, on written application to
the Faculty, be granted status for a maximum of 4 units under 5.3.2 of the Academic Program Rules.

## 4 Assessment and examination

4.1 Review of academic progress

If in the opinion of the Board of Studies a candidate for the degree is not making satisfactory progress, the Board may, with the consent of the Council, terminate the candidature.

5 Qualification requirements
5.1 To qualify for the degree a candidate shall:
(a) comply with conditions as prescribed in the Academic Program Rules and
(b) pass such examinations on the candidate's program of advanced study as may be required by the Board of Studies.

### 5.2 Unacceptable combinations of courses

Except as provided in 5.3.5, no candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 5.3 Academic program

5.3.1 A candidate for the degree shall regularly attend lectures and tutorials, do such written and practical work as may be prescribed, and satisfactorily complete courses to the value of at least 36 units as defined in 5.3.2.
5.3.2 The program of study to the value of at least 36 units shall consist of:
(i) courses to the value of at least 18 units selected from: SIP 7001 Information Theory
SIP 7002 Kalman Filtering and Tracking 3
SIP 7003 Error Control Coding 3
SIP 7004 Mobile Communications 3
SIP 7005 Multisensor Data Fusion 3
SIP 7007 Image Processing ..... 3
SIP 7009 Speech Processing ..... 3
SIP 7011Signal Processing Applications ..... 3
SIP 7012 Detection, Estimation and Classification ..... 3
SIP 7013 Introduction to Discrete Linear Systems ..... 3
SIP 7015 Signal Synthesis and Analysis ..... 3
SIP 7017 Specialised Studies A ..... 3
SIP 7018 Specialised Studies B ..... 3
SIP 7019 Specialised Studies C ..... 3
SIP 7020 Specialised Studies D ..... 3
SIP 7023 Satellite Communications ..... 3
SIP 7024 Adaptive Signal Processing ..... 3
SIP 7025 Beamforming \& Array Processing ..... 3
SIP 7026 Mathematical Coding \& Cryptology ..... 3Specialised Studies may consist of directed readingsor approved short courses as approved by the Faculty.The content and assessment of these courses will bedetermined in each case by the academic coordinatorof the course in consultation with the student'ssupervisor and the student.
(ii) Honours and other relevant courses offered by the the University of Adelaide or other tertiary institutions in South Australia as may be approved by the Board of Studies.
(iii) supervised project work consisting of the course:
MATHS 7008 A/B Mathematical Signal and Information Processing Project
Note: Intending students should consult the relevant school early in the year in which they plan to study in order to ascertain whether particular courses will be available in that year, which semester they will be taught and their precise content.
5.3.3 Students who are required to undertake preliminary work will normally enrol in one of the following courses:
MATHS 7010 A/B Qualifying Studies in Mathematics (Full-time) ..... 12
MATHS 7021 A/B Qualifying Studies in Mathematics (Part-time) ..... 6
On satisfactory completion of this work the student will proceed to study as outlined in 5.3.1 above.
5.3.4 The Faculty may grant status of up to 12 units for studies undertaken within an Honours degree in either Mathematics or Physics, or a degree of Bachelor of Engineering (Electrical and Electronic) with Honours of the the University of Adelaide, or within an equivalent degree of another tertiary institution. These candidates will still need to present a minimum of 24 units towards the Master of Mathematical Sciences (Signal and Information Processing) that have not been presented for any other degree.
5.3.5 Candidates who are granted exemption from one or more of the courses listed in 5.3 .2 (i) on the basis of previous studies may select in their place other relevant courses offered by the the University of Adelaide or other tertiary institutions in South Australia as may be approved by the Board of Studies.
5.3.6 The availability of all courses is conditional on there being adequate staffing and resources.

### 5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the Board of Studies special circumstances exist, the Council, on the recommendation of the Board in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Syllabuses

Prospective students should consult the program coordinator early in the year in which the program is being offered regarding the content of the specific courses that are to be offered in that year.

## textbooks

Information on appropriate textbooks will be provided by the course coordinator at the commencement of each course.

## examinations

For each course students may obtain from the course coordinator details of the examination in that course including the relevant weight given to the components (eg. such as the following as are relevant: assessments, semester or mid-semester tests, essays or other written or practical work, final written examinations, viva voce examinations).

## Master of Petroleum Business Management

Note: Postgraduate tuition fees apply to this program.
Academic Program Rules

## 1 Duration of program

Except with the special permission of the Faculty, the program for the Master of Petroleum Business Management shall be completed in two semesters of full-time study, or up to ten semesters of part-time study. Except with the permission of the Faculty, the requirements of the degree must be completed within 5 years.

## 2 Admission

2.1 Except as provided for in 2.2 below, an applicant for admission to the program shall have qualified for a degree with Honours (in a relevant discipline) of the University or of another institution accepted for this purpose by the Faculty.
2.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the degree of Master of Petroleum Business Management, a person who does not qualify under 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status or exemption

A candidate may not present for credit towards the degree any course which has been presented as part of the requirements for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Master of Petroleum Business Management: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 A candidate shall not be eligible to attend for assessment unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails in a course and desires to take the course again shall again attend that course and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
3.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule, a candidate who is refused permission to sit for the assessment for a given course, or who without a reason accepted by the Executive Dean of the Faculty (or nominee) fails to attend all or part of the assessment, shall be deemed to have failed that course.
3.6 The Research Project shall be approved by the Head of the Australian School of Petroleum (or nominee) and be conducted under the supervision of a member of the academic staff of the University of Adelaide.
3.7 The Faculty may permit the Research Project to be undertaken outside the University provided there will be adequate contact and interaction between the candidate and the candidate's supervisor.
3.8 Evaluation of the Research Project shall be through the submission of a comprehensive report and a presentation. This evaluation shall be conducted jointly by the School's academic staff and industry practitioners nominated by the academic staff.

4 Qualification requirements
4.1 To qualify for the degree of Master of Petroleum Business Management, a candidate shall satisfactorily complete a minimum of 24 units of which at least 10 units must be taken from the list of Compulsory Courses in 4.2 Group A, either 4 or 8 units must be taken as a Research Project in 4.2 Group B, and the remaining units must be taken from the list of Elective courses in 4.2 Group C. The specific list of courses to be taken by any candidate must be agreed by the Program Coordinator at the time of enrolment and will depend on the candidate's prior experience and learning goals.

### 4.2 Academic Program

Group A: Compulsory courses
PETROENG 7006 Economic Evaluation
PETROENG 7009 Decision-Making Under Uncertainty 2

PETROENG 7010 Portfolio \& Strategic Management
PETROENG 7012 Oil and Gas Resources and Reserves ..... 3
PETROENG 7023 Project Management ..... 2
PETROENG 7024 People and Organisational Skills Development ..... 2
PETROENG 7036 Managing in a Global Environment ..... 2
PETROENG7043 Integrated Field Development and Economics Project ..... 3
Group B: Research Project
PETROENG 7014 Research Project A ..... 4
PETROENG 7046 Research Project B ..... 4
Group C: Elective courses
PETROENG7001 Petrophysics ..... 2
PETROENG7002 Reservoir Engineering ..... 2
PETROENG7003 Production and Facilities Engineering ..... 2
PETROENG7031 Reservoir Characterisation and Modelling ..... 3
PETROENG7032 Integrated Reservoir Management ..... 3
PETROENG7038 Well Testing and Pressure Transient Analysis ..... 3
PETROENG7039 Production Optimisation \& Project ..... 3
PETROENG7040 Enhanced Oil Recovery ..... 3
PETROENG7041 Gas Fields and Optimisation ..... 2
PETROENG7042 Drilling Engineering and Well Completion ..... 3
PETROENG7044 Development Geology \& Geophysics ..... 2

* The availability of all courses is conditional on the availability of staff and facilities and sufficient enrolments. Each year the Australian School of Petroleum shall determine which courses will be offered and in which semester they will be offered.


### 4.3 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Petroleum Engineering

Note: Postgraduate tuition fees apply to this program.
Academic Program Rules

## 1 Duration of program

Except with the special permission of the Faculty, the program for the Master of Petroleum Engineering shall be completed in two semesters of full-time study, or up to ten semesters of part-time study.

## 2 Admission

2.1 Except as provided for in 2.2 below, an applicant for admission to the program shall:
(a) have qualified in the University of Adelaide for the degree of Bachelor of Engineering (Petroleum) with Honours or
(b) have qualified for an award accepted by the Faculty of Engineering, Computer and Mathematical Sciences as being equivalent academically and professionally to the degree of Bachelor of Engineering (Petroleum) with Honours.
2.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the degree of Master of Petroleum Engineering, a person who does not qualify under 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status or exemption

A candidate may not present for credit towards the degree any course which has been presented as part of the requirements for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Master of Petroleum Engineering: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails in a course and desires to take the course again shall again attend the course and satisfactorily do such written and practical work as the teaching staff
concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
3.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule, a candidate who is refused permission to sit for the assessment for a given course, or who without a reason accepted by the Executive Dean of the Faculty (or nominee) fails to attend all or part of the assessment, shall be deemed to have failed that course.
3.6 The Research Project shall be approved by the Head of the Australian School of Petroleum (or nominee) and be conducted under the supervision of a member of the academic staff of the University of Adelaide.
3.7 The Faculty may permit the Research Project to be undertaken outside the University provided there will be adequate contact and interaction between the candidate and the candidate's supervisor.

## 4 Qualification requirements

4.1 To qualify for the degree of Master of Petroleum Engineering, a candidate shall satisfactorily complete a minimum of 24 units of which a minimum of 16 units must be taken from the list of Core Courses in 4.2 Group A. The remaining 8 units may be taken from either Group A or Group B. The specific list of courses to be taken by any candidate must be agreed by the Program Coordinator at the time of enrolment and will depend on the candidate's prior experience and learning goals.

### 4.2 Academic Program

Group A Core Courses
PETROENG 7001 Petrophysics
PETROENG 7002 Reservoir Engineering 2
PETROENG 7003 Production and Facilities Engineering 2
PETROENG 7006 Economic Evaluation 2
PETROENG 7023 Project Management 2
PETROENG 7031 Reservoir Characterisation \& Modelling 3
PETROENG 7032 Integrated Reservoir Management 3
PETROENG 7042 Drilling, Engineering and Well Completion ..... 3
PETROENG 7043 Integrated Field Development Planning and Economics Project ..... 3
PETROENG7044 Development Geology \& Geophysics ..... 2
Group B: Elective courses
PETROENG 7009 Decision-Making Under Uncertainty ..... 3
PETROENG 7010 Portfolio \& Strategic Management ..... 2
PETROENG 7012 Oil and Gas Resources and Reserves ..... 3
PETROENG 7014 Research Project A ..... 4
PETROENG 7024 People and Organisational Skills Development ..... 2
PETROENG7035 Fundamentals of Numerical Reservoir Simulation ..... 3
PETROENG 7037 Structural Geology \& Seismic Methods ..... 3
PETROENG7038 Well Testing
and Pressure Transient Analysis ..... 3
PETROENG7039 Production Optimisation \& Project ..... 3
PETROENG7040 Enhanced Oil Recovery ..... 3
PETROENG7041 Gas Fields Optimisation ..... 2
PETROENG 7046 Research Project B ..... 4

### 4.3 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Project Management

Note: Postgraduate tuition fees apply to this program.
Academic Program Rules

## 1 Duration of program

The Master of Project Management can be completed in a minimum of 2 semesters or participants can study at their own pace so long as the coursework for the Master of Project Management is completed within 3 years.

2 Admission
2.1 An applicant for admission to the program for the Master of Project Management shall:
(a have qualified for a four-year degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a four-year degree of the University or
(b) have qualified for a three-year degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a three-year degree of the University and have three years' professional work experience.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Master of Project Management a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Masters.

### 2.3 Status, exemption and credit transfer

 Candidates who have previously passed courses in postgraduate awards or equivalent at the University of Adelaide or another university and who wish to count such courses towards the Master of Project Management may, on written application to the Faculty, be granted such status as the Faculty shall determine, to a maximum aggregate value of twelve (12) units.
### 2.4 Articulation with other awards

A candidate who has been admitted to the Graduate Certificate in Project Management and who subsequently satisfies the requirements for the Master of Project Management must surrender the Graduate Certificate before being admitted to the Master degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Master degree: Pass with High Distinction; Pass with Distinction; Pass with Credit; and Pass.
3.2 A candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails a course and wishes to repeat that course, shall, unless exempted partially there from by the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.
3.4 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

## 4 Qualification requirements

4.1 To qualify for the Master of Project Management, a candidate shall satisfactorily complete courses to the value of 24 units of which at least 18 units are from the list of core courses.
Note: students should discuss their choice of courses with the Program Coordinator.

### 4.1.1 Core courses

TECHCOMM 5004 Managing Risk 3
TECHCOMM 5009 Business and Contract Management 3
TECHCOMM 5013 Systems Engineering * 3
TECHCOMM 5014 Project Management Techniques ** 3
TECHCOMM 5015 Project Finance and Accounting 3
TECHCOMM 5021 Applied Project Management $1 \quad 3$
TECHCOMM 5026 Applied Project Management 2* 3

* Candidates must undertake either Applied Project Management 2 or Systems Engineering.
** Project Management Techniques is the intermediate core course between Applied Project Management 1 and Applied Project Management 2 (or Systems Engineering). Therefore

Applied Project Management 1 is a pre or corequisite to Project Management Techniques; furthermore, Applied Project
Management 1 is a prerequisite to Applied Project Management 2, and Project Management Techniques is a pre or corequisite to Applied Project Management 2.
4.1.2 Elective courses
TECHCOMM 5002 Managing Product Design and Development3
TECHCOMM 5008 Leading and Managing ..... 3
TECHCOMM 5010 Technology Project Management ..... 3
TECHCOMM 5012 Integrated Logistic Support ..... 3
TECHCOMM 5016 Entrepreneurship and Innovation* ..... 3
TECHCOMM 5018 Opportunity Assessment* ..... 3
TECHCOMM 5022 A/B Project Management Project (9 units) ** ..... 9
TECHCOMM 5023 A/B Project Management
Project (6 units) ..... 6
TECHCOMM 5024 Project Management Project (3 units) ..... 3
TECHCOMM 5027 Business and Project Creation* ..... 3

* Candidates cannot undertake Opportunity Assessment or Entrepreneurship and Innovation in conjunction with Business and Project Creation.
** Available only to approved students.


### 4.2 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Science and Technology Commercialisation

Note: Postgraduate tuition fees apply to this program.
Academic Program Rules

## 1 Duration of program

It is possible to complete the Master of Science and Technology Commercialisation in one year. Alternatively participants can study at their own pace provided the eight courses plus project are completed within 4 years.

2 Admission
2.1 An applicant for admission to the program for the Master of Science and Technology Commercialisation shall have qualified for a degree of the University or another institution accepted by the University for the purpose as equivalent, shall have had at least 5 years approved professional work experience, and shall have demonstrated to the satisfaction of the University to have the capacity and experience to benefit from the program.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

Candidates who have previously passed courses in postgraduate awards or equivalent at the University of Adelaide or another university and who wish to count such courses towards the Master of Science and Technology Commercialisation may, on written application to the Faculty, be granted such status as the Faculty shall determine, to a maximum aggregate value of six (6) units.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Science and Technology Commercialisation who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate or Graduate Diploma in Science and Technology Commercialisation may be admitted to one or other of those degrees as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Diploma in Science and Technology Commercialisation and who subsequently satisfies the requirements for the Master of Science and Technology Commercialisation must
surrender the Graduate Diploma before being admitted to the Masters degree.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction; Pass with Distinction; Pass with Credit; and Pass.
3.2 A candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails a course and wishes to repeat that course, shall, unless exempted partially therefrom by the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.
3.4 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

## 4 Qualification requirements

4.1 Academic program

To qualify for the Master of Science and Technology Commercialisation, a candidate shall satisfactorily complete courses to the value of 36 units consisting of:
(a) 24 units of coursework of which at least 18 units are core courses and
(b) a 12 unit Project as set out under 4.1.2 below.

Note: students should discuss their choice of courses with the Program Coordinator.

### 4.1.1 Core courses

TECHCOMM 5001 Marketing Technological Innovation
TECHCOMM 5002 Managing Product Design and Development
TECHCOMM 5003 Strategic Analysis for Technology Commercialisation
TECHCOMM 5005 Financing Commercialisation ..... 3
TECHCOMM 5006 Technology Management and Transfer ..... 3
TECHCOMM 5007 Legal Issues of the Commercialisation Process ..... 3
TECHCOMM 5008 Leading and Managing ..... 3
TECHCOMM 5011 Internationalisation of Technology ..... 3
4.1.2 Masters Project
TECHCOMM 7006 A/B Masters Project (Australia) ..... 12
or
TECHPJIL Masters Project (International) ..... 12
4.1.3 Elective courses
TECHCOMM 5004 Managing Risk ..... 3
TECHCOMM 5009 Business and Contract Management ..... 3
TECHCOMM 5012 Integrated Logistics Support ..... 3
TECHCOMM 5021 Applied Project Management I ..... 3
4.2 Unacceptable combination of coursesNo candidate will be permitted to count towards an awardany course, together with any other course, which, in theopinion of the Faculty concerned, contains a substantialamount of the same material; and no course or portion of acourse may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Sciences (Defence)

Note: Postgraduate tuition fees apply to this program.
Academic Program Rules

## 1 Duration of program

Except with permission of the Board of Studies, the program for the Master of Sciences (Defence) shall be completed in three semesters of full-time study, or up to eight semesters of part-time study.

## 2 Admission requirements

2.1 Except as provided for in 2.2 below, an applicant for admission to the program shall:
(a) have qualified for a degree from the University of Adelaide in a discipline related to the proposed field of study
(b) have qualified for an award accepted by the Board of Studies as being equivalent to a degree from the University of Adelaide in a discipline related to the proposed field of study and
(c) shall have had at least 18 months' employment experience in a defence-related industry.
2.2 The Board of Studies may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the degree of Master of Sciences (Defence), a person who does not qualify under 2.1 above, but has given evidence satisfactory to the Board of fitness to undertake work for the degree.

### 2.3 Status or exemption

A candidate may not present for credit towards the degree any course which has been presented as part of the requirements for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course.

### 2.4 Articulation with other awards

2.4.1 A candidate who has been enrolled for the Graduate Certificate or Graduate Diploma in Sciences (Defence) at the University of Adelaide and who has not been awarded the Graduate Certificate or Graduate Diploma shall, on written application, be permitted to transfer all equivalent courses towards the Masters degree.
2.4.2 A candidate who holds the Graduate Certificate or Graduate Diploma in in Sciences (Defence) from the University of Adelaide shall surrender the Graduate Certificate or

Graduate Diploma before being awarded the Masters degree.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Master of Sciences (Defence): Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. Courses passed with a conceded pass classification may not be counted towards the requirements for the degree of Master of Sciences (Defence).
3.2 To satisfy the requirements of the degree, a candidate must obtain a weighted average taken over the best results in eligible courses which together amount to the required number of units, of at least $55 \%$.
3.3 A candidate shall not be eligible to attend for examination unless any prescribed coursework has been completed to the satisfaction of the teaching staff concerned.
3.4 A candidate who fails in a course and desires to take the course again shall again attend the course and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted there from after written application to the Board of Studies for such exemption.
3.5 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Board of Studies and then only under such conditions as may be prescribed.
3.6 For the purpose of this Rule, a candidate who is refused permission to sit for the assessment for a given course, or who without a reason accepted by the Convenor of the Board of Studies (or nominee) fails to attend all or part of the assessment, shall be deemed to have failed that course.

## 4 Qualification requirements

4.1 To qualify for the degree of Master of Sciences (Defence), a candidate shall satisfactorily complete courses from the following list to a total value of at least 36 units. These must include the two core courses from Group A to the value of 6 units and the Research Project (12 units).
4.2 Candidates may present courses offered by other universities from a register of approved courses maintained by the Board of Studies, but the total value of these external courses must not exceed 12 units (including the core courses in Group A).

Candidates must have their proposed program of studies approved by the Convenor of the Board of Studies or nominee at enrolment.

## Group A : Core courses

Both of these courses are offered by the University of South Australia

Research Methods in a Multidisciplinary Environment
Systems Engineering for Complex Problem Solving
Group B : Defence Technology Stream
DEFSCI 7004 Aerospace Navigation \& Guidance
DEFSCI 7006 Antennas and Propagation 3
DEFSCI 7007 Principles of RF Engineering 3
DEFSCI 7008 RF Measurements and Testing 3
DEFSCI 7203 Photonics IV-D: 3
DEFSCI 7204 Physical Optics III-D 3
DEFSCI 7205 Experimental Methods IV-D 3
DEFSCI 7206 Photonics III-D :Laser Physics 3
\# Note: special conditions apply to choosing courses with a Photonics theme. There is a preferred sequence within these courses, and candidates should seek guidance on their enrolment pattern. Electromagnetics III contains material which is assumed knowledge in the remaining courses, and should be taken by candidates without this specialist undergraduate Physics background. From time to time further Photonics options may also become available.

Group C : Information and Communication Technology Stream
DEFSCI 7000 Cognitive Science:
Minds, Brains and Computers 3
DEFSCI 7001 Decision Making in a Real Environment 3
DEFSCI 7002 Distributed Systems 3
DEFSCI 7003 Artificial Intelligence 3
DEFSCI 7013 Knowledge Representation 3
DEFSCI 7014 Parallel Computation 3
Research Project
DEFSCI 7016 Master of Sciences (Defence)
Research Project
The availability of all elective courses is conditional on the availability of staff and facilities and sufficient enrolments.

Other relevant courses may be presented towards the requirements of the Master of Sciences (Defence) with the written approval of the Convenor of the Board of Studies.

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of Board of Studies, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the Board of Studies special circumstances exist, the Council, on the recommendation of the Board in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Sciences (Defence Signal Information Processing)

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 General

A candidate who fulfils the following requirements shall, on the recommendation of the Board of Studies, be admitted to the degree of Master of Sciences (Defence Signal Information Processing).

2 Duration of program
A candidate shall:
(a) complete any preliminary work which may be prescribed
(b) undertake an approved program of advanced study which extends over one and a half years if taken fulltime or not less than three and not more than six years if taken part-time.

## 3 Admission

3.1 The following may be accepted as a candidate for the degree:

Any person who has qualified for an Honours award in Mathematics, Physics or in Electrical and Electronic Engineering: or a Bachelor award that includes a major in either Mathematics or Physics, or for an equivalent degree accepted for the purpose by the University, plus 18 months experience in the Defence industry.
3.2 The Board of Studies may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not qualify under 3.1 but who has given evidence satisfactory to the Board of fitness to undertake work for the degree.

### 3.3 Articulation with other awards

3.3.1 A candidate who has been enrolled for the Graduate Certificate or Graduate Diploma in Signal Information Processing at the University of Adelaide and who has not been awarded the Graduate Certificate or Graduate Diploma shall, on written application, be permitted to transfer all equivalent courses towards the Masters degree.
3.3.2 A candidate who holds the Graduate Certificate or Graduate Diploma in Signal Information Processing from the University of Adelaide shall surrender the Graduate Certificate or Graduate Diploma before being awarded the Masters degree.

### 3.4 Credit Transfer

3.4.1 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
3.4.2 Candidates may present courses offered by other universities from a register of approved courses maintained by the Board of Studies but the total value of these external courses must not exceed 6 units from 6.3.1(i), and 6 units under 6.3.1 (ii) of the Academic Program Rules.

## 4 Assessment and examination

### 4.1 Review of academic progress

If in the opinion of the Board of Studies a candidate for the degree is not making satisfactory progress, the Board may terminate the candidature.

5 Qualification requirements
5.1 To qualify for the degree a candidate shall:
(a) comply with conditions as prescribed in the Academic Program Rules
(b) satisfy examiners in courses of study as prescribed in the Academic Program Rules
(c) do such written and practical work as may be prescribed, and satisfactorily complete a total of at least 36 units as defined in 6.3.1
(d) present a satisfactory dissertation on the candidate's project.

### 5.2 Project Work

Subject to such conditions as it may determine, the Board of Studies may permit project work to be undertaken outside the University provided that it can be satisfied:
(a) that this will result in mutual academic benefit to the candidate and the supervising school or organisation
(b) that there will be adequate contact and interaction between the candidate and the supervising school or organisation.

### 5.3 Academic program

5.3.1 The program of study and project work to the value of at least 36 units shall consist of:
(i) Compulsory courses

## Research Methods in a

Multidisciplinary Environment
Systems Engineering for Complex Problem Solving
(ii) courses to the value of at least 12 units selected from:

DEFSCI 7010 Beamforming and Array Processing
DEFSCI 7011 Adaptive Signal Processing 3
DEFSCI 7012 Multisensor Data Fusion 3
DEFSCI 7029 Kalman Filtering and Tracking 3
DEFSCI 7032 Image Processing 3
DEFSCI 7035 Detection, Estimation and Classification 3
DEFSCI 7036 Introduction to Discrete Linear Systems
(iii) courses to the value of at least 6 units selected from either:
(a) courses listed in 53.1 (ii) or
(b) from the following courses
DEFSCI 7015 Mathematical Coding
\& Cryptology

DEFSCI 7024 Specialised Studies A 3
DEFSCI 7025 Specialised Studies B 3
DEFSCI 7026 Specialised Studies C 3
DEFSCI 7028 Information Theory 3
DEFSCI 7030 Error Control Coding 3
DEFSCI 7031 Mobile Communications 3
DEFSCI 7033 Speech Processing 3
DEFSCI 7034 Signal Processing Applications 3
DEFSCI 7037 Signal Synthesis and Analysis 3
DEFSCI 7038 Specialised Studies D 3
DEFSCI 7039 Satellite Communications 3

Specialised Studies may consist of directed readings or approved short courses as approved by the Board of Studies. The content and assessment of these courses will be determined in each case by the academic coordinator of the course in consultation with the student's supervisor and the student.
(c) other relevant courses as approved by the Board of Studies from other postgraduate programs of the University.
(iv) Supervised Project Work

DEFSCI 7016 Master of Sciences
(Defence) Research Project
5.3.2 Students who are required to undertake preliminary work will normally enrol in one of the following courses:

SIP 7027 A/B Qualifying Studies
in Mathematics Part 1 \& 2
SIP 7028 Qualifying Studies in Mathematics 12
On satisfactory completion of this work the student will proceed to study as outlined in 6.3.1 above.
5.3.3 Candidates who are granted exemption from one or more of the courses listed in 6.3 .1 (ii) and (iii) on the basis of previous studies may select in their place other relevant courses offered by the University of Adelaide or other tertiary institutions in South Australia as may be approved by the Board of Studies.
5.3.4 The availability of all courses is conditional on there being adequate staffing and resources.

### 5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the Board of Studies special circumstances exist, the Board in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Syllabuses
Prospective students should consult the program coordinator early in the year in which the program is being offered regarding the content of the specific courses that are to be offered in that year.
textbooks
Information on appropriate textbooks will be provided by the course coordinator at the commencement of each course.

## examinations

For each course students may obtain from the course coordinator details of the examination in that course including the relevant weight given to the components (eg. such as the following as are relevant: assessments, semester or mid-semester tests, essays or other written or practical work, final written examinations, viva voce examinations).

## Master of Science in

Mathematical and Computer Sciences

## Academic Program Rules

## 1 General

1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.
These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

## 2 Admission

2.1 Further to Rules 4.1 and 4.2 of the General Program Rules, the following persons may become candidates for the degree of Master of Science in Mathematical and Computer Sciences:
(a) (i) Bachelors of Arts
(ii) Bachelors of Science
(b) Persons who have obtained an Honours degree from a University in a suitable Mathematics or Computer Science discipline, or a qualification deemed by the Research Education and Development Committee to be equivalent.

### 2.2 Academic program

To qualify for the degree, a candidate shall satisfactorily complete a program of study consisting of one of the following approved options:
(a) a candidate shall submit a thesis upon an approved course and shall adduce sufficient evidence that the thesis is his/her own work. The thesis shall give the results of original research or of an investigation on which the candidate has been engaged. A candidate
may also submit other contributions to mathematical sciences in support of his/her candidature
(b) a candidate shall pursue a program of advanced study comprising one-third coursework* and two-thirds research and shall submit a thesis describing the results of this research. The thesis while subject to the same conditions as those applying under option (a) would normally be of a less substantial character.
*This represents courses to the value of 8 units per year for fulltime candidates or equivalent part-time.

### 2.3 Courses of study

Courses listed in the Academic Program Rules of Masters degrees in Mathematical Sciences and deemed suitable for the degree by the Committee.

Notwithstanding the above, the availability of all courses is conditional on the availability of staff and facilities and sufficient enrolments.

### 2.4 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Committee, contains a substantial amount of the same material: and no course or portion of a course may be counted twice towards an award.

## Master of Software Engineering

Note: Postgraduate tuition fees apply to this program.
Academic Program Rules

## 1 Duration of program

Except with the permission of the Faculty, the courses of study and, if required, the project report shall be completed on a full-time basis in not less than the following duration:
(a) for students required by rule 5.4 below to complete courses to the value of at least 48 units: two years or
(b) for students required by rule 5.4 below to complete courses to the value of at least 36 units: one and a half years.

## 2 Admission

2.1 The Faculty may accept as a candidate for the degree any person who has completed one of the following at the University of Adelaide:
(a) the degree of Bachelor of Computer Science or Bachelor of Mathematical and Computer Sciences with a major in Computer Science or the Bachelor of Information Science with a major in Computer Science or the Graduate Diploma in Computer Science or
(b) the Honours degree of Bachelor of Mathematical and Computer Sciencesin Computer Science or the Honours degree of Bachelor of Computer Science or the degree of Master of Computer Science or
(c) the degree of Bachelor of Engineering in Computer Systems Engineering or Bachelor of Engineering in Information Technology and Telecommunications or Master of Engineering (Information Technology and Telecommunications) or Bachelor of Engineering with a major in Computer Science .
2.2 The Faculty may accept as a candidate for the degree any person who has completed studies at another institution, where those studies are accepted by the University as equivalent to studies specified in 2.1 above.
2.3 Subject to the approval of Council the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not hold the qualifications specified in 2.1 or 2.2 above but who has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.
2.4 A candidate admitted under 2.3 above may be required to undertake such preliminary work as the Faculty may determine.

### 2.5 Status, exemption and credit transfer

2.5.1 The Faculty may grant status of up to the value of 12 units for studies undertaken within an Honours degree in Computer Science, Master of Computer Science, Master of Engineering (Information Technology \& Telecommunications), or a degree of Bachelor of Engineering with Honours with a specialisation in Information Technology undertaken at the University of Adelaide, or within an equivalent degree of another tertiary institution.These candidates will still need to present a minimum of 24 units towards the Master of Software Engineering that have not been presented for any other degree.
2.5.2 Except as provided for in 2.5.1, a candidate may not count towards the degree a course or closely related course or part of a course that has already been presented for another degree or diploma.

## 3 Enrolment

Each candidate's program of study must be approved by the Dean (or nominee) at enrolment each year. Students may be interviewed to assess their suitability for course choices.

## 4 Assessment and examinations

4.1 If a course has a Conceded Pass classification for the purpose of another award any such course passed with this classification shall not count towards the requirements for the degree.
4.2 No project report or material presented for any other degree within this or any other institution shall be submitted.
4.3 There shall be four classifications of Pass in each course for the degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
4.4 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned. A candidate who is not eligible to attend for examination shall be deemed to have failed the examination.
4.5 A candidate who fails in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for exemption.
4.6 A candidate who has twice failed in any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.

### 4.7 Review of academic progress

If in the opinion of the Faculty a candidate for the degree is not making satisfactory progress, the Faculty may with the consent of Council, terminate the candidature of the candidate and the candidate shall cease to be enrolled for the degree.

5 Qualification requirements
5.1 A candidate shall:
(a) satisfactorily complete any preliminary work which may be prescribed
(b) satisfy examiners in courses of study prescribed in these rules and
(c) where project work is prescribed by these rules, present a satisfactory report on a project approved by the Head of School.
5.2 To complete a course of study a candidate shall, unless exempted by the Head of the School offering the course:
(a) regularly attend the prescribed lectures, tutorials, workshops and seminars and
(b) undertake such computing work, project work, practical work, field work and case studies, do such reading, written and oral work and pass such examinations as the Head of the School offering the course may prescribe.
5.3 The program comprises 48 units of study and consists of three components:
(a) a project
(b) Computer Science courses and
(c) Engineering courses.

Courses are divided into two categories: Core, which are compulsory, and Electives, which may be chosen by the student subject to the approval of the Dean (or nominee).

### 5.4 Academic program

To qualify for the degree a candidate shall satisfactorily complete a program of study comprising a project to the value of 3 units and coursework courses as follows:
(a) for students admitted with the qualification described in Rule 2.1 (a) above or the equivalent:courses to the value of at least 15 units from Group $A$ and at least 30 units from Group B as set out in Rule 5.5 below
(b) for students admitted with the qualification described in Rule 2.1 (b) above or the equivalent:courses to the value of at least 15 units from Group A and at least 18 units from Group $B$ as set out in Rule 5.5 below
(c) for students admitted with the qualification described in Rule 2.1 (c) above or the equivalent who have specialised in Information Technology within that qualification:courses to the value of at least 15 units from Group $A$ and at least 18 units from Group B as set out in Rule 5.5 below
(d) for students admitted with the qualification described in Rule 2.1 (c) above or equivalent who have not specialised in Information Technology within that qualification: courses to the value of at least 15 units from Group $A$ and at least 30 units from Group B as set out in Rule 5.5 below.

### 5.5 Courses of study

Project
COMP SCI7015 A/B Software Engineering Project
Note (not forming part of the Academic Program Rules):
Candidates who have completed this course or its equivalent under Rule 2.1 may, with permission from the Head of School or nominee, substitute this course with an elective from Group B.
Group A
core courses
COMP SCI 7011 Master Project B
COMP SCI 7013 Master Project E 3
COMP SCI 7019 Master Project C 3
COMP SCI 7025 Master Project D 3
COMP SCI 7056 Master Project A 3
Group B
At least 18 units of elective courses must be chosen from the following*:
COMP SCI 7023 Software Process Improvement 3
COMP SCI 7031 Advanced Programming Paradigms 3
COMP SCI 7036 Software Engineering in Industry 3
COMP SCI 7039 Computer Networks 3
COMP SCI7041 Compiler Construction \& Project 3
COMP SCI 7050 Parallel Computation 3
COMP SCI7054 High Integrity Software Engineering 3

Other elective courses
Chosen from courses listed in Academic Program Rule 5.2.2 for the degree of Master of Computer Science.

* not all electives may be offered in any one year.

Students may, with the agreement of the Dean (or nominee), be permitted to undertake other courses drawn from existing Level IV, Level V, honours and postgraduate courses in relevant programs.

### 5.6 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 5.7 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Water Resources Management

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

Except with permission of the Faculty, the program for the Master of Water Resources Management shall be completed:
(i) in the case of a full-time candidate, not less than two semesters
(ii) in the case of a part-time candidate, not less than three semesters.

## 2 Admission

2.1 Except as provided for in 3.2 below, an applicant for admission to the program shall have qualified for:
(a) a Bachelor degree from the University of Adelaide in an Engineering or Science discipline related to the proposed field of study, or a degree of another institution accepted by the Faculty of Engineering, Computer and Mathematical Sciences as being equivalent or
(b) a four-year degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a four-year degree of the University and have professional work experience to an appropriate level as assessed at the discretion of the Program Director.
2.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose, accept as a candidate for the degree of Master of Water Resources Management, a person who does not qualify in 2.1 above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Articulation with other awards

2.3.1 A candidate who has been enrolled for the Graduate Certificate or Graduate Diploma in Water Resources Management at the University of Adelaide and who has not been awarded the Graduate Certificate or Graduate Diploma shall, on written application, be permitted to transfer all equivalent courses towards the Masters degree.
2.3.2 A candidate who holds the Graduate Certificate or Graduate Diploma in Water Resources Management from the University of Adelaide shall surrender the Graduate

Certificate or Graduate Diploma before being awarded the Masters degree.

### 2.4 Status or exemption

Candidates who have previously passed courses in other postgraduate awards at the University of Adelaide or another university and who wish to count such courses towards the degree may, on written application to the Faculty, be granted such status as the Faculty shall determine, to a maximum aggregate value of six (6) units. No such status will be granted for courses in 4.3 (a). However, candidates may, on written application to the Faculty, be granted permission to substitute courses listed in 4.3 (a) with elective courses to a maximum aggregate value of six (6) units.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Master of Water Resources Management: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. Courses passed with a Conceded Pass classification may not be counted towards the requirements for the degree of Master of Water Resources Management.
3.2 A candidate shall not be eligible to attend for examination unless any prescribed coursework has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who fails in a course and desires to take the course again shall again attend the course and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.
3.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.5 For the purpose of this Rule, a candidate who is refused permission to sit for the assessment for a given course, or who without a reason accepted by the Executive Dean of the Faculty (or nominee) fails to attend all or part of the assessment, shall be deemed to have failed that course.

4 Qualification requirements
4.1 To qualify for the degree of Master of Water Resources Management, a candidate shall satisfactorily complete studies to a total value of at least 36 units comprising:
(a) 12 units of core courses in 4.3 (a) and
(b) 24 units taken from 4.3 (b), (c) and (d).
4.2 At least 18 units of study must be undertaken from courses offered by the University of Adelaide.

Candidates must have their program of studies approved by the Postgraduate Coordinator or nominee at enrolment.

### 4.3 Academic program

(a) Core courses

A candidate shall undertake and complete satisfactorily each of the following:

WRM 7000 Global Water Systems I
(Natural Water Cycle)
WRM 7002 Global Water Systems II
(Engineered Water Cycle)
WRM 7003 Water Resources and Society 3
WRM 7004 Water Resources Planning \& Management

(b) Electives

A candidate shall undertake and complete satisfactorily four of the following courses (12 units), at least three courses ( 9 units) must be taken from one of the streams:

## Management of Water Infrastructure

University of Adelaide
WRM 7010 Wastewater Engineering \& Design 3
WRM 7011 Environmental Modelling, Management
and Design
WRM 7012 Water Resources Optimisation and
Modelling
WRM 7013 Water Distribution Systems \& Design 3
WRM 7014 Coastal Engineering and Design 3
WRM 7021 GIS for Environmental Management 3
WRM 7022 Analysis of Rivers and Sediment Transport
WRM 7023 Water Resources Sustainability and Design ..... 3

University of South Australia
BUSS 5256 Strategic Asset Management
BUIL 5017 Facilities and Asset Performance 3
BUIL 5022 Engineering Infrastructure Management 3
CHEM 5007 Water Quality Fundamental \& Processes N
CIVE 5048 Advanced Water Quality and Wastewater Management ..... 3
GEOE 5001 Introduction Geographic Information Systems ..... 3
Deakin University
SEN724 Water Resources Systems Analysis ..... 3
SEN740 Water Treatment Processes and Design ..... 3
SEN741 Wastewater Treatment Processes and Design ..... 3
SEN743 Water Resources Engineering ..... 3
SEN745 Wastewater Reclamation and Reuse ..... 3
SEN744 Environmental Systems ..... 3
SEN752 Engineering Management \& the Environment ..... 3
SEV710 Risk and Environmental Sustainability ..... 3
Public Health
University of Adelaide
WRM 7015 Epidemiology of Infectious Disease ..... 3
WRM 7016 Introduction to Epidemiology and Biostatistics ..... 3
WRM 7017 Biostatistics ..... 3
WRM 7018 Epidemiological Research Methods ..... 3
WRM 7019 Foundations in Public Health ..... 3
WRM 7020 Industrial Toxicology ..... 3
Flinders University
ENVH 8001 Research Paradigms in Environmental Health ..... 3
ENVH 8002 Key Disciplines in Risk Assessment ..... 3
ENVH 8003 Principles of Risk Assessment and Effective Communication ..... 3The following streams are not offered at the University ofAdelaide:Aquatic Ecosystem Management
Groundwater HydrologySustainable Catchment and Water Management/SurfaceHydrology
(c) Other coursesWith permission from the Faculty, the following course maybe presented in lieu of an elective course :
WRM 7007 Research Methodology ..... 3
WRM 7009 Specialised Studies I ..... 3

Note: this course is a prerequisite for Projects listed in (d) below. Other relevant courses may be presented towards the requirements of the degree with the approval of the Faculty.
(d) In addition to (a) and (b), 12 units of study must be taken from the one of the following options:

Study Option 1
Four additional courses (12 units) chosen from (b) and/or (c)
Study Option 2
Two additional courses ( 6 units) chosen from (b) and/or (c) plus
WRM 7005 Minor Industry Project 6
Study Option 3
WRM 7008 Research Project
Study Option 4
WRM 7006 Major Industry Project

### 4.4 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

1 (a) Subject to these Academic Program Rules a person who has been admitted in the University of Adelaide to an Honours degree of Bachelor or a degree of Master in Science, Agricultural Science, Applied Science, Engineering or Engineering Science, or to the degree of Doctor of Philosophy in a field of study approved by the Faculty of Engineering, Computer and Mathematical Sciences, may proceed to the degree of Doctor of Engineering.
(b) On the recommendation of the Faculty of Engineering, Computer and Mathematical Sciences the Council may accept as a candidate for the degree a person who has been admitted to a degree in the University of Adelaide other than one named in section (a) of this regulation, or who is a graduate of another university or institution of higher education recognised by the University of Adelaide and has a substantial association with the University; provided that in each case the graduate concerned has, in the opinion of the Faculty, had an adequate engineering training.
(c) On the recommendation of the Faculty of Engineering, Computer and Mathematical Sciences the Board of Research Education and Development, acting with authority wittingly devolved to it by Council may, in special cases, accept as a candidate for the degree a person who does not hold a degree of a university or institution of higher education, provided that in each case the candidate concerned has a substantial association with the University and has, in the opinion of the Faculty adequate engineering credentials.
(d) Except where a person has been accepted as a candidate under regulation 1 (c), no person shall be accepted as a candidate for the degree of Doctor of Engineering before the expiration of five years from the date of the original graduation.
(a) A person who desires to become a candidate for the degree shall give notice of the intended candidature in writing to the Manager, Graduate Administration and Scholarships, Adelaide Graduate Centre and with such notice shall furnish particulars of the applicant's engineering achievements and of the work to be submitted for the degree.
(b) The Faculty of Engineering, Computer and Mathematical Sciences shall appoint a committee to examine the information submitted and to advise the Faculty on whether the Faculty should:
(i) allow the applicant to proceed, and approve the subject or subjects of the work to be submitted or
(ii) advise the applicant not to submit his work: and the Faculty's decision shall be conveyed to the applicant
(c) If it accepts the candidature and approves the subject or subjects of the work to be submitted the Faculty shall nominate examiners of whom one at least shall be an external examiner.
(a) To qualify for the degree the candidate shall furnish satisfactory evidence that the candidate has made an original contribution of distinguished merit adding to the knowledge, understanding or practice of any subject with which the Faculty is directly concerned.
(b) The degree shall be awarded primarily on a consideration of such published works as the candidate may submit for examination.
(c) The candidate in submitting published works shall state generally in a preface and specifically in notes the main sources from which the information is derived and the extent to which the candidate has made use of the work of others, especially where joint publications are concerned. The candidate may also signify in general terms the portions of his work which he claims as original.
(d) The candidate is required to indicate what part, if any, of the work has been submitted for a degree in this or any other university.
4 The candidate shall lodge with the Adelaide Graduate Centre, three copies of the work prepared in accordance with the directions given in sub-paragraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree two copies of the work will be transmitted to the University Library.
5 A candidate who complies with the foregoing conditions and satisfies the examiners may, on the recommendation of the Faculty of Engineering, Mathematical and Computer Sciences be admitted to the degree of Doctor of Engineering.
6 Notwithstanding anything contained in the preceding rules, the Faculty may recommend the award of the degree to any person who is not a member of the staff of the University. Any such recommendation must be award is
accompanied by evidence that the person for whom the award is proposed has made an original and substantial contribution of distinguished merit to the knowledge or understanding of a subject with which the Faculty is directly concerned, of a standard not less than that required by regulation 3 .

For further information please contact the Adelaide Graduate Centre.

Regulations allowed 15 January, 1976.
Amended: 4 Feb. 1982: 2 4; 21 Feb. 1991: 1; 13 Feb 1992: 1(d), 2 (a), 3 (a), 3 (b), 3 (c), 3 (d).
Rule approved and Regulation repealed 18 March 1999.

## Doctor of Science in the Faculty of

Engineering, Computer and Mathematical Sciences

## Academic Program Rules

(a) Subject to these academic Program Rules a person who has been admitted in the University of Adelaide to an Honours degree of Bachelor of Science or a degree of Master of Science, Arts or Economics, or to the degree of Doctor of Philosophy in a field of study approved by the Faculty of Engineering, Computer and Mathematical Sciences, may proceed to the degree of Doctor of Science in the Faculty of Engineering, Computer and Mathematical Sciences.
(b) On the recommendation of the Faculty of Engineering, Computer and Mathematical Sciences the Board of Research Education and Development acting with authority wittingly devolved to it by Council may accept as a candidate for the degree a person who has been admitted to a degree in the University of Adelaide other than one named in section (a) of this regulation, or who is a graduate of another university or institution of higher education recognised by the University of Adelaide and has a substantial association with the University; provided that in each case the graduate concerned has, in the opinion of the Faculty, had an adequate training in the mathematical sciences.
(c) No person shall be accepted as a candidate for the degree of Doctor of Science in the Faculty of Engineering, Computer and Mathematical Sciences before the expiration of five years from the date of his/her original graduation.
(a) A person who desires to become a candidate for the degree shall give notice of his/her intended candidature in writing to the Manager, Graduate Administration and Scholarships and with such notice shall furnish particulars of his/her achievements in the mathematical sciences and of the work which he/she proposes to submit for the degree.
(b) The Faculty of Engineering, Computer and Mathematical Sciences shall appoint a committee to examine the information submitted and to advise the Faculty on whether the Faculty should
(i) allow the applicant to proceed, and approve the subject or subjects of the work to be submitted
or
(ii) advise the applicant not to submit his/her work: and the Faculty's decision shall be conveyed to the applicant.
(c) If it accepts the candidature and approves the subject or subjects of the work to be submitted the Faculty shall nominate examiners of whom one at least shall be an external examiner.
(a) To qualify for the degree the candidate shall furnish satisfactory evidence that he/she has made an original contribution of distinguished merit adding to the knowledge or understanding of any subject with which the Faculty is directly concerned.
(b) The degree shall be awarded primarily on a consideration of such of his/her published works as the candidate may submit for examination.
(c) The candidate in submitting his/her published works shall state generally in a preface and specifically in notes the main sources from which his/her information is derived and the extent to which he/she has availed himself of the work of others, especially where joint publications are concerned. He/she may also signify in general terms the portions of his/her work which he/she claims as original.
(d) The candidate is required to indicate what part, if any, of the work he/she has submitted for a degree in this or any other university.
4 The candidate shall lodge with the Adelaide Graduate Centre three copies of the work prepared in accordance with the directions given in sub-paragraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree two of the copies will be transmitted to the University Library.
5 A candidate who complies with the foregoing conditions and satisfies the examiners may, on the recommendation of the Faculty of Engineering, Computer and Mathematical Sciences, be admitted to the degree of Doctor of Science in the Faculty of Engineering, Mathematical and Computer Sciences.
6 Notwithstanding anything contained in the preceding rules, the Faculty may recommend the award of the degree to any person who is not a member of the staff of the University. Any such recommendation must be
accompanied by evidence that the person for whom the award is proposed has made an original and substantial contribution of distinguished merit to the knowledge or understanding of a subject with which the Faculty is directly concerned, of a standard not less than required by regulation 3.

For further information please contact the Adelaide Graduate Centre.

Regulations allowed 28 February, 1974.
Amended: 15 Jan. 1976: 6; 4 Feb. 1982: 2, 4; 21 Feb. 1991: 1. Rule approved and Regulation repealed 18 March 1999.

## Education Centre for Innovation and Commercialisation (ECIC) - Graduate Attributes

- Knowledge and understanding of the content and techniques of a chosen discipline at advanced levels that are internationally recognised.
- The ability to locate, analyse, evaluate and synthesise information from a wide variety of sources in a planned and timely manner.
- An ability to apply effective, creative and innovative solutions, both independently and cooperatively, to current and future problems.
- Skills of a high order in interpersonal understanding, teamwork and communication.
- A proficiency in the appropriate use of contemporary technologies.
- A commitment to continuous learning and the capacity to maintain intellectual curiosity throughout life.
- A commitment to the highest standards of professional endeavour and the ability to take a leadership role in the community.
- An awareness of ethical, social and cultural issues and their importance in the exercise of professional skills and responsibilities.


# Faculty of Humanities and Social Sciences 

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+ Note:: Not offered in 2006* Note: No intake into these programs in 2006


## Postgraduate awards in the Faculty of Humanities and Social Sciences

- Professional Certificate in Art History
- Le Cordon Bleu Professional Certificate in Gastronomy
- Graduate Certificate in Applied Linguistics
- Graduate Certificate in Art History
- Graduate Certificate in Creative Writing
- Graduate Certificate in Environmental Studies
- Le Cordon Bleu Graduate Certificate in Gastronomy
- Graduate Certificate in International Environmental Management
- Graduate Certificate in International Studies
- Graduate Certificate in Population Studies
- Graduate Certificate in Spatial Information Science
- Graduate Diploma in Applied Linguistics
- Graduate Diploma in Art History
- Graduate Diploma in Creative Writing
- Graduate Diploma in Environmental Studies
- Le Cordon Bleu Graduate Diploma in Gastronomy
- Graduate Diploma in International Environmental Management
- Graduate Diploma in International Studies
- Graduate Diploma in Population and Migration Studies
- Graduate Diploma in Spatial Information Science
- Master of Arts
- Master of Arts (Applied Linguistics)
- Master of Arts (Creative Writing)
- e Cordon Bleu Master of Arts (Gastronomy)
- Master of Arts (International Studies)
- Master of Arts (Population and Migration Studies)
- Master of Arts (Studies in Art History)
- Master of Environmental Studies
- Master of International Environmental Management
- Master of Spatial Information Science
- Doctor of Letters


## 1. Duration of program

To qualify for the Professional Certificate, a candidate shall satisfactorily complete one semester of part-time study or the equivalent in intensive mode.

2 Admission
2.1 An applicant for admission to the academic program for the Professional Certificate in Art History shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may accept as a candidate for the Professional Certificate a person who does not satisfy the requirements of Rule 2.1 above but who presents evidence of professional experience appropriate to undertake work for the Professional Certificate.

### 2.3 Articulation with other awards

2.3.1 Students who complete this academic program are also eligible to apply for entry to the Graduate Certificate in Art History and be granted status for the work they have undertaken in the Professional Certificate.
2.3.2 Students who have conferred upon them the award of Professional Certificate in Art History who subsequently satisfy the requirements of the Graduate Certificate, Graduate Diploma or Master of Arts (Studies in Art History) must surrender their Professional Certificate before being admitted to the higher award.
2.3.3 A candidate for the Graduate Certificate, Graduate Diploma or Master of Arts (Studies in Art History) who does not complete the requirements for the higher award but satisfies the requirements for the Professional Certificate may be admitted to the Professional Certificate.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any subject for the Professional Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 A candidate shall not be eligible to submit work for assessment unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

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Qualifications requirements

### 4.1 Academic program

To qualify for the Professional Certificate, a candidate shall satisfactorily complete one course from the program in Art History, as listed below.
ARTH 5200 Studies in European Paintings Connoisseurship 6

ARTH 5201 Studies in Australian Colonial Art 6
ARTH 5202 Studies in Asian Art 6
ARTH 5203 Studies in Australian Art 6
ARTH 5204 Studies in European Art
Since the Renaissance
ARTH 5208 Studies in Contemporary Art 6
ARTH 5209 Studies in Australian Indigenous Art 6
ARTH 5210 Studies in British Art 6
ARTH 5211 Studies in Decorative Arts 6
ARTH 5212 Studies in Japanese Art 6
ARTH 5213 Studies in South-East Asian Art 6
ARTH 5214 Studies in Modern Art 6

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Le Cordon Bleu Professional Certificate in Gastronomy

## Academic Program Rules

## 1 Duration of program

To qualify for the Professional Certificate, a candidate shall satisfactorily complete one semester of part-time study or the equivalent in intensive mode.

2 Admission
2.1 An applicant for admission to the academic program for the Professional Certificate in Gastronomy shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may accept as a candidate for the Professional Certificate a person who does not satisfy the requirements of Rule 2.1 above but who presents evidence of professional experience appropriate to undertake work for the Professional Certificate.

### 2.3 Articulation with other awards

2.3.1 Students who complete this academic program are also eligible to apply for entry to the Graduate Certificate in Gastronomy and be granted status for the work they have undertaken in the Professional Certificate.
2.3.2 Students who have conferred upon them the award of Professional Certificate in Gastronomy who subsequently satisfy the requirements of the Graduate Certificate, Graduate Diploma or Master of Arts (Gastronomy) must surrender their Professional Certificate before being admitted to the higher award.
2.3.3 A candidate for the Graduate Certificate, Graduate Diploma or Master of Arts (Gastronomy) who does not complete the requirements for the higher award but satisfies the requirements for the Professional Certificate may be admitted to the Professional Certificate.

## 3 Assessment and examination

3.1 There shall be four classifications of pass in any subject for the Professional Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 A candidate shall not be eligible to submit work for assessment unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Professional Certificate, a candidate shall satisfactorily complete the following course:

GAST 5300 Principles of Gastronomy

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: Students who commenced the Graduate Certificate prior to 2005, and have yet to complete the requirements of the program, should contact the Faculty of Humanities and Social Sciences office for enrolment and qualifications advice.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete one semester of full-time study or not more than one year of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Certificate in Applied Linguistics shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this program are also eligible to apply for entry to the Graduate Diploma in Applied Linguistics program, and be granted status for the work they have undertaken in the Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in Applied Linguistics who subsequently satisfy the requirements of the Graduate Diploma must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Graduate Diploma in Applied Linguistics who satisfies the requirements for the Graduate Certificate but who does not complete the requirements for the Graduate Diploma may be admitted to the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units, chosen from the following:
LING 5001 Computer Assisted Language Learning - CALL

LING 5004 Language and Meaning 6
LING 5008 Language and the Environment 6
LING 5009 Language Teaching in Specific Settings 6
LING 5010 English for Academic Purposes 6
LING 5011 Language and Learning 6
LING 5030 Language and Communication Planning 6
LING 5059 Special Topic in Linguistics 6
4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete one semester of full-time study or not more than one year of part-time study.

2 Admission
2.1 An applicant for admission to the academic program for the Graduate Certificate in Art History shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean of the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this academic program are also eligible to apply for entry to the Graduate Diploma in Art History and be granted status for the work they have undertaken in the Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in Art History who subsequently satisfy the requirements of the Graduate Diploma must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Graduate Diploma in Art History who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

### 4.1.1 Core courses

One course from the following:
ARTH 5202 Studies in Asian Art
ARTH 5203 Studies in Australian Art 6

ARTH 5204 Studies in European Art
Since the Renaissance 6

### 4.1.2 Elective courses <br> One course from the following:

ARTH 5200 Studies in European Paintings Connoisseurship 6

ARTH 5201 Studies in Australian Colonial Art 6
ARTH 5208 Studies in Contemporary Art 6
ARTH 5209 Studies in Australian Indigenous Art 6
ARTH 5210 Studies in British Art 6

| ARTH 5211 Studies in Decorative Arts | 6 |
| :--- | :--- |
| ARTH 5212 Studies in Japanese Art | 6 |
| ARTH 5213 Studies in South-East Asian Art | 6 |
| ARTH 5214 Studies in Modern Art | 6 |

4.1.3 Students may also present another core course from those listed in 4.1.1 as an elective.

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: No Intake into this program in 2006.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete one semester of full-time study or not more than one year of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Certificate in Creative Writing shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University, and present a suitable portfolio of creative writing. Selection into the program is based on previous academic achievement and assessment of the portfolio of creative writing.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this program are also eligible to apply for entry to the Graduate Diploma in Creative Writing program, and be granted status for the work they have undertaken in the Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in Creative Writing who subsequently satisfy the requirements of the Graduate Diploma must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Graduate Diploma in Creative Writing who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements

### 4.1 Academic Program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

All candidates shall complete
ENGL5001 Work in Progress
ENGL5002 Creative Writing Study A

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: No Intake into this program in 2006.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete one semester of full-time study or not more than one year of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Certificate in Environmental Studies shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 A candidate who fails a course and is allowed to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this program are also eligible to apply for entry to the Graduate Diploma in Environmental Studies program, and be granted status for the work they have undertaken in the Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in Environmental Studies who subsequently satisfy the requirements of the Graduate

Diploma must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Graduate Diploma in Environmental Studies who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to be assessed, by examination or otherwise, shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

### 4.1.1 Core course

ENVT5036 Principles of Environmentalism

### 4.1.2 Elective courses

All candidates shall complete an elective course from the following:
ENVT5012 Environmental Information Systems 6
ENVT5013 Biodiversity Conservation 6
ENVT5018 Environmental Impact Assessment 6
ENVT 5023 Contested Country:
Managing the Australian Landscape

| ENVT5025 Environmental Professional Internship | 6 |
| :--- | :--- |
| ENVT5030 Environmental Policy | 3 |
| ENVT5037 Special Topic in Environmental Studies | 6 |
| ENVT5039 Sustainable Tourism Management | 6 |
| ENVT5040 Australian Landscape Evolution | 6 |
| ENVT5042 Environmental History | 6 |
| ENVT5043 Environmental Communication | 6 |
| ENVT5061 Integrated Coastal Management | 6 |
| ENVT5090 Environmental Security | 6 |
| GEOG5047 Resource Management in |  |
| Asia and the Pacific | 6 |
| GEOG 5048 Biodiversity and Environmental Change | 6 |
| ENVT 5059 Global Landscapes | 6 |
| GEOG 5067 Population and the Environment | 6 |

4.1.3 Where the core course is not available in a given semester, students may, in consultation with the program coordinator, substitute an additional elective course to satisfy the requirements of the Certificate.

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## 1 Duration of program

To qualify for the Graduate Certificate, an oncampus candidate shall normally complete the program in one semester, based on a study load of 24 units per year. An online candidate shall normally complete the program in one year, based on a study load of 12 units per year.

## 2 Admission

2.1 An applicant for admission to the academic program for the Graduate Certificate in Gastronomy shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean of the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this academic program are also eligible to apply for entry to the Graduate Diploma in Gastronomy and be granted status for the work they have undertaken in the Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in Gastronomy who subsequently
satisfy the requirements of the Graduate Diploma must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Graduate Diploma in Gastronomy who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

### 4.1.1 Core courses

All candidates shall complete the following courses:
GAST 5300 Principles of Gastronomy 6
GAST 5301 Food and Drink
in Contemporary Western Society

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

This program is offered jointly with the United Nations Environment Program, and is currently available to students enrolled through the Ngee Ann-Adelaide Education Centre only. Please note there will be no intake into this program in 2006.

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete one semester of full-time study or not more than one year of part-time study.

2 Admission
2.1 An applicant for admission to the course of study for the Graduate Certificate in International Environmental Management shall have qualified for a degree of the University or for a degree of another university or institution accepted for the purpose by the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a student for the Graduate Certificate a person who does not hold a degree of a tertiary institution but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of the Faculty concerned, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this academic program are also eligible to apply for entry to the Graduate Diploma in International Environmental Management and be granted status for the work they have undertaken in the Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in International Environmental Management who subsequently satisfy the requirements of the Graduate Diploma must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Graduate Diploma in International Environmental Management who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate in International Environmental Management, a candidate shall satisfactorily complete courses to the value of 12 units chosen from the following:
ENVT5001NA Environmental Audit 3
ENVT5010NA Environmental Impact Assessment 3
ENVT5013NA Biodiversity Conservation 3
ENVT5014 NA Environmental Management Challenge

| ENVT5016 NA Environmental Management Systems | 3 |
| :--- | :--- |
| ENVT5019NA Environmental Project Management | 3 |
| ENVT5033NA Issues in Sustainable Development | 3 |
| ENVT5035NA Cleaner Production | 3 |
| ENVT5038NA Special Study in |  |
| Environmental Management | 3 |
| ENVT5060NA Environmental Futures | 3 |
| GISC 5009NA Introduction to |  |
| Spatial Information Systems | 3 |

4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete one semester of full-time study or not more than one year of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Certificate in International Studies shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this program are also eligible to apply for entry to the Graduate Diploma in International Studies program, and be granted status for the work they have undertaken in the Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in International Studies who subsequently satisfy the requirements of the Graduate Diploma must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Graduate Diploma in International Studies who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate a candidate shall satisfactorily complete courses to the value of 12 units as follows:

### 4.1.1 Core course

One from:
INST 5000 Approaches and Issues
in International Studies
INST5001 International Politics
in the Post Cold War World

### 4.1.2 Elective courses <br> One of the following courses:

INST5002 International Studies Option 6
PHIL 5000 Applied Ethics 6
Students may present an additional core course as an elective.
4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: Not offered in 2006.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete one semester of full-time study or not more than one year of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Graduate Certificate in Population Studies shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this program are also eligible to apply for entry to the Graduate Diploma in Population and Migration Studies program, and be granted status for the work they have undertaken in the Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in Population Studies who subsequently satisfy the requirements of the Graduate

Diploma in Population and Migration Studies must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Graduate Diploma in Population and Migration Studies who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units as follows:

### 4.1.1 Core course <br> GEOG5068 Population Data Analysis

### 4.1.2 Elective courses <br> Once course from the following:

GEOG5049 Applied Demography
GEOG5054 Demography of the Family 6
GEOG5059 Global International Migration 6
GEOG5089 Population Studies 6
4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: No Intake into this program in 2006.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete one semester of full-time study or not more than one year of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Graduate Certificate in Spatial Information Science shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this program are also eligible to apply for entry to the Graduate Diploma in Spatial Information Science program, and be granted status for the work they have undertaken in the Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in Spatial Information Science who subsequently satisfy the requirements of the Graduate

Diploma must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Graduate Diploma in Spatial Information Science who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to a total of 12 units, as follows:
GISC 5008 Introduction to Spatial Data Models 3
GISC 5009 Introduction to Spatial Information Systems 3
GISC 5013 Spatial Data Modelling $\&$ Analysis 3
GISC 5014 Spatial Data Visualisation 3
Alternative courses may be made available as appropriate, depending on students' previous study or employment history.
GISC 5015 Special Topic in Spatial Data Models
GISC 5016 Special Topic in Spatial Data Modelling and Analysis

GISC 5018 Special Topic in Spatial Information Systems
4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## 1 Duration of program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete one year of full-time study or no more than two years of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Diploma in Applied Linguistics shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status, except for those candidates who have completed the Graduate Certificate in Applied Linguistics. (see Rule 2.4 below).
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Graduate Diploma in Applied Linguistics who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Applied Linguistics and who subsequently satisfies the requirements for the Graduate Diploma must
surrender the Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the degree of Master of Arts (Applied Linguistics) who does not complete the requirements of the degree, but who satisfies the requirements for the Graduate Diploma may be admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to the value of 24 units, chosen from the following:
LING5001 Computer Assisted Language
Learning - CALL
LING 5004 Language and Meaning 6
LING5008 Language and the Environment 6
LING5009 Language Teaching in Specific Settings 6
LING5010 English for Academic Purposes 6
LING 5011 Language and Learning 6
LING5030 Language and Communication Planning 6
LING5059 Special Topic in Linguistics 6
4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete one year of full-time study or no more than two years of part-time study.

2 Admission
2.1 An applicant for admission to the academic program for the Graduate Diploma in Art History shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status, except for those candidates who have completed the Graduate Certificate in Art History.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean of the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Graduate Diploma in Art History who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Art History and who subsequently satisfies the requirement of the Graduate Diploma must surrender
the Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the degree of Master of Arts (Studies in Art History) who satisfies the requirements for the Graduate Diploma but who does not complete the requirements of the degree may be admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to the value of 24 units, as follows:

### 4.1.1 Core courses

One course from the following:
ARTH 5202 Studies in Asian Art
ARTH 5203 Studies in Australian Art 6
ARTH 5204 Studies in European Art
Since the Renaissance

### 4.1.2 Elective courses

Three courses from the following:
ARTH 5200 Studies in European Paintings Connoisseurship
ARTH 5201 Studies in Australian Colonial Art
6

| ARTH 5206 Art Museum Internship | 6 |
| :--- | :--- |
| ARTH 5207 Curatorial Placement | 6 |
| ARTH 5208 Studies in Contemporary Art | 6 |
| ARTH 5209 Studies in Australian Indigenous Art | 6 |
| ARTH 5210 Studies in British Art | 6 |
| ARTH 5211 Studies in Decorative Arts | 6 |
| ARTH 5212 Studies in Japanese Art | 6 |
| ARTH 5213 Studies in South-East Asian Art | 6 |
| ARTH 5214 Studies in Modern Art | 6 |

4.1.3 Students may also present another core course from those listed in 4.1.1 as an elective.
4.1.4 Students may present only one of the Art Museum Internship or the Curatorial Project for the Graduate Diploma.

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## 1 Duration of program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete one year of full-time study or no more than two years of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Diploma in Creative Writing shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University, and present a suitable portfolio of creative writing. Selection into the program is based on previous academic achievement and assessment of the portfolio of creative writing.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status, except for those candidates who have completed the Graduate Certificate in Creative Writing (see Rule 2.4 below).
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Graduate Diploma in Creative Writing who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Creative Writing and who subsequently satisfies the requirements for the Graduate Diploma must surrender the Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the degree of Master of Arts (Creative Writing) who does not complete the requirements of the degree, but who satisfies the requirements for the Graduate Diploma may be admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to the value of 24 units, as follows:
ENGL5001 Work in Progress 8
ENGL5002 Creative Writing Study A 4
ENGL5003 Creative Writing Study B 4
ENGL5004 Advanced Work in Progress 8

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Diploma in Environmental Studies

Note: No Intake into this program in 2006.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete one year of full-time study or no more than two years of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Diploma in Environmental Studies shall have qualified for a degree of the University or for a degree of another institution accepted for the purpose by the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a student for the Graduate Diploma a person who does not hold a degree of a tertiary institution but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status, except for those candidates who have completed the Graduate Certificate in Environmental Studies (see Rule 2.4 below).
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Graduate Diploma who satisfies the requirements for the Graduate Certificate but does not complete the requirements of the Graduate Diploma may be admitted to the Graduate Certificate.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Environmental Studies and who subsequently satisfies the requirements for the Graduate Diploma must surrender the Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the degree of Master of Environmental Studies who does not complete the requirements of the degree, but who satisfies the requirement for the Graduate Diploma may be admitted to the Graduate Diploma.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma a candidate shall satisfactorily complete courses to the value of 24 units, as follows:

### 4.1.1 Core course

ENVT5036 Principles of Environmentalism

### 4.1.2 Elective courses

All candidates shall complete elective courses to the value of 18 units selected from the following:

ENVT5012 Environmental Information Systems 6
ENVT5013 Biodiversity Conservation 6

ENVT5018 Environmental Impact Assessment 6

ENVT 5023 Contested Country:
Managing the Australian Landscape 6
ENVT5025 Environmental Professional Internship 6
ENVT5030 Environmental Policy 6
ENVT5037 Special Topic in Environmental Studies 6
ENVT5039 Sustainable Tourism Management 6
ENVT5040 Australian Landscape Evolution 6
ENVT5042 Environmental History 6
ENVT5043 Environmental Communication 6
ENVT5061 Integrated Coastal Management 6
ENVT5090 Environmental Security 6
GEOG5047 Resource Management in Asia
and the Pacific
GEOG5048 Biodiversity \& Environmental Change 6
ENVT 5059 Global Landscapes 6
GEOG5067 Population and the Environment 6
4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## 1 Duration of program

To qualify for the Graduate Diploma, an oncampus candidate shall normally complete the program in one year, based on a study load of 24 units per year. An online candidate shall normally complete the program in two years, based on a study load of 12 units per year.

## 2 Admission

2.1 An applicant for admission to the academic program for the Graduate Diploma in Gastronomy shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award other than the Graduate Certificate in Gastronomy.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status, except for those individuals who have completed the Graduate Certificate in Gastronomy.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean of the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Graduate Diploma in Gastronomy who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Gastronomy and who subsequently satisfies the requirements for the Graduate Diploma must surrender the Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the degree of Master of Arts (Studies in Gastronomy) who satisfies the requirements for the Graduate Diploma but who does not complete the requirements of the Master degree may be admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to the value of 24 units, as follows:

### 4.1.1 Core courses

All candidates shall complete the following core courses:
GAST 5300 Principles of Gastronomy
GAST 5301 Food and Drink
in Contemporary Western Society
GAST 5302 Gastronomy and Communication 6

### 4.1.2 Elective courses

All candidates shall complete one of the following elective courses:

GAST 5303 Gastronomic Tourism
GAST 5304 Food and Wine Technology
GAST 5305 Asian Food History and Culture

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

This program is offered jointly with the United Nations Environment Program, and is currently available to students enrolled through the Ngee Ann- Adelaide Education Centre and Research Centre for Eco-Environmental Sciences only. Please note there will be no intake into this program in 2006.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete one year of full-time study or not more than two years of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Diploma in International Environmental Management shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status, except for those candidates who have completed the Graduate Certificate in International Environmental Management (see Rule 2.4 below).
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Graduate Diploma in International Environmental Management who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.
2.4.2 A candidate who has been admitted to the Graduate Certificate in International Environmental Management and who subsequently satisfies the requirements for the Graduate Diploma in International Environmental Management must surrender the Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the degree of Master of International Environmental Management who does not complete the requirements of the degree, but who satisfies the requirements for the Graduate Diploma may be admitted to the Graduate Diploma.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

### 4.1 Academic program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to the value of 24 units, chosen from the following:
ENVT5001NA Environmental Audit 3
ENVT5010NA Environmental Impact Assessment 3
ENVT5013NA Biodiversity Conservation 3
ENVT5014NA Environmental Management Challenge 3
ENVT5016NA Environmental Management Systems 3
ENVT5019NA Environmental Project Management 3
ENVT5033NA Issues in Sustainable Development 3
ENVT5035NA Cleaner Production 3
ENVT5038NA Special Study in
Environmental Management
ENVT5060NA Environmental Futures 3
GISC 5009NA Introduction to
Spatial Information Systems

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## 1 Duration of program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete one year of full-time study or not more than two years of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Diploma in International Studies shall have qualified for a degree of the University, or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status, except for those candidates who have completed the Graduate Certificate in International Studies (see Rule 2.4 below).
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for Graduate Diploma in International Studies who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.
2.4.2 A candidate who has been admitted to the Graduate Certificate in International Studies and who subsequently satisfies the requirements for the Graduate Diploma must surrender the Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the degree of Master of Arts (International Studies) who does not complete the requirements of that degree, but who satisfies the requirements for the Graduate Diploma may be admitted to the Graduate Diploma.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to the value of 24 units, chosen from the following:
INST5000 Approaches and Issues
in International Studies
INST5001 International Politics
in the Post Cold War World 6
INST5002 International Studies Option* 6
PHIL 5000 Applied Ethics 6

* This course can be taken twice towards the degree, with a different topic recorded for each attempt.
4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: Not offered in 2006.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete one year of full-time study or not more than two years of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Diploma in Population and Migration Studies shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status, except for those candidates who have completed the Graduate Certificate in Population Studies (see Rule 2.4 below).
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Graduate Diploma in Population and Migration Studies who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate in Population Studies may be admitted to the Graduate Certificate.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Population and Migration Studies and who subsequently satisfies the requirements for the Graduate Diploma must surrender the Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the degree of Master of Arts (Population and Migration Studies) who does not complete the requirements of the degree, but who satisfies the requirements for the Graduate Diploma may be admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to the value of 24 units:

### 4.1.1 Core courses

GEOG5068 Population Data Analysis 6

GEOG5089 Population Studies 6
4.1.2 Elective courses

12 units selected from the following:
GEOG5049 Applied Demography 6

GEOG5054 Demography of the Family 6
GEOG5059 Global International Migration 6
GEOG5067 Population and the Environment 6
4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: No Intake into this program in 2006.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete one year of full-time study or not more than two years of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Diploma in Spatial Information Science shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University. Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status, except for those candidates who have completed the Graduate Certificate in Spatial Information Science (see Rule 2.4 below).
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Graduate Diploma in Spatial Information Science who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Spatial Information Science and who subsequently satisfies the requirements for the Graduate Diploma must surrender the Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the degree of Master of Spatial Information Science who does not complete the requirements of the degree, but who satisfies the requirements for the Graduate Diploma may be admitted to the Graduate Diploma.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to a total of 24 units, as follows:
4.1.1 Core courses

GISC 5008 Introduction to Spatial Data Models
3
GISC 5009 Introduction to Spatial Information Systems
GISC 5011 Research Project SIS
3

GISC 5013 Spatial Data Modelling \& Analysis 3
GISC 5014 Spatial Data Visualisation 3

### 4.1.2 Elective courses

6 units selected from the following
GISC 5001 Advanced Raster Analysis 3
GISC 5006 Field Sampling Techniques 3
GISC 5010 New Technologies in GIS 3
GISC 5012 Social Applications in GIS 3
GISC 5015 Special Topic in Spatial Data Models 3
GISC 5016 Special Topic in Spatial Data Modeling and Analysis
Alternative courses may be made available as appropriate, depending on students' previous study or employment history.
4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Arts

## Academic Program Rules

1 General
1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.

These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.
In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

2 Admission
2.1 Further to Rule 4.1 of the General Academic Program Rules, an Honours degree in the respective discipline or approved cognate discipline, at IIA or higher, will normally be required for admission to the degree of Master of Arts.

### 2.2 Submission of thesis

Further to Rule 8.3 of the General Academic Program Rules, the degree of Master of Arts shall not be awarded on the basis of a portfolio of publications in lieu of a research thesis.

## Master of Arts (Applied Linguistics)

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete one and a half years of full-time study or not more than three years of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the degree of Master of Arts (Applied Linguistics) shall have:
(a) qualified for a degree of the University, at an appropriate standard, or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University or
(b) qualified for a Graduate Diploma in Applied Linguistics at a Credit level or higher.

Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 12 units of status, except for those candidates who have completed the Graduate Diploma in Applied Linguistics (see Rule 2.3 below).
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Arts (Applied Linguistics) who does not complete the requirements for the Masters
degree but satisfies the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Diploma in Applied Linguistics and who subsequently satisfies the requirements for the Master of Arts (Applied Linguistics) must surrender the Graduate Diploma before being admitted to the Masters degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the degree of Master of Arts (Applied Linguistics): Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.4 A candidate shall complete the coursework component of the degree with a credit average, before proceeding to the research component of the degree. A candidate who is not eligible to undertake the research component, but has satisfied the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.

4 Qualification requirements

### 4.1 Academic program

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 36 units, comprising courses to the value of 24 units chosen from the list below, and the Dissertation:

LING5001 Computer Assisted Language Learning - CALL

LING5004 Language and Meaning 6

LING5008 Language and the Environment

| LING5009 Language Teaching in Specific Settings | 6 |
| :--- | :--- |
| LING5010 English for Academic Purposes | 6 |
| LING5011 Language and Learning | 6 |
| LING5030 Language and Communication Planning | 6 |
| LING5059 Special Topic in Linguistics | 6 |

4.1.1 No candidate will be permitted to count for the award any course that, in the opinion of the Faculty, contains substantially the same material as any other course which he or she has already presented for another award.

### 4.1.2 Dissertation

All candidates shall complete either the full-time or the part-time version of the dissertation:
LING5501 Dissertation in Linguistics (F/T)
or
LING5502 A/B Dissertation in Linguistics (P/T)
4.2 To be eligible to have the degree conferred, candidates are required to provide three bound copies of the dissertation to the Faculty, after it has been passed and accepted for the degree.
4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Postgraduate Programs in Applied Linguistics - Graduate Attributes

Within the Faculty of Humanities and Social Sciences, the Discipline of Linguistics provides a context for graduates in Applied Linguistics to take personal responsibility for developing the following attributes:

- A knowledge of the cultural nature of language and the role of language in human communication.
- A specialised understanding of selected topics in Applied Linguistics related to communication in society and language education.
- The ability to identify characteristic language features of social practices.
- The skills to analyse in a principled way different texts and the rhetorical effects of linguistic choices.
- The skills to plan and conduct applied linguistic research into language practices, applying appropriate research procedures.
- An understanding of ethical issues in professional contexts and in the wider community.
- An awareness of linguistic diversity and cross-cultural communication.
- An understanding of language policy, language planning and related social justice issues.


## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising two years of fulltime study or not more than four years of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the degree of Master of Arts (Creative Writing) shall
(a) have qualified for the Graduate Diploma in Creative Writing at a standard acceptable to the School or have qualified for a degree of the University, at an appropriate standard in an approved field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University and
(b) have presented a suitable portfolio of creative writing.

Selection into the program is based on previous academic achievement and assessment of the portfolio of creative writing.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 12 units of status, except for those candidates who have completed the Graduate Diploma in Creative Writing (see Rule 2.4 below).
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean of the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Arts (Creative Writing) who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Diploma in Creative Writing and who subsequently satisfies the requirements for the Master of Arts (Creative Writing) must surrender the Graduate Diploma before being admitted to the Master degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.4 A candidate shall complete the coursework component of the degree with a Credit average, before proceeding to the research component of the degree. A candidate who is not eligible to undertake the research component, but has satisfied the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the degree of Master of Arts (Creative Writing), a candidate shall satisfactorily complete courses to the value of 48 units, as follows:

### 4.1.1 Core courses

All candidates shall complete the following courses:
ENGL 5001 Work in Progress 8
ENGL5002 Creative Writing Study A 4
ENGL5003 Creative Writing Study B 4
ENGL5004 Advanced Work in Progress 8
4.1.2 Dissertation

All candidates shall complete the following course:
ENGL5500 A/B Creative Writing Dissertation
4.2 To be eligible to have the degree conferred, candidates are required to provide three bound copies of the dissertation to the Faculty, after it has been passed and accepted for the degree.

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Postgraduate Programs in Creative Writing - Graduate Attributes

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates of the Master of Arts in Creative Writing Program take personal responsibility for developing the following attributes:

- The ability to think creatively and critically.
- The ability to communicate concepts and ideas effectively through writing and discussion.
- Specialised knowledge of creative techniques in relation to a chosen genre.
- A broad knowledge of contemporary writing through directed and self-directed reading.
- The skills and discipline to research, synthesise, and integrate information into a creative form.
- The ability to set appropriate goals and work to a deadline.
- The ability to work independently and cooperatively.
- An understanding of ethical issues in the writing profession.
- The ability to revise and edit written manuscripts.
- A broad understanding of contemporary publishing issues and opportunities.


## Le Cordon Bleu Master of Arts (Gastronomy)

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, an oncampus candidate shall normally complete the program in one and half years, based on a study load of 24 units per year. An online candidate shall normally complete the program in three years, based on a study load of 12 units per year.

## 2 Admission

2.1 An applicant for admission to the academic program for the degree of Master of Arts (Gastronomy) shall:
(a) have qualified for a degree of the University, at an appropriate standard in an approved field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University or
(b) have qualified for the Graduate Diploma in Gastronomy with results of at credit level or higher.

Selection into the program is based on previous academic achievement.
2.2 The Faculty may, course to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award other than the Graduate Diploma in Gastronomy (see Rule 2.4 below).
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 12 units of status, except for those candidates who have completed the Graduate Diploma in Gastronomy.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean of the Faculty again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Arts (Gastronomy) who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Diploma in Gastronomy and who subsequently satisfies the requirements for the Master of Arts (Gastronomy) must surrender the Graduate Diploma before being admitted to the Master degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.4 A candidate shall complete the coursework component of the degree with a credit average, before proceeding to the research component of the degree. A candidate who is not eligible to undertake the research component, but has satisfied the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 36 units, as follows:

### 4.1.1 Core courses

All candidates shall complete the following core courses:
GAST 5300 Principles of Gastronomy 6
GAST 5301 Food and Drink
in Contemporary Western Society
GAST 5302 Gastronomy and Communication 6

### 4.1.2 Elective courses

All candidates shall complete one of the following elective courses:

GAST 5303 Gastronomic Tourism
GAST 5304 Food and Wine Technology 6
GAST 5305 Asian Food History and Culture 6

### 4.1.3 Dissertation/Research Projects

All candidates shall complete either the full-time or the part-time version of the dissertation:

GAST 5530 Dissertation in Gastronomy F/T
GAST 5531 A/B Dissertation in Gastronomy P/T
or
two research projects to a total of 12 units:
GAST 5532 Research Project in Gastronomy A
GAST 5533 Research Project in Gastronomy B
4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Postgraduate Programs in Le Cordon Bleu Gastronomy <br> - Graduate Attributes

The Faculty of Humanities and Social Sciences facilitates an environment in which graduates of the Graduate Program in Gastronomy are encouraged to take personal responsibility for developing the following attributes:

- Broad general knowledge of the history and culture of food and drink.
- Specialised understanding in one or two chosen topics in this general area.
- An appreciation of their potential contribution to knowledge through engagement with the traditions and innovations in their fields of enquiry.
- The skills and discipline to research, synthesise, organise and present information, using a range of technologies as appropriate.
- Problem solving skills
- Analytic and critical skills
- The ability to argue from evidence
- The ability to think creatively
- The ability to communicate ideas effectively
- The ability to set appropriate goals and to work independently and/or cooperatively
- An understanding of the importance of lifelong learning
- An understanding of ethical issues in their professional and intellectual contexts
- An awareness of their potential leadership roles in the community of scholars and in the wider community
- An awareness of social justice issues.


## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising three semesters of full-time study or not more than three years of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the degree of Master of Arts (International Studies) shall:
(a) have qualified for a degree of the University, at an appropriate standard, or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University or
(b) have qualified for the Graduate Diploma in International Studies at Credit level or higher.
Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.
2.3 Status, exemption and credit transfer
2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 12 units of status, except for those candidates who have completed the Graduate Diploma in International Studies (see Rule 2.4 below).
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Arts (International Studies) who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.
2.4.2 A candidate who has been admitted to the of Graduate Diploma in International Studies and who subsequently satisfies the requirements for the Master of Arts (International Studies) must surrender the Graduate Diploma before being admitted to the Masters degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the degree of Master of Arts (International Studies): Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.4 A candidate shall complete the coursework component of the degree with a credit average, before proceeding to the research component of the degree. A candidate who is not eligible to undertake the research component, but has satisfied the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the degree of Master of Arts (International Studies), a candidate shall satisfactorily complete courses to the value of 36 units, as follows:

### 4.1.1 Core courses

All candidates shall satisfactorily complete courses to the value of 24 units, chosen from the following:

INST5000 Approaches and Issues
in International Studies
INST5001 International Politics in the Post Cold War World

INST5002 International Studies Option* 6
PHIL 5000 Applied Ethics 6

* This course can be taken twice towards the degree, with a different topic recorded for each attempt.


### 4.1.2 Dissertation

All candidates shall complete either the full-time or the part-time version of the dissertation:

INST5500 Dissertation in International Studies F/T 12
INST5501 A/B Dissertation in International Studies P/T
4.2 To be eligible to have the degree conferred, candidates are required to provide three bound copies of the dissertation to the Faculty, after it has been passed and accepted for the degree

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Postgraduate Programs in International Studies <br> - Graduate Attributes

The Faculty of Humanities and Social Sciences facilitates an environment in which postgraduate students in International Studies are encouraged to take personal responsibility for developing the following attributes:

- Advanced knowledge of theoretical approaches to, and thorough grounding in, International Studies.
- Familiarity with advanced debates in the field of International Studies.
- Knowledge of sub-themes of International Studies that are currently significant, including the places of international relations, politics of culture, political economy, security studies, international justice and ethics, and history.
- Greater sensitivity to inter-cultural understanding.
- Being better equipped for independent study and research work.
- Further development of effective communications skills.
- The nurturing of independent thought, creativity and critical judgement.
- Understanding of ethical issues in the field and within the broader national and international communities.


## Master of Arts (Population and Migration Studies)

Note: Not offered in 2006.

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising three semesters of full-time study or not more than three years of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the degree of Master of Arts (Population and Migration Studies) shall:
(a) have qualified for a degree of the University, at an appropriate standard, or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University or
(b) have qualified for a Graduate Diploma in Population and Migration Studies at a Credit level or higher.
(c) Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with the special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 12 units of status, except for those candidates who have completed the Graduate Diploma in Population and Migration Studies (see Rule 2.4 below).
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Arts (Population and Migration Studies) who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Diploma in Population and Migration Studies and who subsequently satisfies the requirements for the Master of Arts (Population and Migration Studies) must surrender the Graduate Diploma before being admitted to the Masters degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Master of Arts (Population and Migration Studies): Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.4 A candidate shall complete the coursework component of the degree with a Credit average, before proceeding to the research component of the degree. A candidate who is not eligible to undertake the research component, but has satisfied the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.

4 Qualification requirements
4.1 Academic program

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 36 units, as follows.

### 4.1.1 Core courses

All candidates shall complete the following courses:
GEOG 5068 Population Data Analysis 6
GEOG5089 Population Studies 6

### 4.1.2 Elective courses

All candidates shall complete elective courses to the value of 12 units selected from the following:

GEOG 5049 Applied Demography 6
GEOG5054 Demographyof the Family 6
GEOG 5059 Global International Migration 6
GEOG5067 Population and the Environment 6

### 4.1.3 Research project

All candidates shall complete either the full-time or the part-time version of the following course:

GEOG 5500 Research Project in
Population and Migration Studies F/T
or
GEOG 5501 A/B Research Project in
Population and Migration Studies $\mathrm{P} / \mathrm{T}$
4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Arts (Studies in Art History)

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a course of study comprising three semesters of full-time study or no more than three years of part-time study.

## 2 Admission

2.1 An applicant for admission to the academic program for the degree of Master of Arts (Studies in Art History) shall:
(a) have qualified for an Honours degree of the University at IIA level or higher, in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University or
(b) have qualified for the Graduate Diploma in Art History with results of at Distinction level or higher.

Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award other than the Graduate Diploma in Art History (see Rule 2.4 below).
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 12 units of status, except for those candidates who have completed the Graduate Diploma in Art History.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean of the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Arts (Studies in Art History) who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Diploma in Art History and who subsequently satisfies the requirements for the Master of Arts (Studies in Art History) must surrender the Graduate Diploma before being admitted to the Master degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.4 A candidate shall complete the coursework component of the degree with a Distinction average, before proceeding to the research component of the degree. A candidate who is not eligible to undertake the research component, but has satisfied the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.

## $4 \quad$ Academic Program requirements

### 4.1 Academic program

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 36 units, chosen as follows:

### 4.1.1 Core courses

One course from the following:
ARTH 5202 Studies in Asian Art 6
ARTH 5203 Studies in Australian Art 6
ARTH 5204 Studies in European Art
Since the Renaissance
4.1.2 Elective courses

Three courses from the following:
ARTH 5200 Studies in European Paintings Connoisseurship6

ARTH 5201 Studies in Australian Colonial Art 6
ARTH 5206 Art Museum Internship 6
ARTH 5207 Curatorial Placement 6
ARTH 5208 Studies in Contemporary Art 6
ARTH 5209 Studies in Australian Indigenous Art 6
ARTH 5210 Studies in British Art 6
ARTH 5211 Studies in Decorative Arts 6
ARTH 5212 Studies in Japanese Art 6
ARTH 5213 Studies in South-East Asian Art 6
ARTH 5214 Studies in Modern Art 6
4.1.3 Students may also present another core course from those listed in 4.1.1 as an elective.
4.1.4 Students may present only one of the Art Museum Internship or Curatorial Project for the degree.
4.1.5 Dissertation/Research Project

All candidates shall complete either the full-time or the part-time version of the dissertation:

ARTH 5520 Research Project in Art History F/T
ARTH 5521 A/B Research Project in Art History P/T12
4.2 To be eligible to have the degree conferred candidates are required to provide three bound copies of the dissertation to the Faculty, after it has been passed and accepted for the degree.

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Postgraduate Programs in Art History - Graduate Attributes

The Faculty of Humanities and Social Sciences facilitates an environment in which postgraduates students in Art History are encouraged to take personal responsibility for developing the following attributes:

- Broad general knowledge of art history and culture and of art museums and collections.
- Specialised understanding in four Gradate Diploma course areas and in the MA coursework thesis topic area.
- An appreciation of their potential contribution to knowledge through engagement with the traditions and innovations in art Historical scholarship and curatorial practice.
- The skills and discipline to research, synthesise, organise and present information, using a range of technologies as appropriate.
- Problem solving skills including visual problem solving skills.
- Analytic and critical skills.
- The ability to argue from evidence.
- The ability to think creatively.
- The ability to communicate written and verbal ideas effectively.
- The ability to set appropriate goals and to work independently and/or cooperatively.
- An understanding of the importance of lifelong learning.
- An understanding of ethical issues in their professional and intellectual contexts including the gallery/museum situation.
- An awareness of their potential leadership roles in the community of scholars and in the wider visual arts community.
- An awareness of social justice issues.


## Master of Environmental Studies

Note: No Intake into this program in 2006.

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising three semesters of full-time study or not more than three years of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Master of Environmental Studies degree must have:
(a) qualified for a degree from the University, at an appropriate standard in a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University or
(b) completed the Graduate Diploma in Environmental Studies at Credit level or higher.

Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 12 units of status, except for those candidates who have completed the Graduate Diploma in Environmental Studies (see Rule 2.4 below).
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Environmental Studies who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Diploma in Environmental Studies and who subsequently satisfies the requirements for the Master of Environmental Studies must surrender the Graduate Diploma before being admitted to the Master degree.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.4 A candidate shall complete the coursework component of the degree with a credit average, before proceeding to the research component of the degree. A candidate who is not eligible to undertake the research component, but has satisfied the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.

4 Qualification requirements
4.1 Program of study

To qualify for for the degree of Master of Environmental Studies candidates shall complete a program of study to a total of 36 units as follows:

### 4.1.1 Core course

ENVT5036 Principles of Environmentalism

### 4.1.2 Elective courses

All candidates shall complete elective courses to the value of 18 units selected from the following:

ENVT5012 Environmental Information Systems 6
ENVT5013 Biodiversity Conservation 6
ENVT5018 Environmental Impact Assessment 6
ENVT 5023 Contested Country:
Managing the Australian Landscape 6
ENVT5025 Environmental Professional Internship 6
ENVT5030 Environmental Policy 6
ENVT5037 Special Topic in Environmental Studies 6
ENVT5039 Sustainable Tourism Management 6
ENVT5040 Australian Landscape Evolution 6
ENVT5042 Environmental History 6
ENVT5043 Environmental Communication 6
ENVT5090 Environmental Security 6
ENVT5061 Integrated Coastal Management 6
GEOG5047 Resource Management in
Asia and the Pacific
GEOG5048 Biodiversity \& Environmental Change 6
ENVT 5059 Global Landscapes 6
GEOG5067 Population and the Environment 6
4.1.3 Dissertation

All candidates shall complete one of the following courses:
ENVT5503 Environmental Research
Methodology and Project F/T
or
ENVT 5504 A/B Environmental Research Methodology and Project P/T
4.2 To be eligible to have the degree conferred, candidates are required to provide three bound copies of the dissertation to the Faculty, after the dissertation has been passed and accepted for the degree.
4.3 Unacceptable combination of courses

No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

This program is offered jointly with the United Nations Environment Program, and is currently available to students enrolled through the Ngee Ann - Adelaide Education Centre and Research Centre for Eco-Environmental Sciences only. Please note there will be no intake into this program in 2006.

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising three semesters of full-time study or not more than three years of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the degree of Master of International Environmental Management shall:
(a) have qualified for a degree of the University, at an appropriate standard, or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University.
(b) have qualified for the Graduate Diploma in International Environmental Management at credit level or higher.

Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 12 units of status, except for those candidates who have completed the Graduate Diploma in International Environmental Management (see Rule 2.4 below).
2.3.4 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of the Faculty, again complete the required
work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of International Environmental Management who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Diploma in International Environmental Management and who subsequently satisfies the requirements for the Master of International Environmental Management must surrender the Graduate Diploma before being admitted to the Master degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.4 A candidate shall complete the coursework component of the degree with a credit average, before proceeding to the research component of the degree. A candidate who is not eligible to undertake the research component, but has satisfied the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.

### 4.1 Academic program

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 36 units, chosen from the following:

### 4.1.1 Coursework

All candidates shall complete 24 units from the following:
ENVT5001NA Environmental Audit 3

ENVT5010NA Environmental Impact Assessment 3
ENVT5013NA Biodiversity Conservation 3
ENVT5014NA Environmental Management Challenge 3
ENVT5016NA Environmental Management Systems 3
ENVT5019NA Environmental Project Management 3
ENVT5033NA Issues in Sustainable Development 3
ENVT5035NA Cleaner Production 3
ENVT5038NA Special Study in
Environmental Management
ENVT5060NA Environmental Futures 3
GISC 5009NA Introduction to
Spatial Information Systems 3
4.1.2 Dissertation

All candidates shall complete either the full-time or the part-time version of the dissertation:

ENVT5500NA Dissertation
in Int.Environmental Management F/T
ENVT5502NA A/B Dissertation
in Int.Environmental Management $P / T$

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Postgraduate Programs in Environmental Studies <br> - Graduate Attributes

- Knowledge and understanding of internationally recognised best practice in environmental policy development, planning and management.
- The ability to develop environmental policy and plan and implement environmental management projects by identifying, analysing, evaluating and synthesising information from a wide variety of sources in an organised and efficient manner.
- The ability to apply effective, creative and innovative solutions to current and future environmental management problems.
- Skills in the use of collaborative (team-based) approaches to the development of environmental policy and the planning and implement environmental management projects.
- Skill in the written and oral presentation of ideas and information relevant to such projects, particularly in the preparation of reports and community education materials.
- Proficiency in the use of current information collection, compilation and analysis technologies relevant to environmental policy development, planning and management, including community consultation technologies.
- A commitment to continuous learning about the society/environment relationship, and the capacity to maintain intellectual curiosity about social and environmental issues throughout life.
- A commitment to the highest standards of professional endeavour in environmental policy development, planning and management, and the ability to take a leadership role in the community as an environmentally aware and concerned citizen.
- An awareness of the economic and cultural issues that impact on environmental issues and constitute the social context for environmental studies.
- An awareness of the importance of maintaining the highest ethical standards in the exercise of professional skills and responsibilities.


## Master of Spatial Information Science

Note: No Intake into this program in 2006.

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising three semesters of full-time study or not more than three years of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Master of Spatial Information Science degree must have:
(a) qualified for a degree from the University at an acceptable standard in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University or
(b) completed the Graduate Diploma in Spatial Information Science at Credit level or higher.

Selection into the program is based on previous academic achievement.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 12 units of status, except for those candidates who have completed the Graduate Diploma in Spatial Information Science (see Rule 2.4 below).
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Spatial Information Science who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.
2.4.2 A candidate who has been admitted to the of Graduate Diploma in Spatial Information Science and who subsequently satisfies the requirements for the Master of Spatial Information Science must surrender the Graduate Diploma before being admitted to the Master degree.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to to be assessed by examination or otherwise shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.4 A candidate shall complete the coursework component of the degree with a credit average, before proceeding to the research component of the degree. A candidate who is not eligible to undertake the research component, but has satisfied the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.

4 Qualification requirements

### 4.1 Academic program

To qualify for for the degree of Master of Spatial Information Science candidates shall complete a program of study to a total of 36 units as follows:

### 4.1.1 Core courses

GISC 5008 Introduction to Spatial Data Models 3
GISC 5009 Introduction to Spatial Information Systems 3
GISC 5011 Research Project SIS 6
GISC 5013 Spatial Data Modelling \& Analysis 3
GISC 5014 Spatial Data Visualisation 3

### 4.1.2 Elective courses

6 units selected from the following:
GISC 5001 Advanced Raster Analysis 3
GISC 5006 Field Sampling Techniques 3
GISC 5010 New Technologies in GIS 3
GISC 5012 Social Applications in GIS 3
GISC 5015 Special Topic in Spatial Data Models 3
GISC 5016 Special Topic in Spatial Data Modeling
and Analysis
Alternative courses may be made available as appropriate, depending on students' previous study or employment history.

### 4.1.3 Research project

All candidates shall complete either the full-time or the part-time version of the dissertation:
GISC 5501 Dissertation SIS F/T 12
GISC 5502 A/B Dissertation SIS P/T 12
4.2 To be eligible to have the degree conferred, candidates are required to provide three bound copies of the dissertation to the Faculty, after it has been passed and accepted for the degree.
4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

(a) The Faculty of Humanities and Social Sciences may accept as a candidate for the degree of Doctor of Letters a person who has qualified for any degree in the University of Adelaide.
(b) On the recommendation of the Faculty of Humanities and Social Sciences, the Board of Research Education and Development may accept as a candidate for the degree a person who
(i) has obtained in another university or tertiary institution a qualification accepted for the purpose by the University as equivalent to a degree of the University and
(ii) has, or has had, a substantial association with the University.
(c) No person may be admitted to the degree of Doctor of Letters until five years after the date on which he or she obtained the qualification prescribed in (a) or (b) (i) above.
(a) A person who desires to become a candidate for the degree shall give notice of the intended candidature in writing to the Manager, Graduate Administration and Scholarships and provide details of his or her scholarly achievements and of the work which he or she proposes to submit for the degree.
(b) The Faculty of Humanities and Social Sciences shall examine the information submitted and decide whether or not to allow the applicant to proceed.
(c) If the Faculty accepts the candidature it shall nominate examiners, at least two of whom shall be external examiners.
(a) To qualify for the degree the candidate shall provide satisfactory evidence that he or she has made an original and substantial contribution of distinguished merit to the knowledge or understanding of any discipline with which the Faculty is directly concerned.
(b) The degree shall be awarded primarily on consideration of his or her published works as a candidate submitted for examination, but the examiners may take into account any unpublished original work that he or she may submit in support of his or her candidature.
(c) The candidate in submitting his or her work shall, where applicable, state generally in a preface and specifically in notes the main sources from which his or her information is derived and the extent to which
he or she has availed him or herself of the work of others, especially where joint publications are concerned. He or she may also signify in general terms the portions of his or her work which he or she claims as original.
(d) The candidate shall indicate what part, if any, of his or her works has already been submitted for a degree in this or any other university.
The candidate shall lodge with the Adelaide Graduate Centre three copies of the works submitted for the degree, any unpublished work being prepared in accordance with the directions given in sub-paragraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree two of the copies will be transmitted to the University Library.
5 A candidate who complies with the conditions of the award and satisfies the examiners may, on the recommendation of the Faculty of Humanities and Social Sciences, be admitted to the degree of Doctor of Letters.
Notwithstanding anything contained in the preceding rules, the Faculty may recommend the award of the degree to any person who is not a member of the staff of the University. Any such recommendation must be accompanied by evidence that the person for whom the award is proposed has made an original and substantial contribution of distinguished merit to the knowledge or understanding of a discipline with which the Faculty is directly concerned, of a standard not less than that required by regulation 3 .
For further information please contact the Adelaide Graduate Centre.
Regulations allowed 16 December, 1971.
Amended 15 January, 1976: 6. 21 Feb. 1991: 1(b).
Rule approved and Regulation repealed 18 March 1999.

## Notes on Delegated Authority

1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2 Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty

## Law School


www.law.adelaide.edu.au

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- Master of Business Law/Master of Commerce (Marketing)
- Master of Comparative Laws (Adelaide/Mannheim)
- Master of Laws (Coursework)
- Master of Laws/Master of Commerce (Accounting)
- Master of Laws/Master of Commerce (Applied Finance)
- Master of Laws/Master of Commerce (Marketing)
- Master of Laws
- Doctor of Laws


## Notes on Delegated Authority

1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2 Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

1 Duration of course
To qualify for the Professional Certificate in Mediation, a candidate shall satisfactorily complete one semester of part-time study or the equivalent in intensive mode.

2 Admission
2.1 An applicant for admission to the academic program for the Professional Certificate in Mediation shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Professional Certificate in Mediation a person who does not satisfy the requirements of Rule 1.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Professional Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 4 points of status.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean of the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any subject for the Professional Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

To qualify for the Professional Certificate, a candidate shall satisfactorily complete subjects to the value of 6 points, as follows:

### 4.1 Academic program

All candidates shall complete the following courses:
LAW 5009 Alternative Dispute Resolution
LAW 5010 Accreditation for Mediators
4.2 No candidate will be permitted to count for the Professional Certificate any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of Program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising three semesters of full-time study or equivalent part-time. The maximum time permitted for completion of the program is eight years.

2 Admission
2.1 An applicant for admission to the academic program for the degree of Master of Business Law shall have qualified for a Bachelor degree of the University of Adelaide or a Bachelor of another institution accepted by the Faculty for the purpose as equivalent.
2.2 The Faculty may subject to such conditions as it sees fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake the work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 The Faculty may grant credit towards the program as follows:
(a) up to a maximum of 18 units completed towards a comparable Master of Business Law degree of another tertiary institution accepted by the Faculty for the purpose as equivalent or
(b) up to a maximum of 9 units completed towards a comparable degree of the University of Adelaide
(c) up to a maximum of 12 units completed towards a Bachelor of Laws degree
2.3.2 A candidate, who fails a course and wishes to repeat that course shall, unless partially exempted by the Dean of the Law School or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification Requirements

4.1 A candidate shall satisfactorily complete courses from the Master of Business Law to the value of 36 units, as follows:
(a) 12 units of Foundation courses
(b) 24 units of Advanced courses
4.2 The Master of Business Law courses * are listed as follows: Foundation courses:

LAW 7092 Contractual Relations
4

LAW 7093 Negligence and Intentional Wrongs 4
LAW 7094 Principles of Australian Law 4

## Advanced courses

LAW 7024 Comparative Law (PG) 6
LAW 7055 Comparative Corporate Rescue Law PG) 3
LAW 7056 Competition Law:
Comparative Perspectives (PG)
LAW 7057 Corporate Governance (PG) 3
LAW 7058 Dispute System Design
and Implementation (PG)
LAW 7059 European Union Law (PG) 3
LAW 7060 Federal Criminal Law (PG) 3
LAW 7061 Globalisation and the Legal Regulation
of Work (PG)
LAW 7062 Global Issues
in Intellectual Property Law (PG)

LAW 7063 Government Business
and Regulation (PG)

LAW 7064 Intellectual Property Law (PG) 3
LAW 7065 International Commercial Arbitration (PG) 3
LAW 7066 International Conflicts of Law (PG) 3
LAW 7067 International Criminal Law (PG) 3
LAW 7068 International Energy Law (PG) 3
LAW 7069 International Law (PG) 3
LAW 7070 International Trade Law (PG) 3
LAW 7071 Superannuation Law (PG) 3
LAW 7072 The Law of Work in the New Economy PG) ..... 3
LAW 7073 Transnational Crime and Terrorism (PG) ..... 3
LAW 7074 Transitional Justice (PG) ..... 3
LAW 7075 Wine Law (PG) ..... 3
LAW 7076 World Economic Law (PG) ..... 3
LAW 7078 Revenue Law (PG) ..... 3
LAW 7079 Corporate Law (PG) ..... 3
LAW 7096 Sport Law (PG) ..... 3
LAW 7097 Anglo-American Constitutional History (PG) ..... 3
LAW 7098 Insurance Law (PG) ..... 3

Any other course approved by the Program coordinator.

* Not all courses will be offered in any one calendar year.


### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Business Law/Master of Commerce Master of Business Law/Master of Commerce (Accounting) Master of Business Law/Master of Commerce (Applied Finance) Master of Business Law/Master of Commerce (Marketing)

## Academic Program Rules

## 1 Duration of Program

To qualify for the combined degree, a candidate shall satisfactorily complete a program of study comprising five semesters of full-time study or equivalent part-time. The maximum time permitted for completion of the program is eight years.

## 2 Admission requirements

2.1 An applicant for admission shall have qualified for a Bachelor degree of the University of Adelaide or a Bachelor of another institution accepted by the Faculty for the purpose as equivalent.
2.2 The Faculty may subject to such conditions as it sees fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 1.1 above, but who has presented evidence satisfactory to the Faculty of fitness to undertake the work for the degree.
2.3 On satisfying the admission requirements for entry to the Master of Business Law/Master of Commerce, students will enrol in a program of study to allow them to qualify for one of the following degrees:

Master of Business Law/Master of Commerce
Master of Business Law/Master of Commerce (Accounting)
Master of Business Law/Master of Commerce
(Applied Finance)
Master of Business Law/Master of Commerce (Marketing)

### 2.4 Status, exemption and credit transfer

2.4. The Faculty may grant exemptions towards the program up to a total value of 12 units where in the opinion of the Executive Dean of the Professions, the candidate has already presented a course or courses for another award that contain(s) substantially the same material. All exemptions must be replaced by courses selected from the
same discipline area. For the purposes of fulfilling the requirements of Accounting, Applied Finance or Marketing, a minimum of 15 units of new courses from the relevant discipline must be selected that have not been presented towards another degree.
2.4.2 No candidate shall be granted status for courses with a total value of more than 12 units on account of courses presented for any other award except with permission of the Executive Dean of the Professions.
2.4.3 A candidate, who fails a course and wishes to repeat that course shall, unless partially exempted by the Executive Dean of the Professions, again complete the required work in the course to the satisfaction of the teaching staff concerned.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the combined degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.

For the purposes of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom the Executive Dean of the Professions, again complete the required work in the course to the satisfaction of the teaching staff concerned.
3.4 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualifications Requirements

4.1 A candidate shall satisfactorily complete courses to the value of 60 units, as follows:

### 4.1.1 Foundation courses

24 units of foundation courses:
ACCTING 7000 Accounting and Decision Making (M)
COMMERCE 7033 Quantitative Methods (M) 3
ECON 7200 Economic Principles (M) 3
LAW 7092 Contractual Relations 4
LAW 7093 Negligence and Intentional Wrongs 4
LAW 7094 Principles of Australian Law
and (compulsory for Marketing)
MARKETNG 7005 Marketing Principles (M) or

COMMERCE 7005 Principles of Finance

### 4.1.2 Business Law courses

18 units of Business Law courses selected from:
LAW 7024 Comparative Law (PG)
LAW 7055 Comparative Corporate Rescue Law PG) 3
LAW 7056 Competition Law:
Comparative Perspectives (PG)
LAW 7057 Corporate Governance (PG) 3
LAW 7058 Dispute System Design
and Implementation (PG)
LAW 7059 European Union Law (PG) 3
LAW 7060 Federal Criminal Law (PG) 3
LAW 7061 Globalisation and the Legal Regulation
of Work (PG)
LAW 7062 Global Issues
in Intellectual Property Law (PG) 3
LAW 7063 Government Business
and Regulation (PG)
LAW 7064 Intellectual Property Law (PG) 3
LAW 7065 International Commercial Arbitration (PG) 3
LAW 7066 International Conflicts of Law (PG) 3
LAW 7067 International Criminal Law (PG) 3
LAW 7068 International Energy Law (PG) 3
LAW 7069 International Law (PG) 3
LAW 7070 International Trade Law (PG) 3
LAW 7071 Superannuation Law (PG) 3
LAW 7072 The Law of Work in the New Economy PG)
LAW 7073 Transnational Crime and Terrorism (PG) 3

LAW 7074 Transitional Justice (PG)
LAW 7075 Wine Law (PG) 3
LAW 7076 World Economic Law (PG) 3
LAW 7078 Revenue Law (PG) 3
LAW 7079 Corporate Law (PG) 3
LAW 7096 Sport Law (PG) 3
LAW 7097 Anglo-American Constitutional History (PG) 3
LAW 7098 Insurance Law (PG) 3
Any other course approved by the Executive Dean of the Professions or nominee.

* Not all courses will be offered in any one calendar year.
4.1.3 Commerce courses

18 units of Commerce courses of which at least 12 units must be selected from one discipline:

Accounting
ACCTING 7008 Financial Accounting Issues (M)* \# 3
ACCTING 7009 Auditing and Assurance Services (M)* 3
ACCTING 7010 Corporate Accounting (M)* ${ }^{*}$
ACCTING 7012 Commercial Law
and Accounting Regulation $(\mathrm{M})^{*} \# \quad 3$
ACCTING 7014 Management Accounting (M)* \# 3
ACCTING 7015 Advanced Financial Reporting (M) 3
ACCTING 7017 Financial Statement Analysis (M) 3
ACCTING 7018 Public Sector
and Not-For-Profit Accountability (M) 3
COMMERCE 7036 Knowledge Management
and Measurement (M)
COMMLAW 7011 Corporate Law (M)* 3
COMMLAW 7013 Income Taxation (M) * 3
COMMLAW 7016 Business Taxation and GST (M) 3
CORPFIN 7044 Financial Planning (M) 3

* All seven courses are required for eligibility to the CA program.
\# All five courses are required for eligibility to the CPA program.


## Applied Finance

ACCTING 7017 Financial Statement Analysis (M) 3
CORPFIN 7019 Portfolio Theory and Management (M) 3
CORPFIN 7020 Options, Futures
and Risk Management (M)
CORPFIN 7021 Corporate Investment and Strategy (M) 3
CORPFIN 7022 Corporate Finance Theory (M) 3
ECON 7114 Money, Banking and Financial Markets IIID
CORPFIN 7039 Equity Valuation and Analysis (M) 3
CORPFIN 7040 Fixed Income Securities (M) 3
CORPFIN 7042 Treasury and Financial Risk Management (M) ..... 3
CORPFIN 7044 Financial Planning (M) ..... 3
ECON 7044 International Finance IIID ..... 3
Marketing
MARKETNG 7023 Consumer Behaviour (M) ..... 3
MARKETNG 7024 International Marketing (M) ..... 3
MARKETNG 7025 Marketing Communications (M) ..... 3
MARKETNG 7026 Marketing Research and Planning (M) ..... 3
MARKETNG 7027 Brand Management (M) ..... 3
MARKETNG 7028 E-Marketing (M) ..... 3
MARKETNG 7029 International Market Entry Strategies (M) ..... 3
MARKETNG 7030 Marketing Ethics (M) ..... 3
MARKETNG 7031 Relationship Marketing (M) ..... 3
MARKETNG 7032 Strategic Marketing (M) ..... 3
Electives
BUSINESS 7000 Social Challenges to Global Business ..... 3
COMMERCE 7034 Project Management (M) ..... 3
COMMERCE 7035 Contemporary Issues
in Commerce (M) ..... 3
COMMERCE 7037 Research Methodology in Commerce (M) ..... 3
ECOMMRCE 7004 Internet Commerce (M) ..... 3
4.1.3.1 Master of Business Law/Master of Commerce (Accounting)18 units of Accounting courses selected from 4.1.3 or suchcourses as approved by the Executive Dean of theProfessions or nominee.
** Students undertaking Income Taxation (M) and Corporate Law (M) may present these courses in lieu of Corporate Law and Revenue Law from the Business Law courses in 4.1.2.

### 4.1.3.2 Master of Business Law/Master of Commerce (Applied Finance)

18 units of Applied Finance courses selected from 4.1.3 or such courses as approved by the Executive Dean of the Professions or nominee, including:

CORPFIN 7019 Portfolio Theory and Management (M)
CORPFIN 7020 Options, Futures and Risk Management (M)3
CORPFIN 7039 Equity Valuation and Analysis (M) ..... 3
CORPFIN 7040 Fixed Income Securities (M) ..... 3

### 4.1.3.3 Master of Business Law/Master of Commerce

 (Marketing)18 units of Marketing courses selected from 4.1.3 or such courses as approved by the Executive Dean of the Professions or nominee, including:
MARKETNG 7023 Consumer Behaviour (M) ..... 3
MARKETNG 7025 Marketing Communications (M) ..... 3
MARKETNG 7024 International Marketing (M) ..... 3
MARKETNG 7026 Marketing Research and Planning (M) ..... 3
MARKETNG 7030 Marketing Ethics (M) ..... 3
MARKETNG 7032 Strategic Marketing (M) ..... 3

Strategic Marketing (M)* is a capstone course for the Marketing pathway, and as such must be taken in the final semester of study.

### 4.2 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Business Law - Graduate Attributes

## Knowledge

- Advanced understanding of the law in the commercial, international and comparative contexts.


## Skills

- High level critical thinking and problem solving skills.
- Ability to evaluate and synthesise information and existing knowledge from a number of sources and experiences.
- Ability to appreciate the changing knowledge base of the law and to respond to the demand for change.
- Capacity to engage with current issues of significance in society.
- Capacity to design and construct a logically compelling legal thesis.
- High level legal research skills, including familiarity with and proficiency in modern legal research technologies.
- Capacity to participate in teamwork.
- High level oral communication skills.
- High level written communication skills.
- The capacity to engage in life-long learning.


## Attitudes and Values

- A commitment to high levels of academic scholarship.
- A commitment to the rule of law and an appreciation of social justice through the operation of law.
- An appreciation of cultural diversity and sensitivity to the operation of law in this context.


## Master of Comparative Law

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising fifteen months of full-time study or equivalent part-time. The maximum time permitted for completion of the program is five years..

## 2 Admission

2.1 An applicant for admission to the academic program for the degree of Master of Comparative Law (Adelaide/ Mannheim) shall:
(a) have qualified for an Honours Degree of Bachelor of Laws or
(b) have qualified for a degree of Bachelor of Laws which the Faculty judges to have been attained at aboveaverage standard or
(c) have qualified for a degree of Bachelor of Laws, and have substantial professional experience or other relevant qualifications.
2.2 The Faculty may in appropriate cases accept a candidate for the degree of Master of Comparative Law who does not otherwise qualify under the above categories but has given evidence satisfactory to the Faculty of capacity to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 The Faculty may grant credit towards the program as follows:
(a) up to a maximum of 9 units completed towards a comparable Master of Comparative Law degree accepted by the Faculty for the purpose as equivalent; or
(b) up to a maximum of 6 units completed towards a comparable degree of the University of Adelaide or the University of Mannheim
2.3.2 No candidate will be permitted to count towards the degree any course, together with any other course, which in the opinion of the Faculty concerned contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards a degree.

## 3 Assessment and examinations

3.1 There will be four classifications of pass in any course of the Master of Comparative Law (Adelaide/Manheim) as follows: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 The Faculty will appoint an examiner in respect of the dissertation submitted to the Faculty.
3.3 The examiners shall report to the Faculty and may recommend:
(a) that a dissertation is satisfactory or
(b) that a dissertation be returned to the candidate for revision and resubmission or
(c) that a dissertation is not satisfactory.
3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially by the Faculty, again complete the required work in the course to the satisfaction of the relevant teaching staff.
3.5 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.6 If in the opinion of the Faculty a candidate for the degree is not making satisfactory progress, the Faculty may terminate the candidature and the candidate shall cease to be enrolled for the degree

## 4 Qualification requirements

4.1 To qualify for the Master of Comparative Law, a candidate shall satisfactorily complete courses to the value of 30 units as follows:
(a) LAW 7024 Comparative Law (Adelaide)
(b) 3 units from one of the designated disciplinary streams of elective courses from Adelaide in 5.1.3 below
(c) 3 units from any of the elective courses from Adelaide in 5.1.4 below
(d) 20 European Credit Transfer System points ( 20 ECTS $=12$ units) comprised as follows:
(i) Comparative Law (Mannheim)
(ii) 12 ECTS comprised of at least 2 courses from one of the designated disciplinary streams of courses from Mannheim at 5.1.1 below
(iii) 4 ECTS from any of the elective courses from Mannheim at 5.1.2 below.
(e) Thesis at 5.2 below (units)
4.1.1 Mannheim Courses
From Disciplinary Streams ..... ECTS
International Law
Human Rights - Problems and Processes ..... 4
Selected Problems of Public International Law ..... 4
The Law of International Organisations in Comparative Perspective ..... 4
Human Rights and Humanitarian Law
Human Rights - Problems and Process ..... 4
International Criminal Law ..... 4
International Law Seminar ..... 8
European Law
European Law - EC Competition Law ..... 4
European Law - European Market Freedoms ..... 4
European Law - Institutional Aspects ..... 4
International Business Transactions
European Law - EC Competition Law ..... 4
International Economic Law ..... 4
Trade and Commerce Law in Comparative Perspective ..... 4
Insurance Law in Comparative Perspective
Comparative Insurance Contract Law Seminar ..... 8
Insurance Supervision in Comparative Perspective ..... 4
Private International Law of Insurance ..... 4
Any other course approved by the Program Coordinator.
4.1.2 Mannheim Elective Courses (4 ECTS) Comparative Constitutional Law ..... 4
Comparative Environmental Law ..... 4
Intellectual Property Law ..... 4
International Environmental Law ..... 4
Introduction to German Civil Law ..... 4
Legal Methodology ..... 4
Private International Law ..... 4

### 4.1.3 Adelaide Courses

From Disciplinary Streams Units
International Law and European Law
LAW 7056 Competition Law Comparative
Perspectives (PG)
LAW 7059 European Union Law (PG) 3
LAW 7068 International Energy Law (PG) 3
LAW 7069 International Law (PG) 3
Human Rights and Humanitarian Law
LAW 7060 Federal Criminal Law (PG) 3
LAW 7067 International Criminal Law (PG) 3
LAW 7074 Transitional Justice (PG) 3
LAW 7073 Transnational Crime and Terrorism (PG) 3
International Business Transactions and Insurance Law
in Comparative Perspective
LAW 7055 Comparative Corporate Rescue Law(PG) 3
LAW 7056 Competition Law: Comparative
Perspectives(PG) 3
LAW 7057 Corporate Governance (PG) 3
LAW 7061 Globalisation and the Legal Regulation
of Work(PG)
LAW 7062 Global Issues in Intellectual
Property Law(PG)
LAW 7064 Intellectual Property Law(PG) 3
LAW 7065 International Commercial Arbitration(PG) 3
LAW 7066 International Conflicts of Law (PG) 3
LAW 7068 International Energy Law(PG) 3
LAW 7070 International Trade Law(PG) 3
LAW 7075 Wine Law(PG) 3
LAW 7076 World Economic Law(PG) 3
LAW 7098 Insurance Law (PG) 3
Any other course approved by the Program Coordinator.

### 4.1.4 Adelaide Elective Courses

Any course from 5.1.3 above and in addition:
LAW 7058 Dispute System Design and Implementation(PG) 3

LAW 7063 Government, Business and Regulation(PG) 3
LAW 7071 Superannuation Law(PG) 3
LAW 7072 Law of Work in the New Economy(PG) 3
LAW 7078 Revenue Law 3
LAW 7085 Contractual Relations (MCL) 3
LAW 7087 Negligence and Intentional Wrongs (MCL) 3

LAW 7097 Anglo-American Constitutional History(PG)
LAW 7111 Principles of Australian Law (MCL)
Any other course approved by the Program Coordinator.

### 4.2 Thesis

4.2.1 In addition to the above courses a candidate shall write a thesis of between 12,000 and 15,000 words to the value of 6 units.
4.2.2 The subject of the dissertation shall be approved and a supervisor appointed by the Faculty at which the student is enrolled. A candidate shall lodge with the Faculty three copies of a dissertation prepared in accordance with directions given to candidates from time to time.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Comparative Law - Graduate Attributes

## Knowledge

- An understanding of the methods of comparative analysis of the law.
- An appreciation of the advantages and limitations of a comparative law perspective in understanding the factors responsible for the development of legal principles and systems.
- An understanding of basic legal principles underlying different law systems, in particular, in common law and civil law systems.
- An understanding of the systemic features of justice delivery in common law and civil law countries.
- An understanding of the trends toward convergence and divergence between different law systems.
- A specific understanding of selected areas of law applicable in different law systems.
- An understanding about the interplay between national and international law regarding setting, monitoring and implementation of universal law standards.
- An understanding of the political, economic, social and cultural background determining different law systems.
- An understanding of diverse categories of norms and standards in national and international law systems and their means of implementation.
- A basic awareness of the economic impact of law and an understanding of the concept of 'law and economics"'


## Skills

- High level critical thinking and problem solving skills.
- Ability to evaluate and synthesise information and existing knowledge from a number of sources and experiences.
- Ability to appreciate the changing knowledge base of the law and to respond to the demand for change.
- Capacity to engage with current issues of significance in society.
- Ability to apply comparative legal skills so as to find progressive solutions for challenges of today's societies.
- Capacity to adjust legal theory to demands of legal practice.
- Ability to recognise the limits of law and capacity to identify, develop and apply alternative methods to coincide diverging interests.
- Capacity to design and construct a logically compelling legal thesis.
- High level legal research skills, including familiarity with and proficiency in modern legal research technologies.
- Capacity to participate in teamwork.
- High level oral communication skills.
- High level written communication skills.
- The capacity to engage in life-long learning.


## Attitudes and Values

- A commitment to high levels of academic scholarship
- A commitment to the rule of law, human rights and an appreciation of social justice through the operation of law
- An appreciation of cultural diversity and sensitivity to the operation of law in this context.


## Academic Program Rules

1 General
1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.
These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

## 2 Admission

2.1 Further to Rule 4.1 of the General Academic Program Rules, the Board of Research Education and Development may accept as a candidate for the degree of Master of Laws any person who has qualified for an Honours degree of Bachelor of Laws or a degree of Bachelor of Laws with Honours at the University of Adelaide.

3 Submission of Thesis
In satisfying rule Rule 19.1 of the General Academic Program Rules, the candidate shall submit a thesis of not more than 70,000 words.

## Master of Laws (by Coursework)

## Academic Program Rules

## 1 Duration of Program

To qualify for the degree, a candidate shall satisfactorily complete a program of study comprising two semesters of full-time study or equivalent. The maximum time permitted for completion of the program is six years.

## 2 Admission

2.1 An applicant for admission to the academic program for the degree of Master of Laws shall:
(a) have qualified for a Bachelor degree of Laws of the University of Adelaide or a Bachelor degree of Laws of another institution accepted by the Faculty for the purpose as equivalent or
(b) have qualified for the Graduate Diploma of Law of the University of Adelaide or a Graduate Diploma of Law of another institution accepted by the Faculty for the purposes as equivalent.
2.2 The Faculty may subject to such conditions as it sees fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 1.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake the work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 The Faculty may grant credit towards the program as follows:
(a) up to a maximum of 12 units completed towards a comparable Master of Laws degree of another tertiary institution accepted by the Faculty for the purpose as equivalent or
(b) up to a maximum of 6 units completed towards a comparable degree of the University of Adelaide.
2.3.2 A candidate, who fails a course and wishes to repeat that course shall, unless partially exempted by the Dean of the Law School or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification Requirements

4.1 A candidate who has been admitted with a Bachelor of Laws or a Graduate Diploma of Laws degree, shall satisfactorily complete courses from the Master of Laws to the value of 24 units;

The Master of Laws courses* are listed as follows:
LAW 7024 Comparative Law (PG)
6
LAW 7055 Comparative Corporate Rescue Law PG) 3
LAW 7056 Competition Law:
Comparative Perspectives (PG) 3
LAW 7057 Corporate Governance (PG) 3
LAW 7058 Dispute System Design and Implementation (PG) 3

LAW 7059 European Union Law (PG) 3
LAW 7060 Federal Criminal Law (PG) 3
LAW 7061 Globalisation and the Legal Regulation of Work (PG)

3
LAW 7062 Global Issues
in Intellectual Property Law (PG) 3

LAW 7063 Government Business and Regulation (PG) 3
LAW 7064 Intellectual Property Law (PG) 3
LAW 7065 International Commercial Arbitration (PG) 3
LAW 7066 International Conflicts of Law (PG) 3
LAW 7067 International Criminal Law (PG) 3
LAW 7068 International Energy Law (PG) 3
LAW 7069 International Law (PG) 3
LAW 7070 International Trade Law (PG) 3
LAW 7071 Superannuation Law (PG) 3
LAW 7072 The Law of Work
in the New Economy PG)
LAW 7073 Transnational Crime and Terrorism (PG) 3
LAW 7074 Transitional Justice (PG) 3
LAW 7075 Wine Law (PG) 3
LAW 7076 World Economic Law (PG) 3

LAW 7097 Anglo-American Constitutional History (PG)
LAW 7098 Insurance Law (PG)
Any other course approved by the Program coordinator.

* Not all courses will be offered in any one calendar year.


### 4.2 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Master of Laws/Master of Commerce Master of Laws/Master of Commerce (Accounting) Master of Laws/Master of Commerce (Applied Finance) Master of Laws/Master of Commerce (Marketing) 

## Academic Program Rules

## 1 Duration of Program

To qualify for the combined degree, a candidate shall satisfactorily complete a program of study comprising four semesters of full-time study. The maximum time permitted for completion of the program is eight years.

2 Admission
2.1 An applicant for admission to the academic program for the degree of Master of Laws/Master of Commerce shall:
(a) have qualified for a Bachelor degree of Laws of the University of Adelaide or a Bachelor degree of Laws of another institution accepted by the Faculty for the purpose as equivalent or
(b) have qualified for the Graduate Diploma of Law of the University of Adelaide or a Graduate Diploma of Law of another institution accepted by the Faculty for the purposes as equivalent or
2.2 The Faculty may subject to such conditions as it sees fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above, but who has presented evidence satisfactory to the Faculty of fitness to undertake the work for the degree.
2.3. On satisfying the admission requirements for entry to the Master of Commerce/ Master of Laws, students will enrol in a program of study to allow them to qualify for one of the following combined degrees:

Master of Laws/Master of Commerce
Master of Laws/Master of Commerce (Accounting)
Master of Laws/Master of Commerce (Applied Finance)
Master of Laws/Master of Commerce (Marketing)

### 2.4 Status, exemption and credit transfer

2.4.1 The Faculty may grant exemptions towards the program up to a total value of 12 units where in the opinion of the Executive Dean of the Professions, the candidate has already presented a course or courses for another award that
contain/s substantially the same material. All exemptions must be replaced by courses selected from the same discipline area. For the purposes of fulfiling the requirements of Accounting, Applied Finance or Marketing a minimum of 15 units of new courses from the relevant discipline must be selected that have not been presented towards another degree.
2.4.2 No candidate shall be granted status for courses with a total value of more than 12 units on account of courses presented for any other award except with permission of the Executive Dean of the Professions.
2.4.3 A candidate, who fails a course and wishes to repeat that course shall, unless partially exempted by the Executive Dean of the Professions, again complete the required work in the course to the satisfaction of the teaching staff concerned.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
For the purposes of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom the Executive Dean of the Professions, again complete the required work in the course to the satisfaction of the teaching staff concerned.
3.4 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
$4 \quad$ Academic Program Requirements
4.1 A candidate shall satisfactorily complete courses to the value of 48 units, as follows:

### 4.1.1 Foundation courses

12 units of foundation courses:

ACCTING 7000 Accounting and Decision Making (M)
COMMERCE 7033 Quantitative Methods (M) 3
ECON 7200 Economic Principles (M) 3
and (compulsory for Marketing)
MARKETNG 7005 Marketing Principles (M)
or
COMMERCE 7005 Principles of Finance

### 4.1.2 Laws Courses

18 units of Law courses selected from:
LAW 7024 Comparative Law (PG)
LAW 7055 Comparative Corporate Rescue Law PG) 3
LAW 7056 Competition Law:
Comparative Perspectives (PG)
LAW 7057 Corporate Governance (PG) 3
LAW 7058 Dispute System Design
and Implementation (PG)
LAW 7059 European Union Law (PG) 3
LAW 7060 Federal Criminal Law (PG) 3
LAW 7061 Globalisation and the Legal Regulation
of Work (PG)
LAW 7062 Global Issues
in Intellectual Property Law (PG)
3
LAW 7063 Government Business and Regulation (PG) 3
LAW 7064 Intellectual Property Law (PG) 3
LAW 7065 International Commercial Arbitration (PG) 3
LAW 7066 International Conflicts of Law (PG) 3
LAW 7067 International Criminal Law (PG) 3
LAW 7068 International Energy Law (PG) 3
LAW 7069 International Law (PG) 3
LAW 7070 International Trade Law (PG) 3
LAW 7071 Superannuation Law (PG) 3
LAW 7072 The Law of Work
in the New Economy PG)
3
LAW 7073 Transnational Crime and Terrorism (PG) 3
LAW 7074 Transitional Justice (PG) 3
LAW 7075 Wine Law (PG) 3
LAW 7076 World Economic Law (PG) 3

LAW 7096 Sport Law (PG) 3
LAW 7097 Anglo-American Constitutional History (PG)
LAW 7098 Insurance Law (PG)
Any other course approved by the Executive Dean of the Professions or nominee.

Note: Not all courses will be offered in any one calendar year.

### 4.1.3 Commerce Courses

18 units of Commerce courses of which at least 12 units must be selected from one discipline:

## Accounting

ACCTING 7008 Financial Accounting Issues (M)* ${ }^{\text {\# }}$
ACCTING 7009 Auditing and Assurance Services (M)* 3
ACCTING 7010 Corporate Accounting (M)* ${ }^{*} 3$
ACCTING 7012 Commercial Law
and Accounting Regulation $(\mathrm{M})^{*}$ \# 3
ACCTING 7014 Management Accounting (M)* ${ }^{*}$
ACCTING 7015 Advanced Financial Reporting (M) 3
ACCTING 7017 Financial Statement Analysis (M) 3
ACCTING 7018 Public Sector
and Not-For-Profit Accountability (M) 3
COMMERCE 7036 Knowledge Management
and Measurement (M)
COMMLAW 7011 Corporate Law (M)*\# 3
COMMLAW 7013 Income Taxation (M) * 3
COMMLAW 7016 Business Taxation and GST (M) 3
CORPFIN 7044 Financial Planning (M) 3

* All seven courses are required for eligibility to the CA program.
\# All five courses are required for eligibility to the CPA program.


## Applied Finance

ACCTING 7017 Financial Statement Analysis (M) 3
CORPFIN 7019 Portfolio Theory and Management (M) 3
CORPFIN 7020 Options, Futures
and Risk Management (M)
CORPFIN 7021 Corporate Investment and Strategy (M) 3
CORPFIN 7022 Corporate Finance Theory (M) 3
ECON 7114 Money, Banking and Financial Markets IIID 3
CORPFIN 7039 Equity Valuation and Analysis (M) 3
CORPFIN 7040 Fixed Income Securities (M) 3
CORPFIN 7042 Treasury and Financial Risk
Management (M)
CORPFIN 7044 Financial Planning (M) 3
ECON 7044 International Finance IIID 3
Marketing
MARKETNG 7023 Consumer Behaviour (M) ..... 3
MARKETNG 7024 International Marketing (M) ..... 3
MARKETNG 7025 Marketing Communications (M) ..... 3
MARKETNG 7026 Marketing Research and Planning (M) ..... 3
MARKETNG 7027 Brand Management (M) ..... 3
MARKETNG 7028 E-Marketing (M) ..... 3
MARKETNG 7029 International Market Entry Strategies (M) ..... 3
MARKETNG 7030 Marketing Ethics (M) ..... 3
MARKETNG 7031 Relationship Marketing (M) ..... 3
MARKETNG 7032 Strategic Marketing (M) ..... 3
Electives
BUSINESS 7000 Social Challenges to Global Business ..... 3
COMMERCE 7034 Project Management (M) ..... 3
COMMERCE 7035 Contemporary Issues
in Commerce (M) ..... 3
COMMERCE 7037 Research Methodology in Commerce (M) ..... 3
ECOMMRCE 7004 Internet Commerce (M) ..... 3
4.1.3.1 Master of Laws/Master of Commerce (Accounting)
18 units of Accounting courses selected from 4.1.3 or such courses as approved by the Executive Dean of the Professions or nominee.
4.1.3.2 Master of Laws/Master of Commerce (Applied Finance)18 units of Applied Finance courses selected from 4.1.3 orsuch courses as approved by the Executive Dean of theProfessions or nominee, including:
CORPFIN 7019 Portfolio Theory and Management (M) ..... 3
CORPFIN 7020 Options, Futures
and Risk Management (M) ..... 3
CORPFIN 7039 Equity Valuation and Analysis (M) ..... 3
CORPFIN 7040 Fixed Income Securities (M) ..... 3
4.1.3.3 Master of Laws/Master of Commerce (Marketing) 18 units of Marketing courses selected from 4.1.3 or such courses as approved by the Executive Dean of the Professions or nominee, including:
MARKETNG 7023 Consumer Behaviour (M) ..... 3
MARKETNG 7025 Marketing Communications (M) ..... 3
MARKETNG 7024 International Marketing (M) ..... 3
MARKETNG 7026 Marketing Research and Planning (M) ..... 3
MARKETNG 7030 Marketing Ethics (M) ..... 3
MARKETNG 7032 Strategic Marketing (M) * ..... 3

* Strategic Marketing (M) is a capstone course for the Marketing pathway, and as such must be taken in the final semester of study.


### 4.2 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Laws - Graduate Attributes

## Knowledge

- Advanced understanding of the law in the commercial, international and comparative contexts.


## Skills

- High level critical thinking and problem solving skills.
- Ability to evaluate and synthesise information and existing knowledge from a number of sources and experiences.
- Ability to appreciate the changing knowledge base of the law and to respond to the demand for change.
- Capacity to engage with current issues of significance in society.
- Capacity to design and construct a logically compelling legal thesis.
- High level legal research skills, including familiarity with and proficiency in modern legal research technologies.
- Capacity to participate in teamwork.
- High level oral communication skills.
- High level written communication skills.
- The capacity to engage in life-long learning.


## Attitudes and Values

- A commitment to high levels of academic scholarship.
- A commitment to the rule of law and an appreciation of social justice through the operation of law.
- An appreciation of cultural diversity and sensitivity to the operation of law in this context.


## Academic Program Rules

1 Subject to these Academic Program Rules the Council may, on the recommendation of the Faculty of the Professions, accept as a candidate for the degree of Doctor of Laws any person who, in the opinion of the Faculty, is a fit and proper person to be so accepted.
2 To qualify for the degree a candidate may either:
(a) submit for assessment all or some of his/her scholarly work, including work not previously published or
(b) present a thesis on a subject approved by the Faculty.

3 (a) A person who desires to qualify for the degree in accordance with alternative (a) of Regulation 2 shall give notice of his/her intended candidature in writing to the Manager, Graduate Administration and Scholarships, Adelaide Graduate Centre and with such notice shall furnish particulars of his/her scholarly achievements and of the work which he/she proposes to submit for the degree.
(b) the Faculty of the Professions shall examine the information submitted and shall decide whether to recommend to the Council that the applicant be accepted as a candidate.
(a) to qualify for the degree according to alternative (a) of Regulation 2 a candidate shall submit work which constitutes an original and substantial contribution of distinguished merit to legal knowledge or understanding.
(b) if any of the material submitted represents work carried out conjointly, the candidate shall state the extent to which he/she was responsible for such work.
(c) the candidate shall indicate what part, if any, of his/her works has already been presented for a degree in this or any other university.

5 A person who desires to qualify for the degree in accordance with alternative (b) of Regulation 2 may be accepted as a candidate if he/she:
(a) holds or has qualified for the Honours degree of Bachelor of Laws or
(b) holds or has qualified for the degree of Master of Laws: provided that the Faculty of the Professions may accept in lieu of the foregoing an equivalent qualification obtained in any other university recognised by the University of Adelaide or
(c) has passed an examination approved by the Faculty.
(a) to qualify for the degree according to alternative (b) of Regulation 2 a candidate shall present a thesis which:
(i) contains an original and substantial contribution of distinguished merit to legal knowledge or understanding and
(ii) merits publication as a book or monograph (other than as a collection of separate articles), whether or not it has been previously published in full or in part. A thesis previously presented for a degree in this or in any other University may not be submitted under this regulation.
(b) a candidate may also present in support of his/her candidature other published books, monographs, or articles. If any of these publications record work carried out conjointly, the candidate shall state the extent to which he/she was responsible for the initiation and presentation of such publications.
(c) a candidate proceeding in accordance with alternative (b) of regulation 2 and with this regulation shall not be admitted to the degree until the expiration of the fourth academic year from his/her admission to the degree by virtue of which he/she was accepted as a candidate.
7 The candidate shall lodge with the Adelaide Graduate Centre three copies of the work submitted or of the thesis presented, as the case may be, prepared in accordance with the directions given in sub-paragraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree the two of the copies will be transmitted to the University Library.
8 The Faculty of the Professions shall nominate examiners. Normally there will be three examiners, two of them external to the University; but exceptions may be made in special cases recommended by the Faculty and approved by the Council.
9 The examiners may, if they think fit, examine the candidate either orally or by written questions on the material presented for the degree.
10 A candidate who complies with the foregoing conditions and satisfies the examiners may, on the recommendation of the Faculty of the Professions, be admitted to the degree of Doctor of Laws.

For further information please contact the Adelaide Graduate Centre.

Regulations allowed 15 January, 1976.
Amended: 4 Feb. 1982: 3, 7.
Rule approved and Regulation repealed 18 March 1999.

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## Postgraduate awards in the Medical School

- Graduate Certificate in Alcohol and Drug Studies
- Graduate Certificate in Grief and Palliative Care Counselling
- Graduate Certificate in Human Anatomy
- Graduate Certificate in Nursing Science
- Graduate Certificate in Occupational Health and Safety Management
- Graduate Certificate in Public Health
- Graduate Diploma in Alcohol and Drug Studies
- Graduate Diploma in General Practice Palliative Care
- Graduate Diploma in Grief and Palliative Care Counselling
- Graduate Diploma in Nursing Science
- Graduate Diploma in Occupational Health and Safety Management
- Graduate Diploma in Public Health
- Graduate Diploma in Surgical Nursing
- Master of Alcohol and Drug Studies
- Master of Clinical Science
- Master of Grief and Palliative Care Counselling
- Master of Medical Science
- Master of Nursing Science
- Master of Occupational Health and Safety
- Master of Psychology(Clinical)
- Master of Psychology (Clinical)/Doctor of Philosophy
- Master of Psychology (Organisational and Human Factors)
- Master of Public Health
- Master of Surgery
- Doctor of Medicine
- Doctor of Nursing


## Notes on Delegated Authority

1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2 Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty. The Head of department or centre may approve minor changes to any previously approved syllabus.

## Graduate Certificate in Alcohol and Drug Studies

Note: This program is only offered in the external mode.
Postgraduate tuition fees apply to the program.

## Academic Program Rules

## 1 Duration of Program

To qualify for the Graduate Certificate a candidate shall satisfactorily complete a program of full time study extending over at least one semester or part-time study extending over at least 2 semesters.

2 Admission
2.1 An applicant for admission to the program for the Graduate Certificate in Alcohol and Drug Studies shall have qualified for a degree of the University or another institution accepted by the University for the purpose as equivalent and shall have demonstrated to the satisfaction of the University that they have the capacity and experience to benefit from the program.
2.2 The Faculty may, subject to any conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.
2.3 Status, exemption and credit transfer With permission of the Faculty, status may be granted for courses, on written application from the candidate.

### 2.4 Articulation with other awards

A candidate who has been admitted to the Graduate Certificate in Alcohol and Drug Studies and who subsequently satisfies the requirements for the Graduate Diploma in Alcohol and Drug Studies must surrender the Graduate Certificate before being admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to satisfaction of the teaching staff concerned.
(b) A candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualifications requirements

### 4.1 Academic Program

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

PHARM 5001 Biobehavioural Aspects of Drug Use 4
PHARM 5002 Management of Drug Problems 4
PHARM 5003 Law, Policy and Prevention 4
4.2 Unacceptable combinations of courses

No candidate will be permitted to count for the Graduate Certificate any course that, in the opinion of the Faculty contains substantially the same material as any other course that he or she has already presented for another award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Grief and Palliative Care Counselling

## Academic Program Rules

1 Duration of program
To qualify for the Graduate Certificate, a candidate shall satisfactorily complete two semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the academic program for the Graduate Certificate in Grief and Palliative Care Counselling shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty of Health Sciences for the purpose as equivalent to a degree of the University.
2.2 The Faculty of Health Sciences may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Head of the Department of General Practice, no candidate will be granted status for the core or elective courses of the Graduate Certificate, except for those candidates who have completed antecedent courses in Grief and Palliative Care Counselling presented by the Department of General Practice, the University of Adelaide.
2.3.2 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Head of Department concerned, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this academic program are eligible to apply for entry to the Graduate Diploma in Grief and Palliative Care Counselling and be granted status for the work they have undertaken in their Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in Grief and Palliative Care Counselling who subsequently satisfy the requirements of the Graduate Diploma must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Master of Grief and Palliative Care Counselling or the Graduate Diploma in Grief and Palliative Care Counselling who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

### 4.1.1 Core courses

GENPRAC 7101HO Bereavement
GENPRAC 7104HO Supervised Field Education
GENPRAC 7105HO Grief Counselling I 2
GENPRAC 7106HO Grief Counselling II
GENPRAC 7107HO Grief Counselling III 2

### 4.1.2 Elective courses

All candidates shall complete an elective course to the value of 2 units selected from the following elective courses:

GEN PRAC 7102HO Loss and Grief 2

GEN PRAC 7103HO Issues in Death and Dying 2
4.2 Candidates who wish to enrol in a course for which they do not have the necessary preliminary knowledge or approved qualifications, may be required to undertake such bridging studies prior to the commencement of the course as may be deemed appropriate by the Head of the Department of General Practice.

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete one year of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Certificate in Human Anatomy shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 The Faculty may, subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 1.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 A candidate normally would not be granted status for any course which he or she has completed for another award.
2.3.2 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Head of Department concerned, again complete the required work in the course to the satisfaction of the teaching staff concerned.

## 3 Assessment and examination

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete the following course:
ANAT SC5000 A/B Human Anatomy Graduate Certificate

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Certificate in Nursing Science

## Academic Program Rules

## 1 General

There shall be a Graduate Certificate in Nursing Science which is offered in the following specialisations:

### 1.1 Apheresis Nursing

1.2 Evidence Based Practice
1.3 Hyperbaric Nursing
1.4 Infection Control
1.5 Retrieval Nursing
1.6 Stomal Therapy

2 Duration of program
To qualify for the Graduate Certificate an applicant shall satisfactorily complete a program of study comprising one semester of full time study or not more that one year of part-time study.

3 Admission
3.1 An applicant for admission to the program of study for the Graduate Certificate shall:
(a) be registered, or be eligible for registration, as a nurse in South Australia and
(b) have qualified for a degree of Bachelor of Nursing of a university accepted for the purposes by the University or
(c) have at least two years experience as a registered nurse in the field of the specialisation to be undertaken
(d) satisfactorily complete an appropriate medical examination on Occupation Health and Safety grounds for the specialisation in Hyperbaric Nursing and Retrieval Nursing.
3.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above, but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the program.

### 3.3 Status, exemption and credit transfer

3.3.1 No candidate shall be granted status for courses with a total value of more than 6 units on account of courses presented for any other award.
3.3.2 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

## 4 Assessment and examinations

4.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
4.2 A candidate who does not complete the specified work to the satisfaction of the teaching staff concerned shall be awarded a failing grade of Incomplete-Fail.
4.3 A candidate who fails a course twice may be subject to a Review of Academic progress.

5 Qualification requirements
5.1 Academic program

To qualify for the Graduate Certificate a candidate shall successfully complete a specialisation set of courses, listed below, to the value of 12 units:

## Apheresis Nursing

CLIN NUR5101HO Apheresis Nursing I 6
CLIN NUR5102HO Apheresis Nursing II 6

Evidence Based Practice
CLIN NUR5109HO An introduction
to Evidence Based Health Care 6

CLIN NUR5110HO Change Management and Evaluation 6
Hyperbaric Nursing
CLIN NUR6116HO Hyperbaric Nursing I6

CLIN NUR5103HO Hyperbaric Nursing II ..... 6

Infection Control
CLIN NUR6117HO Infection Control Nursing6
CLIN NUR5104HO Microbiology and Epidemiology ..... 6

Retrieval Nursing

CLIN NUR5105HO Principles and Practices of Retrieval Nursing
CLIN NUR5106HO Trauma Nursing 6

CLIN NUR6122HO Wound Management 6

### 5.2 Additional specialisation

If a candidate who qualifies for the Graduate Certificate subsequently undertakes, as a non-award student, another specialisation, the candidate may, on payment of a fee determined by the University, return the Graduate Certificate testamur and receive a new testamur listing all the specialisations completed.

### 5.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Certificate in Nursing Science - Graduate Attributes

Graduates of the Graduate Certificate in Nursing Science will be distinguished by the following attributes:

- A rigorous academic knowledge of the sciences that inform nursing practice in the specialty.
- The clinical and technological skills required, to provide high quality effective nursing care in the chosen specialty.
- The ability to work as team leaders and managers and to undertake the role of case management and care coordination in the chosen specialty.
- The ability to apply critical thinking skills to problem solving in advanced specialty practice.
- The ability to evaluate nursing care according to professional standards of practice within the chosen specialty.
- Highly developed communication skills and sound interpersonal skills to work effectively in a leadership role within the multidisciplinary team.
- The attitudes and skills to practice person-centred nursing in a culturally sensitive and ethically sound manner in the chosen specialty.
- Being committed to and have the skills to continue life long learning to advance nursing practice in their specialty.
- Possessing skills and knowledge to practice as a specialist nurse in a technologically dynamic environment.
- The ability to effectively integrate skills and knowledge in order to facilitate quality, nursing care, in their specialty.
- Having the skills, knowledge and attitudes to manage and implement care for the patient with complex health needs.
- Being prepared to promote safe practice in accordance with legislation, professional codes, and specialty competencies and guidelines.


## Graduate Certificate in

## Occupational Health and Safety Management

The Graduate Certificate is a part of joint postgraduate program studies in Occupational Health and Safety Management of the University of Adelaide and University of South Australia.

There is a Management Committee (comprising two academic representatives from each university and a student representing each program in the joint postgraduate venture) which administers the Graduate Diploma in Occupational Health \& Safety Management and the Master of Occupational Health and Safety. A Coursework Coordinator, a full-time member of the academic staff, is appointed at each university by the Management Committee.

Note: the program is offered only on a part-time basis and may attract tuition fees

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete a program of part-time study extending over at least two semesters, and except with the special permission of the Faculty, complete the program in not more than four semesters of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Certificate in Occupational Health \& Safety Management shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University, together with a minimum of two years' appropriate work experience.
2.2 The Faculty may, subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 1.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 A candidate normally would not be granted status for any course which he or she has completed for another award.
2.3.2 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Head of Department concerned, again complete the required work in the course to the satisfaction of the teaching staff concerned.
2.3.3 Consideration will be given to granting status to students who have partially completed equivalent programs interstate, up to a maximum of two courses. Appropriate
status (up to the year 2000) will be granted to students who have partly completed the former Graduate Diplomas at the University of South Australia and the University of Adelaide.
2.3.4 In exceptional cases, status will be granted for one course to students who have undertaken relevant study at a TAFE institution.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Graduate Diploma in Occupational Health and Safety Management who satisfies the requirements for the Graduate Certificate but who does not complete the requirements for the Graduate Diploma, may be admitted to the Graduate Certificate.
2.4.2 Candidates wishing to progress to the Graduate Diploma in Occupational Health and Safety Management must have satisfactorily completed the four compulsory courses with a grade of at least Pass Division 1 .

3 Assessment and examination
3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass. Further, a pass will be recorded in two divisions with a Pass Division I being higher than a Pass Division II.

To complete this award, at least a Pass Division II is required in each course.
3.2 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.

4 Qualification requirements
4.1 Academic program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete the following courses.
OH\&S 7105HO Diseases of Occupation* 3
OH\&S 7031HO Occupational Hygiene
and Ergonomics
OH\&S 7131HO Occupational Safety \& Statistics ** 3
OH\&S 7132HO OHS Management \& Law I G ** 3

* Offered by the University of Adelaide
** Offered by the University of South Australia


### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete one semester of full-time study or the equivalent of part-time study.

## 2 Admission

2.1 An applicant for admission to the academic program for the Graduate Certificate in Public Health shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Head of the Department of Public Health, no candidate will be granted status for the core course in the Graduate Certificate.
2.3.2 No candidate shall be granted status for any elective course.
2.3.3 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Head of Department, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this academic program are eligible to apply for entry to the Graduate Diploma in Public Health, and be granted status for the work they have undertaken in the Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in Public Health who subsequently satisfy the requirements of the Graduate Diploma must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Master of Public Health or the Graduate Diploma in Public Health who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

4.1 Academic program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

### 4.1.1 Core courses

All candidates shall complete the following course:
PUB HLTH7100HO Foundations of Public Health

### 4.1.2 Elective courses

All candidates shall complete elective courses to the value of 9 units selected from the following:
DENT 7150HO Dental Public Health 3
PUB HLTH7031HO Occupational Hygiene and Ergonomics ..... 3
PUB HLTH7101HO Introduction to Epidemiology and Biostatistics ..... 3
PUB HLTH7102HO Public Health Policy ..... 3
PUB HLTH7104HO Biostatistics ..... 3
PUB HLTH7105HO Diseases of Occupation ..... 3
PUB HLTH7106HO Epidemiological Research Methods ..... 3
PUB HLTH7107HO Epidemiology of Infectious Diseases ..... 3
PUB HLTH7108HO Ethical Issues in Public Health ..... 3
PUB HLTH7109HO Health Promotion ..... 3
PUB HLTH 7110HO Health Resource Allocation ..... 3
PUB HLTH7111HO Industrial Toxicology ..... 3
PUB HLTH7113HO Introduction to Environmental and Occupational Health ..... 3
PUB HLTH7114HO National Short Course in Environmental Health ..... 3
PUB HLTH7115HO Public Health Law ..... 3
PUB HLTH7118HO Public Health Studies ..... 3
PUB HLTH7121HO Health Program Evaluation ..... 3
PUB HLTH7123HO Rural Public Health ..... 3
PUB HLTH7124HO Population Health for Clinicians A ..... 3
PUB HLTH7125HO Population Health for Clinicians B ..... 3
PUB HLTH7126HO Qualitative Research in Practice ..... 3
PUB HLTH 7146HO An Anthropological Lens on Public Health ..... 3
Other courses offered by this or other universities which the Faculty approves for presentation in lieu of elective courses listed above up to the value of 3 units.
4.2 Candidates who wish to enrol in a course for which they do not have the necessary preliminary knowledge or approved qualifications may be required to undertake such bridging studies prior to the commencement of the course as may be deemed appropriate by the Head of the Department of Public Health.

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

Note: This program is only offered in the external mode.
Postgraduate tuition fees apply to the program.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma a candidate shall satisfactorily complete a program of full-time study over one year or part-time study extending over at least two years.

2 Admission
2.1 An applicant for admission to the program for the Graduate Diploma in Drug and Alcohol Studies shall:
(a) have qualified for a degree of the University or for a degree of another university accepted for the purposes by the University and
(b) have obtained the approval of the Department of Clinical and Experimental Pharmacology.
2.2 Subject to the approval of Council, the Faculty may in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not qualify for admission to the program under (2.1) above, but who has a significant level of experience and training in the field of alcohol and drug services and who has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

 With permission of the Faculty, status may be granted for courses, on written application from the candidate.
## 3 Assessment and examinations

3.1 There shall be four classes of pass in each course for the Graduate Diploma: pass with High Distinction, pass with Distinction, pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) A candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the head of department concerned, again complete the required work in the course to the satisfaction of the teaching staff concerned..

4 Qualification requirements

### 4.1 Academic program

Unless exempted therefrom by the Faculty every candidate for the Graduate Diploma in Alcohol and Drug Studies shall satisfactorily complete 6 of the following courses to the value of 24 units, in a sequence determined by the Head of Department of Clinical and Experimental Pharmacology:

PHARM 5001EX Bio-Behavioural Aspects Of Drug Use 4
PHARM 5002EX Management of Drug Problems 4
PHARM 5003EX Law, Policy and Prevention 4
PHARM 5004EX Development of Drug Problems 4
PHARM 5005EX Community Responses \& Interventions 4
PHARM 5006EX Professional Study 4
PHARM7001EX Principles of Drug Action 4
PHARM7002EX Aetiology of Drug Problems 4
PHARM7003EX Treatment Principles and Practice I 4
PHARM 7004EX Treatment Principles and Practice II 4
PHARM7005EX Public Health Principles \& Drug Use 4
PHARM7006EX Practicum and Project 4
4.2 No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Grief and Palliative Care Counselling

## Academic Program Rules

1 Duration of program
To qualify for the Graduate Diploma, a candidate shall satisfactorily complete four semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Graduate Diploma in Grief and Palliative Care Counselling shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty of Health Sciences for the purpose as equivalent to a degree of the University.
2.2 The Faculty of Health Sciences may, subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with the special permission of the Head of the Department of General Practice, no candidate will be granted status for any of the core courses of the Graduate Diploma.
2.3.2 No candidate shall be granted status for courses with a total value of more than 12 units except for those candidates who have completed antecedent courses in Grief and Palliative Care Counselling presented by the Department of General Practice, the University of Adelaide.
2.3.3 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Head of Department concerned, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

A candidate for the Degree of Master of Grief and Palliative Care Counselling who satisfies the requirements for the Graduate Diploma but who does not complete the requirements for the Degree of Master of Grief and Palliative Care Counselling may be admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to the value of 24 units, as follows:

### 4.1.1 core courses

All candidates shall complete the following courses:
GEN PRAC 7101HO Bereavement
GEN PRAC 7104HO Supervised Field Education 2
GENPRAC 7105HO Grief Counselling I 2
GENPRAC 7106HO Grief Counselling II 2
GENPRAC 7107HO Grief Counselling III 2
GENPRAC 7205HO Advanced Grief Counselling IA 1
GENPRAC 7206HO Advanced Grief Counselling II 3
GENPRAC 7207HO Advanced Grief Counselling III 3
GENPRAC 7210HO Advanced Grief Counselling IB

### 4.1.2 elective courses

All candidates shall complete additional elective courses to the value of 4 units selected from the following courses:

GEN PRAC 7102HO Loss and Grief
GEN PRAC 7103HO Issues in Death and Dying

Other courses offered by this University or other universities that the Faculty approves for presentation in lieu of elective courses listed above up to the value of 4 units.
4.1.3 Candidates who wish to enrol in a course for which they do not have the necessary preliminary knowledge or approved qualifications, may be required to undertake such bridging studies prior to the commencement of the course as may be deemed appropriate by the Head of the Department of General Practice.

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

1 General
There shall be a Graduate Diploma in Nursing Science which is offered in the following specialisations:

### 1.1 Acute Care Nursing

1.2 Anaesthetic and Recovery Nursing
1.3 Burns Nursing
1.4 Cardiac Nursing
1.5 District Nursing
1.6 Emergency Nursing
1.7 General Practice Nursing
1.8 Gerontological Nursing
1.9 Infection Control Nursing
1.10 Intensive Care Nursing
1.11 Mental Health Nursing
1.12 Oncology Nursing
1.13 Orthopaedic Nursing
1.14 Perioperative Nursing
1.15 Public Health Nursing
1.16 Rural Nursing.

## 2 Duration of program

To qualify for the Graduate Diploma a candidate shall satisfactorily complete a program of study comprising one year of full-time study or not more that two years of part- time study.

3 Admission
3.1 An applicant for admission to the program of study for the Graduate Diploma shall:
(a) be registered, or be eligible for registration, as a nurse in South Australia and
(b) have qualified for a degree of Bachelor of Nursing of a university accepted for the purposes by the University or
(c) have at least two years experience as a registered nurse in the field of the specialisation to be undertaken.
3.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the
requirements of Rule 3.1 above, but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the program.

### 3.3 Status, exemption and credit transfer

3.3.1 No candidate, normally, will be granted status in any of the core courses.
3.3.2 No candidate shall be granted status for courses with a total value of more than 12 units on account of courses presented for any other award.
3.3.3 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

## 4 Assessment and Examinations

4.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
4.2 A candidate who does not complete the specified work to the satisfaction of the teaching staff concerned shall be awarded a failing grade of Incomplete-Fail.
4.3 A candidate who fails a course twice may be subject to a Review of Academic Progress.

5 Qualification requirements

### 5.1 Academic program

To qualify for the Graduate Diploma a candidate shall successfully complete the following:
5.1.1 Core courses, listed below, to the value of 8 units:

CLIN NUR6101HO Developing Advanced Practice in Health Systems I
CLIN NUR6102HO Developing Advanced Practice in Health Systems II
5.1.2 A specialisation set of courses, listed below, to the value of 16 units:

Acute Care Nursing
CLIN NUR 6190 HO Nursing and Medical Science in Acute Care Nursing
CLIN NUR 6191HO Acute Care Nursing
CLIN NUR 6192HO Medical NursingCLIN NUR 6194HO Surgical Nursing
CLIN NUR 6193HO High Acuity Nursing ..... 4Elective taken from any course currently offered by thedepartment with a minimum value of 4 units, inconsultation with the relevant program coordinator.
Anaesthetic and Recovery Nursing
CLIN NUR6104HO Nursing \& Medical Sciencein Anaesthesia \& Recovery I4
CLIN NUR6105HO Nursing \& Medical Science in Anaesthesia \& Recovery II ..... 4
CLIN NUR6178HO Anaesthetic \& Recovery Nursing I ..... 4
CLIN NUR6179HO Anaesthetic \& Recovery Nursing II ..... 4
Burns Nursing
CLIN NUR 6181HO Nursing \& Medical Science in Burns Nursing I ..... 4
CLIN NUR 6182HO Nursing \& Medical Science in Burns Nursing II ..... 4
CLIN NUR 6183HO Burns Nursing I ..... 4
CLIN NUR 6184HO Burns Nursing II ..... 4
Cardiac Nursing
CLIN NUR6108HO Cardiac Nursing I ..... 4
CLIN NUR 6109HO Cardiac Nursing II ..... 4
CLIN NUR6110HO Nursing \& Medical Science in Cardiac Nursing I ..... 4
CLIN NUR6111HO Nursing \& Medical Science in Cardiac Nursing II ..... 4
District Nursing
CLIN NUR6167HO Contemporary Issuesin District Nursing4
CLIN NUR 6168HO Population Profiling in Chronic Illness ..... 4
CLIN NUR6169HO District Nursing A ..... 4
CLIN NUR6170HO District Nursing B ..... 4
CLIN NUR 6195HO Working with Clients \& Community ..... 4
Emergency Nursing
CLIN NUR6127HO Emergency Nursing I ..... 4
CLIN NUR6128HO Emergency Nursing II ..... 4
CLIN NUR6129HO Nursing \& Medical Science in Emergency Nursing I ..... 4
CLIN NUR6130HO Nursing \& Medical Science in Emergency Nursing II ..... 4
General Practice Nursing
CLIN NUR6131HO Emergency Carein General Practice2
CLIN NUR6132HO General Practice Nursing I ..... 4
CLIN NUR6133HO Health Assessment ..... 3
CLIN NUR6134HO Nursing and Medical Science in Primary Health Care ..... 4
CLIN NUR6135HO Pathology and Pharmacology in General Practice ..... 3
Gerontological Nursing
CLIN NUR6136HO Contemporary Issuesin Aged Care4
CLIN NUR6137HO Functional Assessment ..... 4
CLIN NUR6138HO Gerontological Nursing ..... 4
CLIN NUR6139HO Palliative Nursing in Aged Care ..... 4
Infection Control Nursing
CLIN NUR5104HO Microbiology and Epidemiology ..... 6
CLIN NUR6117HO Infection Control Nursing ..... 6
The student must complete a further 4 units by selectingone of the following courses:
CLIN NUR6108HO Focused Reading in Clinical Nursing ..... 4
CLIN NUR6201 Advanced Infection Control Practice ..... 4
Intensive Care Nursing
CLIN NUR6144HO Intensive Care Nursing I ..... 4
CLIN NUR6145HO Intensive Care Nursing II ..... 4
CLIN NUR6146HO Nursing \& Medical Science in Intensive Care I ..... 4
CLIN NUR6147HO Nursing \& Medical Science in Intensive Care II ..... 4
Mental Health Nursing
CLIN NUR 6196HO Acute Mental Health Care I ..... 4
CLIN NUR 6197HO Acute Mental health Care II ..... 4
CLIN NUR 6198HO Primary Mental Health Care ..... 4The student must complete a further 4 units of study byselecting one of the following two courses:
CLIN NUR 6199HO Therapeutic Advancesin Acute Mental Health4
CLIN NUR 6200HO Community Mental Health Nursing ..... 4
Oncology NursingCLIN NUR6152HO Nursing \& Medical Sciencein Oncology Nursing I4
CLIN NUR6153HO Nursing \& Medical Science in Oncology Nursing II ..... 4
CLIN NUR6154HO Oncology Nursing I ..... 4
CLIN NUR6155HO Oncology Nursing II ..... 4
Orthopaedic Nursing
CLIN NUR6156HO Nursing and Medical Sciencein Orthopaedics I4
CLIN NUR6157HO Orthopaedic Nursing I ..... 4
CLIN NUR6158HO Orthopaedic Nursing II ..... 4
CLIN NUR6175HO Nursing \& Medical Science in Orthopaedics II ..... 4
Perioperative NursingCLIN NUR6159HO Nursing \& Medical Sciencein Perioperative Nurs I4
CLIN NUR6160HO Nursing \& Medical Science in Perioperative Nurs II ..... 4
CLIN NUR6161HO Perioperative Nursing I ..... 4
CLIN NUR6162HO Perioperative Nursing II ..... 4
Public Health Nursing
CLIN NUR6163HO Contemporary Issuesin Public Health Nursing4
PUB HLTH7100HO Foundations of Public Health ..... 3
PUB HLTH7101HO Introduction to Epidemiology and Biostatistics ..... 3
PUB HLTH7109HO Health Promotion ..... 3
and one elective course from the following list:
PUB HLTH 7113HO Introduction to Environmental and Occupational Health ..... 3
PUB HLTH7115HO Public Health Law ..... 3
PUB HLTH7117HO Public Health Policy and Ageing ..... 3
PUB HLTH7118HO Public Health Studies ..... 3
Rural Nursing
CLIN NUR 6185HORural Nursing I ..... 4
CLIN NUR 6186HORural Nursing II ..... 4
CLIN NUR 6187HORural Nursing III ..... 4
5.1.3 Notwithstanding the above, if a candidate has successfullycompleted a recognised hospital certificate and gained atleast two years advanced post registration experience inthe specialisation of the certificate within five years ofcommencing candidature, the candidate shall quality forthe Graduate Diploma by successfully completing:
(a) core courses listed in 5.1 above to the value of 8 units
(b) the four unit course CLIN NUR 6103 HO Focused Reading in Clinical Nursing.

### 5.2 Additional specialisations

If a candidate who qualifies for the Graduate Diploma subsequently undertakes, as a non-award student, another specialisation, the candidate may, on payment of a fee determined by the University, return the Graduate Diploma
testamur and receive a new testamur listing all the specialisations completed.

### 5.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Graduate Diploma in Nursing Science - Graduate Attributes

Graduates of the Graduate Diploma in Nursing Science will be distinguished by the following attributes:

- A rigorous academic knowledge of the sciences that inform nursing practice in the specialty.
- The clinical and technological skills required to provide high quality effective nursing care in the chosen specialty.
- The ability to work as team leaders and managers and to undertake the role of case management and care coordination in the chosen specialty.
- The ability to apply critical thinking skills to problem solving in advanced specialty practice.
- The ability to evaluate nursing care according to professional standards of practice within the chosen specialty.
- Highly developed communication skills and sound interpersonal skills to work effectively in a leadership role within the multidisciplinary team.
- The attitudes and skills to practice person-centred nursing in a culturally sensitive and ethically sound manner in the chosen specialty.
- Being committed to and having the skills to continue life long learning to advance nursing practice in their specialty.
- Possessing skills and knowledge to practice as a specialist nurse in a technologically dynamic environment.
- The ability to effectively integrate skills and knowledge in order to facilitate quality nursing care in their specialty.
- Having the skills, knowledge and attitudes to manage and implement care for the patient with complex health needs.
- Being prepared to promote safe practice in accordance with legislation, professional codes, and specialty competencies and guidelines.
- The ability to critically analyse in order to evaluate the evidence and make decisions to implement specialist nursing care based on the best available evidence.
- Having a sound understanding of the dynamics of the health care system and the sociological, cultural and political influences that influence specialty professional practice.


## Academic Program Rules

1 Duration of program
To qualify for the Graduate Diploma, a candidate shall satisfactorily complete one year of full-time study or no more than two years of part-time study.

## 2 Admission

2.1 An applicant for admission to the academic program for the Graduate Diploma in Occupational Health and Safety Management shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award other than the Graduate Certificate in Occupational Health and Safety Management (see Rule 2.4 below).
2.3.2 In any case, no candidate will be awarded more than 12 units of status.
2.3.3 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Head of Department concerned, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate who has been admitted to the Graduate Certificate in Occupational Health and Safety Management and who has been granted status toward the Graduate Diploma for courses presented for the Graduate Certificate must surrender the Graduate Certificate before being admitted to the Graduate Diploma.
2.4.2 A candidate for the degree of Master of Occupational Health and Safety who satisfies the requirements for the Graduate Diploma but who does not complete the requirements of the Masters degree may be admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass. Further a pass will be recorded in two divisions, with a Pass Division I being higher than a Pass Division II. At least a Pass Division I in each compulsory course and a Pass Division || in each elective course is required to complete this award.
3.2 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic programs

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to the value of 24 units, as follows:

### 4.1.1 Core courses

All candidates shall complete the following core course, being the requirement for the Graduate Certificate in Occupational Health and Safety Management:
OH\&S 7105HO Diseases of Occupation*
OH\&S 7031HO Occupational Hygiene and Ergonomics 3

OH\&S 7131HO Occupational Safety and Statistics** 3
OH\&S 7132HO OHS Management and Law 1G**

### 4.1.2 Elective courses

All candidates shall complete 12 units selected from the
following elective courses:
PUB HLTH7114HO National Short Course
in Environmental Health*
PUB HLTH7134HO Advanced Occupational Hygiene* 3
PUB HLTH7135HO Advanced OHS Management** 3
PUB HLTH7136HO Occupational Safety** 3
PUB HLTH7137HO Occupational Toxicology* 3
PUB HLTH7138HO OHS Management and Law IIG** 3
PUB HLTH7139HO OHS Research Methods***
(compulsory for students proceeding to Masters)
PUB HLTH7140HO OHSM Dissertation *** 6
PUB HLTH7141HO Practical Occupational Health* 3

* offered by the University of Adelaide
** offered by the University of South Australia
*** offered by either university
4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete one year of full-time study or the equivalent of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Diploma in Public Health shall have qualified for a degree of the University or a degree of another institution accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 The Faculty may, subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with the special permission of the Head of the Department of Public Health, no candidate will be granted status for any of the core courses of the Graduate Diploma.
2.3.2 No candidate shall be granted status for courses with a total value of more than 12 units.
2.3.3 A candidate who fails a course and desires to repeat that course shall, unless exempted partially therefrom by the Head of Department concerned, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

A candidate for the degree of Master of Public Health who satisfies the requirements for the Graduate Diploma but who does not complete the requirements of the degree may be admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements
4.1 Academic program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete courses to the value of 24 units, as follows.

### 4.1.1 Core course

All candidates shall complete the following courses:
PUB HLTH7100HO Foundations of Public Health
PUB HLTH7101HO Introduction to Epidemiology and Biostatistics
PUB HLTH7102H01292 Public Health Policy 3

### 4.1.2 Elective courses

All candidates shall complete elective courses to the value of 12 units selected from the following:
DENT 7150HO Dental Public Health 3
PUB HLTH7031HO Occupational Hygiene
and Ergonomics
PUB HLTH7104HO Biostatistics 3
PUB HLTH7105HO Diseases of Occupation 3
PUB HLTH7106HO Epidemiological Research Methods 3
PUB HLTH7107HO Epidemiology of Infectious Diseases 3
PUB HLTH7108HO Ethical Issues in Public Health 3
PUB HLTH7109HO Health Promotion 3
PUB HLTH 7110HO Health Resource Allocation 3
PUB HLTH7111HO Industrial Toxicology 3
PUB HLTH7113HO Introduction to Environmental
and Occupational Health
PUB HLTH7114HO National Short Course in Environmental Health
PUB HLTH7115HO Public Health Law 3
PUB HLTH7118HO Public Health Studies 3

PUB HLTH 7123HO Rural Public Health 3
PUB HLTH 7124HO Population Health for Clinicians A 3
PUB HLTH 7125HO Population Health for Clinicians B 3
PUB HLTH 7126HO Quantitative Research in Practice 3
PUB HLTH 7146HO An Anthropological Lens on Public Health

Other courses offered by this University or other universities which the Faculty approves for presentation in lieu of elective courses listed above up to the value of 3 units.
4.2 Candidates who wish to enrol in a course for which they do not have the necessary preliminary knowledge or approved qualifications, may be required to undertake such bridging studies prior to the commencement of the course as may be deemed appropriate by the Head of the Department of Public Health.

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Alcohol and Drug Studies

Note: This program is only offered in the external mode. Postgraduate tuition fees apply to the program.

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a course of study comprising at least two years of full-time study or at least four years of part-time study.

2 Admission
2.1 An applicant for admission to the academic program for the degree of Master of Alcohol and Drug Studies shall:
(a) have qualified for an Honours degree of the University in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent to an Honours degree of the University
(b) have qualified for the Graduate Diploma in Alcohol and Drug Studies with results of at credit level or higher or
(c) have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent, plus have at least two years' approved professional work experience.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award other than the Graduate Diploma in Alcohol and Drug Studies (see Rule 2.4 below).
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 12 units of status, except for those candidates who have completed the Graduate Diploma in Alcohol and Drug Studies or equivalent.

### 2.4 Articulation with other awards

2.4.1 A candidate who has been admitted to the Graduate Diploma in Alcohol and Drug Studies and who subsequently satisfies the requirements for the Master of Alcohol and Drug Studies must surrender the Graduate Diploma in Alcohol and Drug Studies before being admitted to the Master degree.
2.4.2 A candidate for the degree of Master of Alcohol and Drug Studies who does not complete the requirements of the degree, but who satisfies the requirements for the Graduate Diploma may be admitted to the Graduate Diploma in Alcohol and Drug Studies.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially thereform by the head of department concerned, again complete the required work in the course to the satisfaction of the teaching staff concerned.
3.4 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualifications requirements

### 4.1 Academic program

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 48 units, as follows:
4.1.1 Core courseAll candidates shall complete the following core courses:
PHARM 7001 Principles of Drug Action ..... 4
PHARM 7002 Aetiology of Drug Problems ..... 4
PHARM 7003 Treatment Principles and Practice I ..... 4
PHARM 7004 Treatment Principles and Practice II ..... 4
PHARM 7005 Public Health Principles \& Drug Use ..... 4
PHARM 7006 Practicum and Project ..... 4
4.1.2 DissertationAll candidates shall complete either the full-time or a part-time version of the following course:
PHARM7009 AEX/BEX Alcohol and Drug Studies Dissertation (full-time) ..... 12
PHARM7010 AEX/BEX Alcohol and Drug Studies Dissertation (part-time) ..... 12
4.2 Some periods of residence in Adelaide may be required ifacademic progress is not satisfactory.
4.3 Unacceptable combinations of coursesNo candidate will be permitted to count towards an awardany course, together with any other course, which, in theopinion of the Faculty concerned, contains a substantialamount of the same material; and no course or portion of acourse may be counted twice towards an award.
4.4 GraduationSubject to Chapter 89 of the Statutes, candidates whohave satisfied the requirements for any award of theUniversity shall be admitted to that award at a graduationceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Clinical Science

## Academic Program Rules

1 General
1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.
These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.
All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

## 2 Admission

2.1 Further to Rule 4.1 of the General Academic Program Rules, an applicant for admission to the program for the Master of Clinical Science shall:
(a) have qualified for the degrees of Bachelor of Medicine and Bachelor of Surgery of the University or degrees of another institution accepted by the Research Education and Development Committee for the purpose as equivalent or
(b) have qualified for a degree of Bachelor of Nursing of a university accepted for the purpose by the University or
(c) have qualified for the Graduate Diploma in Grief and Palliative Care Counselling with results of credit level or higher or
(d) have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or Committee for the purpose as equivalent, plus have at least two years' approved professional work experience.

## Master of Grief and Palliative Care Counselling

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete six semesters of part-time study.

2 Admission
2.1 The Faculty of Health Sciences may accept as a candidate for the degree any person who has qualified for a degree of the University of Adelaide or of another university.
2.2 Subject to the approval of the Board of Research Education and Development acting with authority wittingly devolved to it by Council the Faculty of Health Sciences may in special cases and subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not meet the requirements specified in 2.1 above if it is satisfied that he or she is likely to be able satisfactorily to undertake work for the degree.
2.3 The Faculty of Health Sciences may require an applicant to complete such preliminary work as it may prescribe before being accepted as a candidate for the degree.

### 2.4 Status, exemption and credit transfer

2.4.1 Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any other award (See Rule 2.5 below).
2.4.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.4.3 In any case, no candidate will be awarded more than 12 units of status, except for those candidates who have completed the Graduate Diploma in Grief and Palliative Care Counselling, or antecedent courses in Grief and Palliative Care Counselling presented by the Department of General Practice, the University of Adelaide.
2.4.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Head of Department concerned, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.5 Articulation with other awards

2.5.1 A candidate for the Master of Grief and Palliative Care Counselling who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.
2.5.2 A candidate who has been admitted to the Graduate Diploma in Grief and Palliative Care Counselling or the Graduate Certificate in Grief and Palliative Care Counselling and who subsequently satisfies the requirements for the Master of Grief and Palliative Care Counselling must surrender the Graduate Diploma or Graduate Certificate respectively before being admitted to the Master degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements
4.1 Academic program

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 36 units, as follows:

### 4.1.1 Core courses

All candidates shall complete the following core courses:
GEN PRAC 7101HO Bereavement
GEN PRAC 7104HO Supervised Field Education 2
GENPRAC 7105HO Grief Counselling I 2
GENPRAC 7106HO Grief Counselling II 2
GENPRAC 7107HO Grief Counselling III 2

GENPRAC 7205HO Advanced Grief Counselling IA
GENPRAC 7206HO Advanced Grief Counselling II 3
GENPRAC 7207HO Advanced Grief Counselling III 3
GENPRAC 7210HO Advanced Grief Counselling IB 1
and one of
GEN PRAC 7102HO Loss and Grief 2
GEN PRAC 7103HO Issues in Death and Dying 2

### 4.1.2 Elective courses

All candidates shall complete an additional 4 units selected from the following elective courses:

GEN PRAC 7102HO Loss and Grief 2
GEN PRAC 7103HO Issues in Death and Dying 2
GEN PRAC 7201HO Grief and Spirituality 2
GEN PRAC 7202HO Grief Studies 2
GEN PRAC 7209HO Research Design and Methodology 2
Other courses offered by this University or other universities that the Faculty approves for presentation in lieu of elective courses listed above up to the value of 4 units.

### 4.1.3 Dissertation

All candidates shall complete either the full-time or the part-time version of the following course:

GEN PRAC 7304HO MGPCC Dissertation (full-time) 12
GEN PRAC 7404HO MGPCC Dissertation (part-time) 12

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Postgraduate Coursework Programs in <br> Grief \& Palliative Care Counselling - Graduate Attributes

The Grief and Palliative Care Counselling Program encourages the following attributes in its graduates:

- Specialised up-to-date knowledge and understanding of grief and its associated issues, together with effective skills for appropriate interventions with grieving people.
- The ability to evaluate and synthesise grief-related information from a wide variety of sources.
- The ability to apply knowledge and skills to their own relevant professional situations.
- A high level of interpersonal skills, essential in communication with grieving individuals and families, as well as in the workplace.
- Proficient use of technology appropriate to learning at a post-graduate level.
- Commitment to lifelong learning. Graduates are encouraged to build on their experience and previous learning in order to maximise their personal and professional effectiveness.
- The ability to take leadership and to share their learning in their own communities and workplaces.
- Appropriate practice and awareness of ethical, social and cultural issues relevant to the areas, of grief, loss bereavement and palliative care.


## Academic Program Rules

## 1. General

1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.
These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.
2. Admission
2.1 Further to the Admission Rules listed on pages 8 and 9 of the general Academic Program Rules, admission to candidature for the Master in Grief and Palliative Care Research may be granted to:
(a) Persons who have qualified for an Ordinary degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent, and who have at least two years' approved professional work experience.

## Academic Program Rules

1 General
1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.
These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

## 2 Admission

2.1 Further to Rule 4.1a of the General Program Rules, the Research Education and Development Committee may accept as a candidate for the degree a person who has qualified for:
(a) the degrees of Bachelor of Medicine and Bachelor of Surgery of the University of Adelaide or
(b) the Honours degree of Bachelor of Medical Science or Bachelor of Health Sciences or Bachelor of Science or Bachelor of Science in Dentistry of the University of Adelaide, at First or Second Class standard.

## Master of Nursing Science

## Academic Program Rules

## 1 Duration of program

To qualify for the Master of Nursing Science a candidate shall satisfactorily complete a program of full-time study extending over one year or a program of part-time study extending over at least two years.

## 2 Admission

2.1 An applicant for admission to the program for the Master of Nursing Science shall:
(a) have qualified for a Graduate Diploma in Nursing Science (Stage 1) of the University or for a Graduate Diploma in Nursing from another university accepted for the purposes by the University or have completed the equivalent of four years tertiary study in nursing from another university for the purposes by the university and
(b) have at least two years post registration experience as a registered nurse and
(c) be registered, or be eligible for registration, as a nurse
(d) have obtained the approval of the Department of Clinical Nursing.
2.2 Subject to the approval of Council, the Faculty may in special cases and subject to such conditions (if any) as it may seem fit to impose in each case, accept as a candidate for the Master of Nursing Science, a person who does not qualify for admission to the program under (2.1) above, but has given evidence satisfactory to the Faculty of fitness to undertake work for the Master of Nursing Science.

3 Assessment and examinations
3.1 There shall be four classes of pass in each course for the Master of Nursing Science: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate who fails to pass in the course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application for such exemption.
(b) A candidate who has twice failed the examination in any course or division of a course may not enrol for the course again except by special permission to be
obtained in writing from the Manager, Academic Programs, and then only under such conditions as may be prescribed.
(c) For the purpose of this Rule a candidate who is refused permission to sit for examination, or who, without a reason accepted by the Head of the Department of Clinical Nursing as adequate, fails to attend all or part of a final examination (or supplementary examination if granted) after remaining enrolled for at least 9 teaching weeks that semester, shall be deemed to have failed the examination.

## 4 Qualification requirements

4.1 Unless exempted therefrom by the Faculty every candidate for the Master of Nursing Science shall:
(a) satisfactorily complete the Stage I requirements by qualifying for the award of the Graduate Diploma in Nursing Science or a Graduate Diploma in a nursing specialty offered by the Department of Clinical Nursing or
satisfactorily complete a program of study to the value of 24 units, approved by the Department of Clinical Nursing, selected from a range of courses offered by the Department.
(b) satisfactorily complete the requirements of 4.1.1 and 4.1.2 or 4.1.3 or 4.1.4 below.

### 4.1.1 Core courses

All candidates shall complete the following core courses:
CLINNUR 7001HO Empirical/Analytical Research 3

CLINNUR 7002HO Interpretative \& Critical Research

### 4.1.2 Dissertation

All candidates shall complete either:
CLINNUR 7008AHO Research Dissertation B Part 16 and

CLINNUR 7008BHO Research Dissertation B Part 212
or
CLIN NUR 7008AHO Research Dissertation B Part 1
and
CLIN NUR 7009HO Research Dissertation B (Part-time) Progress

6
and
CLIN NUR 7010HO Research Dissertation B (Part-time) Final6
4.1.3 Dissertation and Electives
CLIN NUR 7005HO Research Dissertation A ..... 12
or
CLIN NUR 7006HO Research Dissertation A (Stage 1) ..... 6
andCLIN NUR 7007HO Research Dissertation A (Stage 2)6
and
two courses from the following:
CLIN NUR7003HO International Issues in Nursing Service Delivery ..... 3
CLIN NUR 7004HO The Emergence of a Theoretical Base for Nursing ..... 3
CLIN NUR 7011HO Clinical Management ..... 3
CLIN NUR 7012HO Systematic and Critical Reviews of the Research ..... 3
CLIN NUR 7014HO Advanced Health Assessment ..... 3
CLIN NUR 7015HO Applied Pharmacology in Nursing ..... 3
4.1.4 Coursework
Choose courses to the value of 18 units from the following:
CLIN NUR7003HO International Issues in Nursing Service Delivery ..... 3
CLIN NUR 7004HO The Emergence of a Theoretical Base for Nursing ..... 3
CLIN NUR 7011HO Clinical Management ..... 3
CLIN NUR 7012HO Systematic and Critical Reviews of the Research ..... 3
CLIN NUR 7013HO Critical Review Project ..... 6
CLIN NUR 7014HO Advanced Health Assessment ..... 3
CLIN NUR 7015HO Applied Pharmacology in Nursing ..... 3
4.2 Unacceptable combinations of coursesNo candidate will be permitted to count towards an awardany course, together with any other course, which, in theopinion of the Faculty concerned, contains a substantialamount of the same material; and no course or portion of acourse may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Nursing Science - Graduate Attributes

Graduates of the Master of Nursing Science will be distinguished by the following attributes:

- A sound knowledge of a broad range of research methodologies and methods.
- The ability to design and conduct a research project in a rigorous and ethical manner.
- The skills to critically evaluate research and make informed decisions for practice change when appropriate.
- The ability to work as an effective member of a research team.
- A basic understanding of the philosophical basis of nursing research.
- The ability to identify and describe the major theoretical perspectives that inform nursing practice.
- Being a critical and informed thinker regarding issues related to nursing and health.
- The ability to communicate effectively using a range of mediums.


## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a course of study comprising three semesters of full-time study or the equivalent of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the degree of Master of Occupational Health \& Safety shall:
(a) have qualified for an Honours degree of the University in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent to an Honours degree of the University
(b) have qualified for the Graduate Diploma in Occupational Health and Safety Management with a minimum grade of at least Pass Division I in all courses or
(c) have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent, plus have at least two years' approved relevant practical experience.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award other than the Graduate Certificate or Graduate Diploma in Occupational Health and Safety Management (see Rule 2.4 below).
2.3.2 Subject to the following clause, no candidate will be awarded more than 12 units of status.
2.3.3 Candidates who have completed the Graduate Diploma in Occupational Health and Safety Management or the Graduate Diploma in Occupational Health and Safety Management formerly offered by the University of South Australia, the Graduate Diploma in Occupational Health formerly offered by this University, or an equivalent award from another institution, may be granted exemption from
all courses (other than the OHS Research Thesis) if in the opinion of the Faculty their studies are equivalent to the admission requirements set out in Rule 2.1 (b).
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Head of Department concerned, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Occupational Health and Safety who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those degrees as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Diploma in Occupational Health and Safety Management and who subsequently satisfies the requirements for the Master of Occupational Health and Safety must surrender the Graduate Diploma before being admitted to the Master degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass. Further a pass will be recorded in two divisions, with a Pass Division I being higher than a Pass Division II. To complete this award a candidate will be required to obtain an average mark of at least Credit standard in all courses except for the Research Thesis.
3.2 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements

### 4.1 Academic program

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 36 units, as follows:

### 4.1.1 Core courses

All candidates shall complete the following core courses, being the requirement for the Master of Occupational Health and Safety Management:

OH\&S 7105HO Diseases of Occupation* 3
PUB HLTH 7031 HO Occupational Hygiene
and Ergonomics
OH\&S 7131HO Occupational Safety \& Statistics ** 3
OH\&S 7132HO OHS Management and Law 1G ** 3
4.1.2 Elective courses

All candidates shall complete 12 units selected from the following elective courses:

OH\&S 7014HO Occupational and Environmental Health Studies

OH\&S 7114HO National Short Course
in Environmental Health*3

OH\&S 7133HO Advanced Ergonomics ** 3
OH\&S 7134HO Advanced Occupational Hygiene* 3
OH\&S 7135HO Advanced OHS Management ** 3
OH\&S 7136HO Occupational Safety** 3
OH\&S 7137HO Occupational Toxicology* 3
OH\&S 7138HO OHS Management and Law IIG** 3
OH\&S 7139HO OHS Research Methods*** 3
OH\&S 7141HO Practical Occupational Health* 3

### 4.1.3 Research project

All candidates shall complete the following research course:
OH\&S 7142HO OHS Research Thesis ***

* offered by the University of Adelaide
** offered by the University of South Australia
*** offered by either university


### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

1.1 Except with the permission of the Faculty, the courses of study and the dissertation shall be completed in not more than two years of full-time study or four years of part-time study.
1.2 A student whose work on the dissertation is interrupted for a reason acceptable to the Dean may be granted an intermission of candidature by the Head of the Psychology Department on behalf of the Faculty. If such an application is approved the maximum period specified in clause 1.1 will be adjusted accordingly by adding the length of the intermission.

2 Admission
2.1 An applicant for admission to the program of study for the degree of Master of Psychology (Clinical) shall have qualified for an Honours degree of Bachelor, with Honours in Psychology, of the University of Adelaide or for an Honours degree of another institution accepted for the purpose by the University.
2.2 Subject to the approval of the Council the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a student for the Master's degree a person who does not hold a degree of a tertiary institution but has given evidence satisfactory to the Faculty of fitness to undertake work for the Master's degree.

### 2.3 Status, exemption and credit transfer

2.3.1 The Faculty may grant such status for other studies undertaken in the University or other institutions in any course as it may determine up to a maximum of 8 units, provided that any such course has not been presented for another degree.
2.3.2 Except by the special permission of the Head of the Department of Psychology, no student may gain status for the course 7114 A/B Research Project in Clinical/Health Psychology for other studies undertaken in the University or other institutions.

## 3 Assessment and examinations

3.1 There shall be one of two systems of classification of pass in individual courses for the Master's degree: either Satisfactory; or Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 On completion of the Research Project the student shall lodge with the Department three copies of the dissertation prepared in accordance with directions given to students from time to time. No dissertation or material presented for any other degree within this or any other institution shall be submitted.
3.3 Two examiners of the Research Project will be appointed by the Head of Department. Both examiners will normally be internal to the Department but not include the student's supervisor.

### 3.4 Review of academic progress

3.4.1 A student who fails a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe.
3.4.2 A student who has twice failed a course may not enrol for that course again except by special permission to be obtained in writing from the Faculty and then only under such conditions as may be prescribed.

Attendance is required for at least $80 \%$ of the sessions in any compulsory course. A student who fails this requirement will not be eligible for examination unless there are extenuating circumstances.
3.4.3 For the purposes of this clause a student who is refused permission to be assessed, by examination or otherwise, or who does not, without a reason accepted by the Head of the Department of Psychology as adequate, attend all or part of a final examination (or supplementary examination if granted) after having enrolled for at least two thirds of the normal period during which the course is taught, shall be deemed to have failed the course.
3.4.4 If in the opinion of the Head of the Psychology Department a student for the degree is not making satisfactory progress, the Faculty may, with the consent of the Council, terminate the candidature and the student shall cease to be enrolled for the degree.

## 4 Qualification requirements

4.1 Unless exempted therefrom by the Faculty all students will satisfactorily complete Compulsory Courses to the value of 22 units, Three eighteen-week periods (of 5 half-days per week or equivalent) of placement in different institutions or organisations offering psychological services approved by the Head of the Department of Psychology, and a Research Dissertation.
4.2 In the normal pattern of study, students enrolled on a fulltime basis will complete the courses PSYCHOL 7101 A/B, PSYCHOL 7102, PSYCHOL 7103, PSYCHOL 7105, PSYCHOL 7106, PSYCHOL 7107, PSYCHOL 7108, PSYCHOL 7109 and PSYCHOL 7110, and one placement, during first year. They should also do preliminary work on their research project although they will not enrol formally until second year. During second year they will complete PSYCHOL 7104, two further placements and the research project. Students may wish to consider linking the research project to one of the placements.

For the normal pattern of study for students enrolled on a part-time basis, see the program handbook.

### 4.3 Academic program

Unless exempted therefrom by the Faculty of Health Sciences, every student for the degree shall satisfactorily complete the following three components:

### 4.3.1 Coursework courses

All students shall complete the following compulsory courses:

PSYCHOL 7101 A/B Adult Clinical Psychology Part 1 \& 24
PSYCHOL 7102 Applied Methodology 2
PSYCHOL 7103 Child Clinical Psychology 2
PSYCHOL7104 Clinical Neuropsychology 2
PSYCHOL7105 Preparation for Psychological Practice II 2
PSYCHOL7106 Health Psychology 2
PSYCHOL 7107 Preparation for Psychological Practice I 2
PSYCHOL 7108 Psychological Assessment 2
PSYCHOL7109 Clinical Geropsychology 2
PSYCHOL7110 Rehabilitation and Disability 2

### 4.3.2 Placements

Three placements, as follows:
PSYCHOL7111 Placement I 4
PSYCHOL7112 Placement II 4
PSYCHOL 7113 Placement III 4
4.3.3 Research project

PSYCHOL7114 A/B Research Project in Clinical Psychology
4.4 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.
4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Psychology (Clinical) - Graduate Attributes

The aim of this program is to provide graduates with the tertiary-level education required to be eligible for registration as an Organisational Psychologist with additional skills in the area of human factors. Graduates will display the following attributes:

- A broad general knowledge, together with specialised understanding in the discipline of Clinical Psychology.
- An appreciation of their potential contribution to knowledge through the traditions and innovations of the field of Clinical Psychology.
- Specialised knowledge of the effective and ethical practice of the profession of Clinical Psychology, appropriate for registration to practise as a Psychologist in Australia and, sometimes with minor extensions, internationally.
- The skills and discipline to research, synthesise, organise and present information, using a range of technologies appropriate to the discipline of Psychology.
- Analytical and critical skills.
- The ability to argue from evidence.
- Problem solving skills.
- The ability to set appropriate goals and to work both independently and cooperatively as appropriate.
- The ability to communicate effectively.
- An understanding of the importance of lifelong learning and continuing professional development.
- An awareness of their potential leadership roles in the community of scholars and in the Mental Health professions.
- Excellence in professional skills to deliver effective services in Clinical Psychology, as outlined in Guidelines and Competency Statements by the College of Clinical Psychologists of the Australian Psychological Society.
- An understanding of ethical issues in both intellectual and professional contexts.
- An awareness of social justice issues, particularly in the practice of Clinical Psychology.


## Academic Program Rules

1 Duration of program
1.1 Except with the permission of the Faculty, the courses of study and the dissertation shall be completed in not more than two years of full-time study or four years of part-time study.
1.2 A student whose work in the Program is interrupted for a reason acceptable to the Head of the Department of Psychology may be granted an intermission of candidature by the Head on behalf of the Faculty. If such an application is approved the maximum period specified in clause 1.1 will be adjusted accordingly by adding the length of the intermission.

## 2 Admission

2.1 An applicant for admission to the program of study for the degree of Master of Psychology (Organisational and Human Factors) shall have qualified for an Honours degree of Bachelor, with Honours in Psychology, of Adelaide University or for an Honours degree of another institution accepted for the purpose by the University.

### 2.2 Status, exemption and credit transfer:

2.2.1 The Faculty may grant such status for other studies undertaken in the University or other institutions in any course as it may determine up to a maximum of 8 units, provided that any such course has not been presented for another degree.
2.2.2 Except by the special permission of the Head of the Department of Psychology, no student may gain status for the course PSYCHOL 7225 A/B Research Project in Organisational Psychology and Human Factors for other studies undertaken in the University or other institutions.

3 Assessment and examinations
3.1 There shall be one of two systems of classification of pass in individual courses for the Master's degree: either Satisfactory; or Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 On completion of the Research Project the student shall lodge with the Department two copies of the dissertation prepared in accordance with directions given to students
from time to time. No dissertation or material presented for any other degree within this or any other institution shall be submitted.
3.3 Two examiners of the Research Project will be appointed by the Head of Department. Both examiners will normally be internal to the Department but not include the student's supervisor.

### 3.4 Review of academic progress

3.4.1 A student who fails a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe.
3.4.2 A student who has twice failed a course may not enrol for that course again except by special permission to be obtained in writing from the Faculty and then only under such conditions as may be prescribed. Attendance is required for at least $80 \%$ of the sessions in any compulsory course. A student who fails this requirement will not be eligible for examination unless there are extenuating circumstances.
3.4.3 For the purposes of this clause a student who is refused permission to be assessed, by examination or otherwise, or who does not, without a reason accepted by the Head of the Department of Psychology as adequate, attend all or part of a final examination after having enrolled for at least two thirds of the normal period during which the course is taught, shall be deemed to have failed the course.
3.4.4 If in the opinion of the Head of the Department of Psychology a student for the degree is not making satisfactory progress, the Faculty may, with the consent of the Council, terminate the candidature and the student shall cease to be enrolled for the degree.

## 4 Qualification requirements

4.1 Unless exempted therefrom by the Faculty, all students will satisfactorily complete Compulsory Courses to the value of 22 units, three 18 -week periods lof 5 half-days per week or equivalent) of placement in different institutions or organisations offering psychological services approved by the Head of the Department of Psychology, and a Research Dissertation.
4.2 In the normal pattern of study, students enrolled on a fulltime basis will complete the courses PSYCHOL 7110, PSYCHOL 7201, PSYCHOL 7202, PSYCHOL 7203, PSYCHOL 7204, PSYCHOL 7207, PSYCHOL 7208, PSYCHOL 7209, PSYCHOL 7210, and PSYCHOL 7211 and one placement, during first year. They should also do preliminary work on their research project although they will not enrol formally for that project until second year. During second year they will complete PSYCHOL 7205, two further placements, and the research project. Students may wish to consider linking the research project to one of the placements.

### 4.3 Program of study

Unless exempted therefrom by the Faculty of Health Sciences, every student for the degree shall satisfactorily complete the following three components:

### 4.3.1 Coursework courses

All students shall complete the following compulsory courses:

PSYCHOL 7110 Rehabilitation and Disability 2
PSYCHOL 7201 Applied Methodology and Statistics 2
PSYCHOL 7202 Applied Perceptual and Cognitive Psychology 2

PSYCHOL 7203 Consumer Psychology 2
PSYCHOL 7204 Decision Making in Applied Situations 2
PSYCHOL 7206 Human Factors/Ergonomics 2
PSYCHOL 7207 Human Resource Management 2
PSYCHOL 7208 Individual and Organisational Change and Development

PSYCHOL 7209 Organisational Behaviour and Management
PSYCHOL 7210 Professional and Ethical Practice
PSYCHOL 7211 Psychological Assessment:
Recruitment and Personnel Appraisal

### 4.3.2 Placements <br> Three placements, as follows:

PSYCHOL 7221 Placement I
PSYCHOL 7222 Placement II
PSYCHOL 7223 Placement III 4

### 4.3.3 Research Project

PSYCHOL 7225 A/B Research Project
in Organisational Psychology and Human Factors

### 4.4 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial
amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Master of Psychology (Organisational and Human Factors) Graduate Attributes

The aim of this program is to provide graduates with the tertiary-level education required to be eligible for registration as an Organisational Psychologist with additional skills in the area of human factors. Graduates will display the following attributes:

- A broad general knowledge of psychology together with a specialised understanding in the areas of Organisational Psychology and Human Factors.
- An appreciation of their potential contribution to knowledge though the traditions and innovations of the fields of Organisational Psychology and Human Factors.
- Specialised knowledge of the effective and ethical practice of the profession of Organisational Psychology, appropriate for registration to practise as a Psychologist in Australia and internationally.
- The skills and discipline to research, synthesise, organise and present information using a range of technologies.
- Analytical and critical skills in statistics, computing, applied methodology and problem solving.
- The ability to argue from evidence and communicate effectively in technical reports, essays, and in oral presentations.
- The ability to set appropriate goals and to work both independently and cooperatively.
- Practical knowledge and experience of professional work environments and their interpersonal interactions and organisational structures.
- The ability to show creativity and initiative in the development of independent research and the application of psychological knowledge in organisational contexts.
- Appreciation of the opportunities for research, consultancy and commercialisation in the area of organisational psychology.
- An understanding of the importance of lifelong learning and continuing professional development.
- An awareness of the role of organisational psychologists in leadership roles both in the community of scholars as well as in the business community.
- The ability to deliver high level skills consistent with the Guidelines and Competency Statements of the College of Organisational Psychologists of the Australian Psychological Society.
- An understanding of ethical and social justice issues, particularly in the areas of employment and management.


## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a course of study comprising three semesters of full-time study or the equivalent of part-time study.

2 Admission
2.1 The Faculty of Medicine may accept as a candidate for the degree any person who has qualified for a degree of the University of Adelaide or of another university.
2.2 Subject to the approval of the Board of Research Education and Development acting with authority wittingly devolved to it by Council the Faculty of Medicine may in special cases and subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not meet the requirements specified in 2.1 above if it is satisfied that he or she is likely to be able satisfactorily to undertake work for the degree.
2.3 The Faculty of Medicine may require an applicant to complete such preliminary work as it may prescribe before being accepted as a candidate for the degree.

### 2.4 Status, exemption and credit transfer

2.4.1 Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any other award (see Rule 2.5 below).
2.4.2 In any case, no candidate will be awarded more than 12 units of status, except for those candidates who have completed the Graduate Diploma in Public Health.
2.4.3 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Head of Department concerned, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.5 Articulation with other awards

2.5.1 A candidate for the Master of Public Health who does not complete the requirements for the Master's degree but satisfies the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.
2.5.2 A candidate who has been admitted to the Graduate Diploma in Public Health or the Graduate Certificate in Public Health and who subsequently satisfies the requirements for the Master of Public Health must
surrender the Graduate Diploma or Graduate Certificate respectively before being admitted to the Master degree.

## 3 Assessment and examination

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 36 units, as follows:

### 4.1.1 Core courses

All candidates shall complete the following core courses:
PUB HLTH7100HO Foundations of Public Health
PUB HLTH 7101HO Introduction to Epidemiology and Biostatistics
PUB HLTH 7102HO Public Health Policy

### 4.1.2 Elective courses

All candidates shall complete 15 units selected from the following elective courses:
DENT7150HO Dental Public Health 3
PUB HLTH7031HO Occupational Hygiene and Ergonomics
PUB HLTH7104HO Biostatistics 3
PUB HLTH7105HO Diseases of Occupation 3
PUB HLTH7106HO Epidemiological Research Methods 3
PUB HLTH7107HO Epidemiology of Infectious Diseases 3
PUB HLTH7108HO Ethical Issues in Public Health 3
PUB HLTH7109HO Health Promotion ..... 3
PUB HLTH 7110HO Health Resource Allocation ..... 3
PUB HLTH7111HO Industrial Toxicology ..... 3
PUB HLTH7113HO Introduction to Environmental and Occupational Health ..... 3
PUB HLTH7114HO National Short Course in Environmental Health ..... 3
PUB HLTH 7115HO Public Health Law ..... 3
PUB HLTH 7117HO Public Health Policy and Ageing ..... 3
PUB HLTH 7118HO Public Health Studies ..... 3
PUB HLTH 7121HO Health Program Evaluation ..... 3
PUB HLTH7123HO Rural Public Health ..... 3
PUB HLTH 7124HO Population Health for Clinicians A ..... 3
PUB HLTH 7125HO Population Health for Clinicians B ..... 3
PUB HLTH 7126HO Quantitative Research in Practice ..... 3
PUB HLTH 7146HO An Anthropological Lens on Public Health ..... 3
PUB HLTH 7147HO Health Technology Assessment ..... 3Other courses offered by this University or other universitieswhich the Faculty approves for presentation in lieu ofelective courses listed above up to the value of 3 units.
4.1.3 DissertationAll candidates shall complete either the full-time or thepart-time version of the following course:
PUB HLTH 7119HO MPH Dissertation (full-time) ..... 12
PUB HLTH 7120HO MPH Dissertation (part-time) ..... 12
4.2 Unacceptable combinations of coursesNo candidate will be permitted to count towards an awardany course, together with any other course, which, in theopinion of the Faculty concerned, contains a substantialamount of the same material; and no course or portion of acourse may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

1 General
1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.
These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

## 2 Admission

2.1 Further to Rules 4.1 to 4.5 of the General Academic Program Rules, the following persons may be accepted as candidates for the degree of Master of Surgery:
(a) Bachelors of Surgery of the University of Adelaide
(b) Graduates in surgery of another university who hold a degree which is accepted by the Research Education and Development Committee on the recommendation of the Faculty as equivalent to the degree of Bachelor of Surgery of the University of Adelaide.
2.2 No person may be awarded the degree of Master of Surgery until three years has elapsed since the candidate was awarded the MBBS degree.
2.3 A candidate for the degree shall submit evidence satisfactory to the Faculty of having had special training in surgery including at least one year's basic surgical training, or equivalent, in a teaching hospital recognised by the Faculty for the purpose.

## Master of Psychology (Clinical)/Doctor of Philosophy

## Academic Program Rules

1 There shall be a Master of Psychology (Clinical) and Doctor of Philosophy combined degree program

2 Rules
2.1 The Vice-Chancellor, with authority devolved to her/him by Council, and after receipt of advice from the Research Education and Development Committee, shall from time to time prescribe Rules defining the academic standing required for candidature, eligibility for enrolment, the program of study and research for the combined degree program, the condition of candidature and the assessment for the degree.
2.2 Such Rules shall become effective from the date of prescription by the Vice-Chancellor or such other date as the Vice-Chancellor may determine.

## 3 Academic standing

3.1 The academic standing required for acceptance as a candidate for the combined degree of Master of Psychology (Clinical) and Doctor of Philosophy shall be an Honours degree of Bachelor, with Honours in Psychology of First Class Standard of the University of Adelaide, or an Honours degree of another institution accepted for the purpose by the University. Applications from students with other qualifications will require the approval of the Faculty of Health Sciences and the Research Education and Development Committee.
3.2 A person who holds a degree of another university may be accepted as a candidate provided that the program of study undertaken and the academic standard reached are equivalent to those required of a candidate who is a graduate of the University of Adelaide.
3.3 Acceptance of a candidate in the combined degree program will also require selection based on the usual entry criteria for the Master of Psychology (Clinical) program which include referee reports and a structured interview to assess suitability for the profession.
$4 \quad$ Credit for work previously completed
4.1 The Faculty of Health Sciences may grant such status as it may determine up to a maximum of 8 units for courses undertaken at another institution, provided that any such coursework has not been presented for another degree.
4.2 The Committee may grant credit in the program for research undertaken in another program in the University or in another university or tertiary institution.
4.3 The Committee may also grant credit for research undertaken in an organisation other than a University or tertiary institution.
4.4 In consideration for acceptance under Rules 4.2 or 4.3 , the Committee must be satisfied that
(a) the person is of such academic standing as would be required of other candidates for the degree and
(b) the person's progress so far has been satisfactory and the research for which credit is granted is of a satisfactory standard.

## 5 Enrolment

5.1 A person shall not be enrolled as a candidate for the combined degree unless the applicant's proposed field of study and research is acceptable to the Department responsible for the supervision of the candidate's work.
5.2 Except with the permission of the Dean of Graduate Studies, a candidate may not enroll concurrently in another academic program.
5.3 Except with the permission of the Dean of Graduate Studies, a candidate who is permitted to enroll concurrently in another academic program and who is granted leave of absence must intermit all academic programs in which they are enrolled.

## 6 Duration of candidature and mode of study

A candidate may proceed to the degree by full-time study or, if the Head of the Department is satisfied that the candidate has adequate time to pursue supervised research under the control of the University, by half-time study. Except in circumstances approved by the Committee, all coursework, placements and the research thesis shall normally be completed and the thesis submitted:
(a) in the case of a full-time candidate, not more than four years from the date of commencement of candidature.
(b) in the case of a half-time candidate, not less than four years and not more than eight years from the date of commencement of candidature.

## $7 \quad$ Work for the degree

7.1 A candidate shall pursue an approved program of study and research under the control of the University and under the general guidance of supervisors appointed by the University. At least one supervisor shall be a member of the academic staff of the Department in which the candidate is enrolled.
7.2 Unless exempted by the Faculty, all students will satisfactorily complete compulsory courses to the value of 18 units and one elective to the value of 2 units, three 18week periods (of 5 half-days per week or equivalent) of supervised placement (12 units) in institutions or organisations offering clinical psychological services approved by the Head of the Department of Psychology, and a research project.

### 7.3 Academic program

Unless exempted there from by the Faculty of Health Sciences, every student for the combined degree shall satisfactorily complete the following four components:

### 7.3.1 Compulsory courses

PSYCHOL 7101 A/B Adult Clinical Psychology 4
PSYCHOL 7102 Applied Methodology 2
PSYCHOL 7103 Child Clinical Psychology 2
PSYCHOL 7104 Clinical Neuropsychology 2
PSYCHOL 7105 Preparation for Psychological Practice II 2
PSYCHOL 7106 Health Psychology 2
PSYCHOL 7107 Preparation for Psychological Practice I 2
PSYCHOL 7108 Psychological Assessment 2

### 7.3.2 Elective course

One course from the following:
PSYCHOL 7109 Clinical Geropsychology 2
PSYCHOL 7110 Rehabilitation and Disability 2

### 7.3.3 Placements

All placements are compulsory:
PSYCHOL 7111 Placement I
PSYCHOL 7112 Placement II 4
PSYCHOL 7113 Placement III 4

### 7.3.4 Research thesis

Research Project in Clinical Psychology
7.4 The candidate shall present the context and importance of the research at a Department seminar.
7.5 The Head of Department shall certify that the thesis is worthy of examination.

## 8 Assessment

8.1 There shall be one of two systems of classification of pass in individual courses for the combined degree: either Non Graded Pass; or Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
8.2 Attendance is required for at least $80 \%$ of the sessions in any compulsory or optional course. A student who fails to meet this requirement will be awarded the result of Incomplete Fail unless there are extenuating circumstances.
8.3 On the completion of the approved program of study and research, a candidate shall submit a thesis embodying the results of that study and research, and may submit also, in support of the thesis, other relevant material. No thesis or material presented for any other degree within this or any other institution shall be so submitted. The Committee shall prescribe the form in which the thesis shall be submitted and the number of copies to be submitted.
8.4 The thesis and any other material submitted shall be assessed by examiners external to the University.

9 Required program of activities at the commencement of candidature
9.1 Each candidate will be enrolled on a provisional basis for the first twelve months of the degree.
9.2 Continuation of enrolment at the end of this period will depend on overall academic progress and the completion of set activities to the satisfaction of the Department. These activities will form part of a Structured Program of activities extending through the candidature.
9.3 Such activities will be determined by the Department and in the first year will include the completion and presentation of the research proposal and other programs and skills training deemed necessary by the Department.
9.4 The research proposal will be agreed and submitted to the Adelaide Graduate Centre preferably within nine, but no later than twelve months from the commencement of candidature.
9.5 A major review of progress after twelve months will recommend confirmation of candidature, termination, or the extension of provisional status. In the case of extension, a further review after a clearly defined period, normally three but not in excess of six months would form the basis for confirmation or termination or change to a single program enrolment.

## 10 Remote candidature

10.1 Enrolment as a remote candidate may be permitted for some periods of the candidature associated with the research project on the conditions that the Department can
ensure, and the Research Education and Development Committee is satisfied, that appropriate external supervision, with appropriate affiliation, and facilities are available.
10.2 A remote candidate will be required to complete periods of residence in the University of Adelaide as determined by the Research Education and Development Committee in consultation with the Department.
10.3 In accordance with Rule 7 a remote candidate may proceed to the degree either by full-time or half- time study.
10.4 On the recommendation of the Department, the Committee at any time may permit an enrolled student to enrol as a remote candidate subject to the conditions specified in 9.1 , 9.2 and 9.3 above.
10.5 A remote candidate may be permitted to convert to an internal mode of attendance and shall be subject to the conditions normally applied.
10.6 Not withstanding Rules 9.1 to 9.4 above, remote candidates are also required to abide by the other Rules and guidelines for the degree of Master of Psychology (Clinical)/ Doctor of Philosophy.

## 11 Review of Academic Progress

11.1 The Committee or Faculty may review the progress of a candidate at any time during the program and, if the candidate's progress is unsatisfactory, may terminate the candidature and the student shall cease to be enrolled for the degree.
11.2 A formal review of the candidate's progress shall be conducted by the Department at least once a year in accordance with the guidelines determined by the Research Education and Development Committee and outlined in the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research.
11.3 A formal review and confirmation of candidature will occur twelve months after enrolment (see 9.5 above). Subsequent reviews will occur around October each year with written reports forwarded to the Dean of Graduate Studies. A candidate's re-enrolment in the following year is conditional upon satisfactory progress in the year of the review.
11.4 A student who fails a course and desires to take this course again shall attend the lectures and seminars and do such written and practical work as the teaching staff concerned may prescribe. No student shall be permitted to repeat a course more than once without the approval in writing of the Head of the Department concerned.

12 Absence from the University
Except for remote candidates, the Committee, on the recommendation of the Department concerned, may
permit a candidate to pursue, away from the University, work connected with the research for the degree Such permission may only be granted when the candidate has completed or deemed to have completed the Structured Program.

## 13 Leave of Absence

A candidate whose work is interrupted for a period of time may be granted a leave of absence by the Committee of up to 12 months. If such an application is approved, the minimum and maximum periods specified in Rule 6 will be adjusted accordingly by the length of the leave of absence.

## 14 Extension of candidature

A candidate may be granted, by the Committee, only one extension of candidature of twelve months beyond the maximum period specified in Rule 6 . If the thesis has not been submitted by the end of the extended period, the candidature will lapse.

## 15 Completion of thesis outside the

 universityA candidate who has completed the equivalent of two years of full-time work under the control of the University and who has completed the required experimental work, coursework, and placements and whose research progress is sufficiently well advanced to permit the satisfactory completion of the thesis outside the University, may be granted permission by the Committee to complete the writing-up of the thesis outside the University. If such permission is granted the candidate will be allowed either twelve months or until the end of candidature, whichever is the lesser, to submit the thesis. If the thesis has not been submitted by the end of the writing-up period the candidature will lapse.

## 16 Lapsed candidature

16.1 A candidature that has lapsed will be resumed if the completed thesis, which has not departed from the field of study which was being pursued before the candidature lapsed, is subsequently submitted to the Manager, Graduate Administration and Scholarships. The thesis will only be accepted if the Department certifies that it is satisfactory to that Department.
16.2 Approval of the Committee is required for resumption of a lapsed candidature under any other conditions.
16.3 In special circumstances, the Committee may approve the resumption of a lapsed candidature for one period of up to six months (whether full- or half time) prior to the submission of the completed thesis.

17 Intention to submit thesis
A candidate shall notify the Manager, Graduate Administration and Scholarships, in writing, approximately three months before he or she expects to submit the thesis required under Rule 18. A summary of the thesis, together with the proposed thesis title, shall be submitted at the same time.

## 18 Submission of thesis

18.1 On completion of the approved program of study and research, including all coursework and placement requirements, a candidate shall submit a thesis embodying the results of that study and research, and may submit also, in support of the thesis, other relevant material.
18.2 The thesis shall:
(a) display original and critical thought
(b) be a significant contribution to knowledge
(c) relate the topic of research to the broader framework of clinical psychology and
(d) be clearly, accurately and cogently written and be suitable illustrated and documented.
18.3 The Committee shall prescribe the form in which the thesis shall be submitted and the number of copies to be submitted.

## 19 Appointment of thesis examiners

19.1 Candidates shall have the right to submit objections to the appointment of potential examiners of their thesis. Any such objections should be submitted to the Manager, Graduate Administration and Scholarships, at the same time as the notification of intention to submit required under Rule 17.
19.2 The Committee shall appoint two thesis examiners who are external to the University, taking account of any objections raised under Rule 19.1 and the recommendations of the Head of the Department.
19.3 The examiners shall be requested to report in such form as the Committee will determine and to recommend one of the alternatives listed in Rule 20.
19.4 After consideration of the reports of the examiners, the Committee may appoint a third external examiner and/or an external arbitrator.

## 20 Examination results

20.1 After consideration of the reports of the examiners, the Committee shall determine that:
(a) the thesis meets criteria for the Doctor of Philosophy and the candidate therefore be awarded the Master of Psychology (Clinical)/Doctor of Philosophy or
(b) the thesis meets criteria for the Doctor of Philosophy and the candidate therefore be awarded the Master of Psychology (Clinical)/Doctor of Philosophy but that minor amendments be made to the thesis or
(c) the thesis meets criteria for the Doctor of Philosophy and the candidate therefore be awarded the Master of Psychology (Clinical)/Doctor of Philosophy subject to specified amendments being made to the thesis or
(d) the thesis does not meet criteria for the Doctor of Philosophy and therefore the candidate be not awarded the Master of Psychology (Clinical)/Doctor of Philosophy but be permitted to re-submit the thesis for examination in a revised form or
(e) the thesis meets criteria for the Master of Medical Science or
(f) the thesis meets criteria for the Master of Medical Science upon making suitable amendments to the thesis or
(g) the thesis does not meet criteria for the Master of Medical Science
20.2 In the event of an examination outcome of (e), (f) or (g), providing that all coursework and placement requirements have been completed satisfactorily, the candidate may be permitted on the recommendation of the Head of the Department to re-enrol in the Master of Psychology (Clinical) and to present additional aspects of research to satisfy requirements for award of the Master of Psychology (Clinical) degree.

## 21 Deposit of thesis in the library

Such number of copies of a thesis and any other material on which the degree is awarded shall be deposited in the Barr Smith Library or elsewhere in the University as determined by the Committee. Unless otherwise determined by the Committee the copies shall be available for loan and photocopy.

## 22 Loan or photocopy of thesis

A candidate who does not wish to allow the thesis to be lent or photo-copied when it is deposited in the Library under Rule 21 shall make written application to the Manager, Graduate Administration and Scholarships, at the same time as he or she notifies his or her intention to submit under Rule 17. The withholding of such permission and the period of time involved shall be determined by the Committee.

## 23 General

When, in the opinion of the Research Education and Development Committee, special circumstances exist, the Committee on the recommendation of the Department, may vary any of the provisions in Rules 1-22 above.

## Academic Program Rules

1 The following persons may be accepted as candidates for the degree of Doctor of Medicine:
(a) Bachelors of Medicine of the University of Adelaide
(b) Graduates in medicine of another university, but who have had a substantial association with the University of Adelaide, and who hold a degree which is accepted by the School of Medicine as equivalent to the degree of Bachelor of Medicine of the University of Adelaide.
1.1 Under normal circumstances, one would not expect this award to be given to an applicant with less than eightyears of highly productive and original research in the field of medicine. However, the Doctor of Medicine may be awarded, in exceptional cases, for shorter periods of outstanding work.
2 A candidate may only proceed to the award by the submission of previously published work.
2.1 A person who desires to become a candidate for the award shall give notice of the intended candidature, in writing, to the Adelaide Graduate Centre and, with such notice, shall furnish particulars of his/her medical achievements and of the work to be submitted for the award. No work presented for the award may include material which has been accepted for any other degree or qualification of any university or institution.
2.2 The School of Medicine shall appoint a committee to assess the information provided and to advise on whether the School should:
(a) allow the applicant to proceed, and approve the subject or subjects of the work to be submitted or
(b not allow the applicant to proceed.The School's decision shall be conveyed to the applicant.
2.3 If the School approves the subject or subjects of the work, and the candidate proceeds with the submission, the School shall nominate three external examiners, all of whom will be eminent in the field of the submitted work; all of whom will still be active in research and experienced in the supervision and examination of work at this level.
3 To qualify for the award, the candidate shall furnish satisfactory evidence that he/she has made an original and substantial contribution to medical knowledge.
3.1 The Doctor of Medicine shall be awarded primarily on a consideration of such published works as a candidate may submit for examination.
3.2 The candidate in submitting published works shall state generally in a preface, and more specifically in notes, the main sources from which the information is derived and the extent to which the candidate has made use of the work of others, especially where joint publications are concerned. The candidate may also signify in general terms the portions of the work claimed as original.
3.3 The outcome of the examination shall be either 'award the MD' or 'not award the MD'

4 The candidate shall lodge with Adelaide Graduate Centre three copies of the work prepared in accordance with the directions given in the Specifications for Thesis, the University of Adelaide's Calendar 2004, Handbook of Postgraduate Programs.

5 Graduation
Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## Academic Program Rules

1 There shall be a degree of Doctor of Nursing.

2 Rules
2.1 The Vice-Chancellor, with authority devolved to her/him by Council, and after receipt of advice from the Board of Research Education and Development, shall from time to time prescribe Rules defining the academic standing required for candidature, eligibility for enrolment, the program of study and research for the degree, the condition of candidature and the assessment for the degree.
2.2 Such Rules shall become effective from the date of prescription by the Vice-Chancellor or such other date as the Vice-Chancellor may determine.

## 3 Guidelines

The Board of Research Education and Development may from time to time approve guidelines on any matters included in these Rules and may authorise the Dean of Graduate Studies or the Manager, Graduate Administration and Scholarships, to act in accordance with such guidelines without reference to the Board in each case.

## 4 Academic standing

4.1 The academic standing required for acceptance as a candidate for the degree shall be an Honours degree of Bachelor of at least a IIA Standard or a degree of Master of the University of Adelaide or the equivalent thereof *. Applications from students with other qualifications will require the approval of the Board of Research Education and Development.

* Where a Master's degree is presented as a qualification for admission to a D.Nurs. program, the Master's degree must contain a research component deemed appropriate by the Board of Research Education and Development. A Master's degree which contains only coursework will not be accepted for this purpose.
4.2 A person who holds a degree of another university may be accepted as a candidate provided that the program of study undertaken and the academic standard reached are equivalent to those required of a candidate who is a graduate of the University of Adelaide.
4.3 The Board may accept as a candidate a graduate who does not qualify under Rules 4.1 or 4.2 but
(a) has completed to the satisfaction of the Board at least one year of full-time postgraduate study or research
and
(b) has passed a qualifying examination of Honours standard prescribed by the appropriate Faculty and approved by the Board.


## 5 Credit for work previously completed

5.1 The Board may grant credit in the program for the degree of Doctor of Nursing for research undertaken in another program in the University or in another university or tertiary institution.
5.2 The Board may also grant credit for research undertaken in an organisation other than a University or tertiary institution.
5.3 In consideration for acceptance under Rules 5.1 or 5.2 , the Board must be satisfied that
(a) the person is of such academic standing as would be required of other candidates for the degree and
(b) the person's progress so far has been satisfactory and the research for which credit is granted is of a satisfactory standard.

6
6.1 A person shall not be enrolled as a candidate for the degree unless:
(a) the applicant's proposed field of study and research is acceptable to the University and the School/ Discipline responsible for the supervision of the candidate's work
(b) in the case of a person granted credit under Rule 5.1, at least one year of full-time study and research, or its equivalent, will still be necessary to complete the work for the degree
(c) in the case of a person granted credit under Rule 5.2, at least two years of full-time study and research, or its equivalent, will be necessary to complete the work for the degree.
6.2 Except with the permission of the Dean of Graduate Studies, a candidate may not enrol concurrently in another academic program.
6.3 Except with the permission of the Dean of Graduate Studies, a candidate who is permitted to enroll concurrently in another academic program and who is granted leave of absence must intermit all academic programs in which they are enrolled.

## 7 Duration of candidature and mode of study

A candidate may proceed to the degree by full-time study or, if the head of the Department concerned is satisfied that the candidate has adequate time to pursue supervised research under the control of the University, by half-time study. Except in circumstances approved by the Board, the work for the degree shall be completed and the portfolio submitted:
(a) in the case of a full-time candidate, not less than two years and not more than three years from the date of commencement of candidature
(b) in the case of a half-time candidate, not less than four years and not more than six years from the date of commencement of candidature
(c) in the case of a candidate granted credit under Rule 5.1 the candidature shall normally expire
(i) in the case of a full-time candidate, not less than one year and not more than three years from the date the candidate commenced work in the other program or
(ii) in the case of a half-time candidate, not less than two years and not more than six years from the date the candidate commenced work in the other program.
(d) in the case of a candidate granted credit under Rule 5.2 the candidature shall normally expire
(i) in the case of a full-time candidate, not less than two years and not more than three years from the date the candidate commenced work under the control of the University or
(ii) in the case of a half-time candidate, not less than four years and not more than six years from the date the candidate commences work under the control of the University.

## 8 Work for the degree

8.1 A candidate shall pursue an approved program of study and research under the control of the University and under the general guidance of supervisors appointed by the University. At least one supervisor shall be a member of the academic staff of the Department of the University in which the candidate is enrolled.
8.2 A doctoral portfolio will comprise a conventional written narrative presented as typescript (see University Calendar Specifications for PhD).
8.3 The candidate shall present the context and importance of the research at a Department seminar.
8.4 The head of Department shall certify that the portfolio is worthy of examination.

9 Required program of activities at the commencement of candidature
9.1 Each candidate (including those on remote candidature) will be enrolled on a provisional basis for the first twelve months of the degree.
9.2 Continuation of enrolment at the end of this period will depend on overall academic progress and the completion of set activities to the satisfaction of the School/ Discipline concerned. These activities will form part of a Structured Program of activities extending through the candidature.
9.3 Such activities will be determined by the Discipline through which the candidate is enrolled and in the first year will include the completion and presentation of one research proposal and other programs and skills training deemed necessary by the Discipline.
9.4 The research proposal will be agreed and submitted to the Adelaide Graduate Centre preferably within three, but no later than six months from the commencement of candidature.
9.5 A major review of progress after twelve months will recommend confirmation of candidature, termination, or the extension of provisional status. In the case of extension, a further review after a clearly defined period, normally three but not in excess of six months, would form the basis for confirmation or termination or change to a Masters enrolment.

## 10 Remote candidature

10.1 Enrolment as a remote candidate may be permitted on the conditions that the Department concerned can ensure, and the Board of Research Education and Development is satisfied, that appropriate external supervision, with appropriate affiliation, and facilities are available.
10.2 A remote candidate may be required to complete a period of residence in the University of Adelaide as determined by the Board of Research Education and Development in consultation with the Department concerned.
10.3 In accordance with Rule 7, a remote candidate may proceed to the degree either by full-time or half- time study.
10.4 On the recommendation of the Department, the Board at any time may permit an enrolled student to enrol as a remote candidate subject to the conditions specified in 10.1, 10.2 and 10.3 above.
10.6 Not withstanding Rules 11.1 to 11.4 above, remote candidates are also required to abide by the other Rules and guidelines for the Degree of Doctor of Nursing.

## 11 Review of academic progress

11.1 The Board may review the progress of a candidate at any time during the program of candidature and, if the candidate's progress is unsatisfactory, may terminate the candidature.
11.2 A formal review of a candidate's progress shall be conducted by the Discipline at least once a year in accordance with guidelines determined by the Board of Research Education and Development and outlined in the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees.
11.3 The first formal review and confirmation of candidature will occur twelve months after enrolment (see 9.2 above). Subsequent reviews will occur around October each year with written reports forwarded to the Dean of Graduate Studies. A candidate's re-enrolment in the following year is conditional upon satisfactory progress in the year of the review.

## 12 Absence from the university

12 Except for remote candidates, the Board, on the recommendation of the Department concerned, may permit a candidate to pursue away from the University work connected with the research for the degree. Such a permission may only be granted under special circumstances during provisional candidature.

13 Leave of absence
A candidate whose work is interrupted for a period of time may be granted a leave of absence by the Board of up to 12 months. If such an application is approved the minimum and maximum periods specified in Rule 7 will be adjusted accordingly by adding the length of the leave of absence.

14 Extension of candidature
A candidate may be granted by the Board one extension of candidature only of twelve months beyond the maximum period specified in Rule 7. If the portfolio has not been submitted by the end of the extended period the candidature will lapse.

## 15 Completion of portfolio outside the university

Except for candidates admitted under Rule 6, a candidate who has completed the equivalent of two years of full-time work under the control of the University, who has completed the experimental work (where appropriate) and whose progress is sufficiently well advanced to permit the satisfactory completion of the portfolio outside the University, may be granted permission by the Board to
complete the writing-up of the portfolio outside the University. If such a permission is granted the candidate will be allowed either twelve months or until the end of candidature, whichever is the lesser, to submit the portfolio. If the portfolio has not been submitted by the end of the writing-up period the candidature will lapse.

## 16 Lapsed candidature

16.1 A candidature which has lapsed will be resumed if the completed portfolio, which has not departed from the field of study which was being pursued before the candidature lapsed, is subsequently submitted to the Manager, Graduate Administration and Scholarships. The portfolio will only be accepted if the Department certifies that it is satisfactory to that Department.
16.2 Approval of the Board is required for the resumption of a lapsed candidature under any other conditions.
16.3 In special circumstances the Board may approve the resumption of a lapsed candidature for one period of up to six months (whether full- or half-time) prior to the submission of the completed portfolio.

17 Intention to submit portfolio
A candidate shall notify the Manager, Graduate Administration and Scholarships, in writing, approximately three months before he or she expects to submit the portfolio required under Rule 18. A summary of the portfolio, together with the proposed portfolio title, shall be submitted at the same time.

## 18 Submission of portfolio

18.1 On completion of the approved program of study and research a candidate shall submit a portfolio embodying the results of studies and research, and may submit also, in support of the portfolio, other relevant material.
18.2 The portfolio submitted shall:
(a) display original and critical thought
(b) be a significant contribution to knowledge
(c) relate the topic of research to the broader framework of the discipline within which it falls and
(d) be clearly, accurately and cogently written and be suitably illustrated and documented.
18.3 The portfolio shall be assessed by examiners external to the University.
18.4 No portfolio presented for any other degree within this or any other institution shall be so submitted.
18.5 The Board shall prescribe the form in which the portfolio shall be submitted and the number of copies to be submitted.

## 19 Appointment of examiners

19.1 Candidates shall have the right to submit objections to the appointment of potential examiners. Any such objections should be submitted to the Manager, Graduate Administration and Scholarships, at the same time as the notification of intention to submit required under Rule 19. Such objections do not serve as a veto.
19.2 The Board shall appoint two examiners who are external to the University, taking account of any objections raised under Rule 19.1 and the recommendations of the head of the relevant Discipline.
19.3 The examiners shall be requested to report in such form as the Board will determine and to recommend one of the alternatives listed in Rule 20.
19.4 After consideration of the reports of the examiners, the Board may appoint a third external examiner and/or an external arbitrator.

## 20 Examination results

After consideration of the reports of the examiners and such other information as it thinks fit, the Board shall determine that:
(a) the candidate be awarded the degree or
(b) the candidate be awarded the degree but that minor amendments be made to the portfolio or
(c) the candidate be awarded the degree subject to the specified amendments being made to the portfolio or
(d) the candidate be not awarded the degree but be permitted to re-submit the portfolio in a revised form or
(e) the candidate be awarded the appropriate degree of Master or
(f) the candidate be awarded the appropriate degree of Master upon making suitable amendments to the portfolio or
(g) the candidate be not awarded the degree of Doctor of Nursing or the degree of Master.

21 Deposit of portfolio in the library
Such number of copies of a portfolio shall be deposited in the Barr Smith Library or elsewhere in the University as determined by the Board. Unless otherwise determined by the Board, the copies shall be available for loan and photocopy.

22 Loan or photocopy of portfolio
A candidate who does not wish to allow the portfolio to be lent or photocopied when it is deposited in the Library under Rule 21 shall make a written application to the Manager, Graduate Administration and Scholarships, at the same time as he or she notifies his or her intention to submit under Rule 17. The withholding of such permission and the period of time involved shall be determined by the Board.

## 23 General

When, in the opinion of the Board of Research Education and Development, special circumstances exist, the Board, on the recommendation of the relevant Department in each case, may vary any of the provisions in Rules 1-22 above.

## Elder Conservatorium of Music

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- Master of Music (Performance and Pedagogy)
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## Notes on Delegated Authority

1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2 Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty.

Note: Postgraduate tuition fees apply to these programs.

1 General
There shall be Graduate Diplomas in Music (Performance) and Music (Performance and Pedagogy).

## 2 Duration of program

To qualify for either Graduate Diploma a candidate shall complete a program of study extending over one year as a full-time student, or not less than two years as a part-time student.

3 Admission
3.1 The Faculty may accept as a candidate for either Graduate Diploma any person who has qualified for
(a) the degree of Bachelor of Music of the University of Adelaide which the Faculty judges to have been attained at above-average standard
(b) the degree of the Bachelor of Arts of the University of Adelaide which has within it a major sequence in Music or its equivalent. These courses must have been attained at above-average standard or
(c) a degree in Music of another institution which is accepted for the purpose by the Faculty.
3.2 Subject to the approval of Council the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for either Graduate Diploma a person who does not qualify for admission to the program under Academic Program Rule 3.1 but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma in Music (Performance) or the Graduate Diploma in Music (Performance and Pedagogy).

### 3.3 Status, exemption and credit transfer

 Candidates who have previously satisfactorily completed courses for the Bachelor of Music or Bachelor of Arts or another award which includes substantially the same material as that in the program listed above, shall complete alternative courses in lieu of those already passed to a total value of 12 units.3.4 Articulation with other awards

Candidates who complete the Graduate Diploma in Music (Performance) or the Graduate Diploma in Music (Performance and Pedagogy) are also eligible to apply for entry to the Master of Music (Performance and Pedagogy), and to be granted status for the work they have undertaken in the Graduate Diploma.

4 Assessment and examination
4.1 There shall be the four classifications of Pass in courses for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.

### 4.2 Review of academic progress

If in the opinion of the Faculty a candidate is not making satisfactory progress the Faculty may, with the consent of the Council, terminate the candidature.

## 5 Qualification requirements

### 5.1 Graduate Diploma in Music (Performance)

5.1.1 To qualify for the Graduate Diploma in Music Performance, a candidate shall satisfactorily complete the following courses:

PERF6008 A/B Major Recital IV
PERF6015 A/B Minor Recital IV 6

PERF6016 A/B Negotiated Project IV
5.1.2 Students of brass instruments or bassoon may give two short ( 30 minute) recitals in lieu of Major Recital IV.
5.1.3 In special cases the Dean may approve different but equivalent sets of exercises.

### 5.2 Graduate Diploma in Music (Performance and Pedagogy)

5.2.1 To qualify for the Graduate Diploma in Music Performance and Pedagogy, a candidate shall satisfactorily complete the following courses:
MUSPED 6001 Pedagogy Seminar IV 6
MUSPED 6002 Pedagogy Practicum IV 6
5.2.2 In special cases the Dean may approve different but equivalent sets of exercises

### 5.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 5.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

1 General
1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.
These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.
All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

## 2 Studies in Music

2.1 Every candidate in Music shall pursue a program of advanced study in Music. This may include the presentation and assessment of one of the following:
(a) a folio of compositions which may include a multimedia project or
(b) a thesis on a topic in Ethnomusicology, Musicology, Music Education or relevant interdisciplinary study or
(c) two CDs (presenting recordings of 2 public recitals and an exegesis).
2.2 The degree shall not be awarded on the basis of a portfolio of publications.
2.3 (a) in addition, candidates enrolled under clause 2.1 shall also present other advanced projects or seminars. Candidates enrolled under clause 2.1 (a) must present two seminar papers or a major analysis; candidates enrolled under clause 2.1 (b) must present two seminar papers ; candidates enrolled under clause $2 . .1$ (c) must present two seminar papers.
(b) the advanced work required under clause 2.3 (a) must be completed prior to the presentation of the work specified under clause 2.1.
(c) the advanced work will not be assessed by an external examiner. Should any of this work be assessed as unsatisfactory then it may be represented or re-submitted.
2.4 The public recitals required under clause 2.1 (c) must be presented at an interval of not more than 3 months, the duration of each to be 60 minutes. The exegesis will be 5000 words.
2.5 The details of the recital programs shall be submitted to the Head of Program for approval not less than 6 months before the recitals.
2.6 A candidate completing the requirements of clauses 2.1 and 2.3 (a) shall qualify for the degree.

## Master of Music (Performance and Pedagogy)

Note: Postgraduate tuition fees apply to this program.

## Academic Program Rules

## 1 General

There shall be a Master of Music (Performance and Pedagogy).

## 2 Duration of program

To qualify for the degree a candidate shall complete a program of advanced studies in Performance and Pedagogy extending over not less than four semesters of full-time study or no more than eight semesters of part-time study.

## 3 Admission

3.1 The Faculty may accept as a candidate for the degree a person who has qualified for:
(a) the Honours degree of Bachelor of Music (Performance) of the University of Adelaide at First Class or IIA standard or
(b) the Graduate Diploma in Music (Performance) of the University of Adelaide at a standard comparable to First Class or IIA Honours or
(c) the Graduate Diploma in Music (Performance and Pedagogy) of the University of Adelaide at a standard comparable to First Class or IIA Honours or
(d) a degree or diploma in Music of another institution accepted for the purpose by the University.
The Faculty reserves the right to require an acceptable level of performance at audition.
3.2 In special cases the Board of Research Education and Development acting with authority wittingly devolved to it by Council on the recommendation of the Faculty and subject to such conditions (if any) as it may impose in each case, may accept as a candidate for the degree an applicant who has given other evidence satisfactory to the Faculty of their fitness to undertake studies for the degree.

### 3.3 Articulation with other awards

3.3.1 A candidate for the Master of Music (Performance and Pedagogy) who does not complete the requirements for the Masters but satisfies the requirements for the Graduate Diploma in Music (Performance and Pedagogy) or the Graduate Diploma in Music (Performance), may be admitted to the one or other of those awards as appropriate.
3.3.2 A candidate who has been admitted to the Graduate Diploma in Music (Performance and Pedagogy) or the Graduate Diploma in Music (Performance) and who subsequently satisfies the requirements for the Master of Music (Performance and Pedagogy) must surrender the Graduate Diploma before being admitted to the Masters degree.

## 4 Qualification requirements

4.1 To qualify for the degree a candidate shall:
(a) undertake an approved program of advanced study in singing or a musical instrument, under the direction of a supervisor or supervisors appointed by the Dean.
(b) perform at a satisfactory standard at such public recitals as may be prescribed in the Academic Program Rules.
(c) complete the courses listed under 4.3 below.

### 4.2 Academic program

The availability of all courses is conditional upon the availability of staff and facilities.

### 4.3 Courses of Study

4.3.1 To qualify for the Master of Music (Performance and Pedagogy), a candidate shall satisfactorily complete the following courses to the value of 48 units:

MUSPED 6001 Pedagogy Seminar IV
MUSPED 6002 Pedagogy Practicum IV
MUSPED 7001 Pedagogy Seminar V 6
MUSPED 7002 Pedagogy Practicum V 6
PERF 6008 A/B Major Recital IV 12
PERF 6015 A/B Minor Recital IV 6
PERF 6016 A/B Negotiated Project IV 6
4.3.2 Students of brass instruments or bassoon may give two short ( 30 minute) recitals in lieu of Major Recital IV.
4.3.3 In special cases the Dean may approve different but equivalent sets of exercises.

### 4.4 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the
opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special Circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

1 (a) The Faculty of Humanities and Social Sciences may, on the recommendation of the Elder School of Music, accept as a candidate for the degree of Doctor of Music a person who:
(i) has qualified in the University of Adelaide for the degree of Bachelor of Music (New), or the degree of Master of Music or
(ii) has obtained another degree in the University of Adelaide and has satisfied the Faculty of his or her fitness to submit work for the degree of Doctor of Music.
(b) On the recommendation of the Faculty of Humanities and Social Sciences, the Board of Research Education and Development acting with authority wittingly devolved to it by Council may accept as a candidate for the degree a person who
(i) has obtained in another university or institution of higher education recognised by the University of Adelaide a qualification accepted by the Faculty as equivalent to one of the qualifications specified in (a) above and
(ii) has, or has had, a substantial association with the University.
(c) No person may be admitted to the degree of Doctor of Music before the expiration of five years from the date on which the qualification prescribed in (a) or (b) (i) above was obtained.
(a) A person who desires to become a candidate for the degree shall give notice of the intended candidature in writing to the Manager, Graduate Administration and Scholarships, Adelaide Graduate Centre and with such notice shall furnish particulars of his/her musical achievements and of the work to be submitted for the degree.
(b) The Elder Conservatorium of Music shall appoint a committee to examine the information submitted and to advise the Faculty whether it should:
(i) allow the applicant to proceed, and approve the details of the work to be submitted or
(ii) advise the applicant not to submit his/her work; and the Faculty's decision shall be conveyed to the applicant.
(c) if the Faculty of Humanities and Social Sciences accepts the candidature and approves the details of
the work to be submitted, the Elder Conservatorium of Music shall nominate examiners of whom two at least shall be external to the University.
(a) to qualify for the degree the candidate shall furnish satisfactory evidence that he/she has made an original and substantial contribution of distinguished merit in the field of composition, performance, research or in any combination of these fields.
(b) the degree shall be awarded primarily on a consideration of such published or recorded compositions, recorded interpretations of music or published research as the candidate may submit for examination, but the examiners may take into account any unpublished material or other work submitted in support of the candidature.
(c) the candidate in submitting work for examination shall, where applicable, state generally in a preface and specifically in notes the main sources from which it is derived and the extent to which use has been made of the work of others. The candidate may also signify in general terms the portions of the work which he/she claims as original.
(d) the candidate shall indicate what part, if any, of the work submitted in support of the candidature has been accepted for the award of any other degree in this or any other university.
The candidate shall lodge with the Adelaide Graduate Centre three copies of the work prepared in accordance with the directions given in sub-paragraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree two of the copies will be transmitted to the University Library.
5 A candidate who complies with the foregoing conditions and satisfies the examiners may, on the recommendation of the Faculty Humanities and Social Sciences, be admitted to the degree of Doctor of Music.
Notwithstanding anything contained in the preceding rules the Faculty may recommend the award of the degree to any person who is not a member of the Staff of the University. Any such recommendation must be accompanied by evidence that the person for whom the award is proposed has made an original and substantial contribution of distinguished merit to some branch of musical knowledge of a standard not less than that required by Regulation 3.

For further information please contact the Adelaide Graduate Centre.

Regulations allowed 17 December, 1970.
Amended: 15 Jan. 1976: 6; 4 Feb 1982: 2, 4; 24 Feb. 1983: 1, 2 , 3; 21 Feb 1991: 1(b).
Rule approved and Regulation repealed 18 March 1999.

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[^1]www.science.adelaide.edu.au

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## Postgraduate awards in the Faculty of Sciences

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- Graduate Certificate in Agricultural Business
- Graduate Certificate in Biotechnology (Plant Biotechnology)
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- Graduate Certificate in Physics
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- Graduate Certificate in Science Education (not offered in 2005)
- Graduate Certificate in Urban Habitat Management
- Graduate Certificate in Viticulture
- Graduate Certificate in Wine Business
- Graduate Diploma in Agricultural Business
- Graduate Diploma in Biotechnology (Plant Biotechnology)
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- Master of Science in the Faculty of Science
- Master of Science (Applied Physics)
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- Master of Science (Medical Physics)
- Master of Science (Optics and Lasers)
- Master of Science (Reservoir Geoscience)
- Master of Science (Theoretical Physics)
- Master of Science in Petroleum Geology and Geophysics
- Master of Urban Habitat Management
- Master of Viticulture
- Master of Wine Business
- Doctor of Science in the Faculty of Science


## Notes on Delegated Authority

1 Council has delegated the power to approve minor changes to the Academic Program Rules to the Executive Deans of Faculties.
2 Council has delegated the power to specify syllabuses to the Head of each department or centre concerned, such syllabuses to be subject to approval by the Faculty or by the Executive Dean on behalf of the Faculty. The Head of department or centre may approve minor changes to any previously approved syllabus.

## Faculty of Sciences - Graduate Attributes

## All postgraduate programs in the Faculty of Sciences have been planned within the framework of the Graduate Attributes of the University of Adelaide, outlined below:

The University of Adelaide is a research-intensive university which seeks to develop graduates of international distinction by supporting high quality education.

The University of Adelaide provides an environment where students are encouraged to take responsibility for developing the following attributes:

- Knowledge and understanding of the content and techniques of a chosen discipline at advanced levels that are internationally recognised.
- The ability to locate, analyse, evaluate and synthesise information from a wide variety of sources in a planned and timely manner.
- An ability to apply effective, creative and innovative solutions, both independently and cooperatively, to current and future problems.
- Skills of a high order in interpersonal understanding, teamwork and communication.
- A proficiency in the appropriate use of contemporary technologies.
- A commitment to continuous learning and the capacity to maintain intellectual curiosity throughout life.
- A commitment to the highest standards of professional endeavour and the ability to take a leadership role in the community.
- An awareness of ethical, social and cultural issues and their importance in the exercise of professional skills and responsibilities.

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## Academic Program Rules

## 1 Duration of program

To qualify for the Professional Certificate, a candidate shall satisfactorily complete one semester of part-time study or the equivalent in intensive mode.

2 Admission
2.1 An applicant for admission to the academic program for the Professional Certificate in Urban Habitat Management shall have qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 The Faculty may accept as a candidate for the Professional Certificate a person who does not satisfy the requirements of Rule 2.1 above but who presents evidence of professional experience appropriate to undertake work for the Professional Certificate.

### 2.3 Articulation with other awards

2.3.1 Students who complete this academic program are also eligible to apply for entry to the Graduate Certificate in Urban Habitat Management and to be granted status for the work they have undertaken in the Professional Certificate.
2.3.2 Students who have conferred upon them the award of Professional Certificate in Urban Habitat Management who subsequently satisfy the requirements of the Graduate Certificate in Urban Habitat Management must surrender their Professional Certificate before being admitted to the higher award.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Professional Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to be assessed, by examination or otherwise, shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Professional Certificate in Urban Habitat Management, a candidate shall complete one of the following courses:

URBH 7100 Designing Urban Habitats
for Biodiversity
URBH 7101 Urban Habitats: the Ecology of Cities 6
URBH 7200 Managing Wildlife in Urban Habitats 6
URBH 7201 Managing Urban Vegetation 6

### 4.2 Unacceptable combination of courses

No candidate will be permitted to count for the award any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award; and no course or portion of a course may be counted twice towards the award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete one semester of full-time study or not more than 4 semesters of part-time study.

2 Admission
2.1 An applicant for admission to the academic program for the Graduate Certificate in Agricultural Business shall have qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 A candidate who fails a course and is allowed to repeat that course shall, unless exempted partially there from by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this program are also eligible to apply for entry to the Graduate Diploma in Agricultural Business program, and to be granted status for the work they have undertaken in the Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in Agricultural Business who subsequently satisfy the requirements of the Graduate Diploma must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Graduate Diploma in Agricultural Business who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to be assessed, by examination or otherwise, shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate a candidate shall satisfactorily core courses to the value of 9 units:

AGRIBUS 7009WT Issues in Australian Agribusiness
AGRIBUS 7012WT International Agribusiness Environment

AGRIBUS 7044WT Agricultural Business Management
Elective course to the value of 3 units chosen from the Master of Agricultural Business pool

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count for the award any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award; and no course or portion of a course may be counted twice towards the award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

# Graduate Certificate in Biotechnology <br> (Plant Biotechnology) 

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate in Biotechnology (Plant Biotechnology), a candidate shall satisfactorily complete one semester of full-time study or no more than 3 semesters of part-time study.

2 Admission
2.1 An applicant for admission to the academic program for the Graduate Certificate in Biotechnology (Plant Biotechnology) shall have qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Program Management Committee for the purpose as equivalent to a degree of the University.
2.2 The Program Management Committee may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 1 Except with special permission of the Faculty, no candidate will be granted status for any course, which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 3 units of status
2.3.4 A candidate who fails a course and is allowed to repeat that course shall, unless exempted partially there from by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this program are also eligible to apply for entry to the Graduate Diploma in Biotechnology (Plant Biotechnology) program, and to be granted status for the work they have undertaken in the Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in Biotechnology (Plant Biotechnology) who subsequently satisfy the requirements of the Graduate Diploma must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Graduate Diploma in Biotechnology (Plant Biotechnology) who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to be assessed, by examination or otherwise, shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements
4.1 Academic program

To qualify for the Graduate Certificate in Biotechnology (Plant Biotechnology), a candidate shall satisfactorily complete the following courses:
PLANT SC 7225WT Foundations of Plant Biotechnology 6

PLANT SC 7226WT Molecular Plant Breeding 3
PLANT SC 7227WT Plant Genomics

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count for the award any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he
or she has already presented for another award; and no course or portion of a course may be counted twice towards the award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate a candidate shall satisfactorily complete a program of study comprising one semester of full-time study or no more than four semesters of part-time study.

2 Admission
2.1 An applicant for admission to the academic program for the Graduate Certification in Oenology shall have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the Graduate Certificate any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award. Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for equivalent postgraduate level studies.
2.3.3 In any case, no candidate will be awarded more than 3 units of status.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the Graduate Certificate degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been
completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 (a) a candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
(b) supplementary examinations are allowable only in exceptional circumstances. A candidate must apply for special permission from the Faculty.

## 4 <br> Qualification requirements

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

### 4.1 Academic program

All candidates shall complete the following 4 core courses:
OENOLOGY 7010WT Stabilisation and Clarification 3
OENOLOGY 7019WT Sensory Studies
OENOLOGY 7028WT Introductory Winemaking 3
OENOLOGY 7047WT Winemaking at Vintage

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

Except with the permission of the Faculty the program for the Graduate Certificate shall be completed in at least one semester of full-time study or at least two semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Graduate Certificate shall:
(a) have qualified for the degree of Bachelor of Science of the University with a major sequence in Geology or Geophysics, or hold qualifications from another institution accepted by the Faculty for the purpose and
(b) have obtained the approval of the Director of the National Centre for Petroleum Geology and Geophysics
2.2 Subject to the approval of the Council the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not qualify for admission to the program under 2.1 above but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

3 Assessment and examinations
3.1 There shall be the following classifications of Pass in each course for the graduate certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate who fails in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application for such exemption.
(b) a candidate who has twice failed the examination in any course or division of a course may not enrol for that course again except by special permission to be obtained in writing and then only under such conditions as may be prescribed.
(c) for the purpose of this Rule, a candidate who is refused permission to sit for examination, or who fails, without a reason accepted by the Executive Dean of Sciences (or nominee), to attend all or part of a final examination (or supplementary examination if granted) after remaining enrolled for at least nine teaching weeks of that semester, shall be deemed to have failed the examination.

## 4 Qualification requirements

A candidate for the Graduate Certificate shall regularly attend lectures and tutorials, do such written work and practical work as may be prescribed, and pass examinations in courses to the value of 12 units.

### 4.1 Academic program

4.1.1 The following shall be the courses for the Graduate Certificate in Petroleum Geology and Geophysics:
PETROL 7000TB Petroleum Geology \& Geophysics (B) 6
PETROL 7001TB Petroleum Geology \& Geophysics (A) 6
4.1.2 The Faculty may require a candidate to undertake additional work needed as background to the program.

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate a candidate shall satisfactorily complete a program of full-time study extending over at least one semester or part-time study extending over at least two semesters.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Certificate shall have qualified for a degree of the University of Adelaide or hold qualifications from another institution accepted by the University for the purpose; and obtained the approval of the Head of Physics.
2.2 Subject to the approval of Council, the Faculty may in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not hold the qualifications specified in 2.1 above but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in each course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 (a) a candidate who fails in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application for such exemption.
(b) a candidate who has twice failed the examination in any course or division of a course may not enrol for that course again except by special permission to be obtained in writing and then only under such conditions as may be prescribed.
(c) for the purpose of this Rule, a candidate who is refused permission to sit for examination, or who fails, without a reason accepted by the Head of Physics, to attend all or part of a final examination (or supplementary examination if granted) after remaining enrolled for at least nine teaching weeks of that semester, shall be deemed to have failed the examination.

## 4 Qualification requirements

4.1 A candidate for the Graduate Certificate shall regularly attend lectures and tutorials, do such written work and practical work as may be prescribed, and pass examinations in a selection of courses to an aggregate value of at least 12 units, including at least six units from the courses listed at 4.2 (c).

### 4.2 Academic program

The courses may be chosen from:
(a) Level III courses offered in Physics
(b) Level III courses and Honours courses offered by another area of the University where appropriate and
(c) the following courses:

PHYSICS7002 Advanced Astrophysics 3

PHYSICS7003 Advanced Atmospheric and
Environmental Physics

PHYSICS7004 Advanced Electromagnetism 3
PHYSICS 7007 Experimental Methods 3
PHYSICS 7008 Gauge Theory 3
PHYSICS7009 General Relativity 3
PHYSICS7010 Laser Physics \& Non-linear Optics 3
PHYSICS7011 Nuclear and Radiation Physics 3
PHYSICS7012 Nuclear Theory \& Particle Physics* 3
PHYSICS 7013 Quantum Field Theory 3
PHYSICS7014 Relativistic Quantum Mechanics and Particle Physics
PHYSICS 7015 Statistical Mechanics and Many Body Theory*
The courses to be offered in any year will be dependent on staff availability and student demand.
*not offered in 2006.
4.3 The Faculty may require a candidate to undertake additional work needed as background to the program.

### 4.4 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate in Plant Health, a candidate shall satisfactorily complete one semester of fulltime study or no more than 3 semesters of part-time study.

2 Admission
2.1 An applicant for admission to the academic program for the Graduate Certificate in Plant Health shall have qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Program Management Committee for the purpose as equivalent to a degree of the University.
2.2 The Program Management Committee may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course, which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status
2.3.4 A candidate who fails a course and is allowed to repeat that course shall, unless exempted partially there from by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this program are also eligible to apply for entry to the Graduate Diploma in Plant Health program, and to be granted status for the work they have undertaken in the Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in Plant Health who subsequently satisfy the requirements of the Graduate Diploma must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Graduate Diploma in Plant Health who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate in Plant Health may be admitted to the Graduate Certificate in Plant Health.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to be assessed, by examination or otherwise, shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate in Plant Health, a candidate shall satisfactorily complete the following courses:

PLANT SC 7220WT Foundations of Plant Health 6

PLANT SC 7221WT Classical Diagnostic Methods in Plant Health
PLANT SC 7222WT Advanced Pest Management Principles

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count for the award any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award; and no course or portion of a course may be counted twice towards the award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete one semester of full-time study or not more than one year of part-time study.

2 Admission
2.1 An applicant for admission to the academic program for the Graduate Certificate in Urban Habitat Management shall have qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status
2.3.4 A candidate who fails a course and is allowed to repeat that course shall, unless exempted partially there from by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this program are also eligible to apply for entry to the Graduate Diploma in Urban Habitat Management program, and to be granted status for the work they have undertaken in the Graduate Certificate.
2.4.2 Students who have conferred upon them the award of Graduate Certificate in Urban Habitat Management who subsequently satisfy the requirements of the Graduate Diploma must surrender their Graduate Certificate before being admitted to the Graduate Diploma.
2.4.3 A candidate for the Graduate Diploma in Urban Habitat Management who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.
2.4.4 A candidate for the Graduate Certificate in Urban Habitat Management who does not complete the requirements for the Graduate Certificate but satisfies the requirements for the Professional Certificate may be admitted to the Professional Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to be assessed, by examination or otherwise, shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete two of the following courses:
URBH 7100 Designing Urban Habitats for Biodiversity
URBH 7101 Urban Habitats: the Ecology of Cities
URBH 7200 Managing Wildlife in Urban Habitats URBH 7201 Managing Urban Vegetation

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count for the award any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award; and no course or portion of a course may be counted twice towards the award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate a candidate shall satisfactorily complete a program of study comprising one semester of full-time study or no more than four semesters of part-time study.

2 Admission
2.1 An applicant for admission to the academic program for the Graduate Certification in Viticulture shall have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the Graduate Certificate any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award. Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for equivalent postgraduate level studies.
2.3.3 In any case, no candidate will be awarded more than 3 units of status.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Certificate degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 (a) a candidate who has failed a course twice may not reenrol in that course except by special permission of the Executive Dean or nominee and then only under such conditions as may be prescribed.
(b) supplementary examinations are allowable only in exceptional circumstances. A candidate must apply for special permission from the Executive Dean.

## 4 Qualification requirements

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

### 4.1 Academic program

### 4.1.1 Core Courses

All candidates shall complete the following core courses:
VITICULT 7002WT Viticultural Science
VITICULT 7021WT Viticultural Production
VITICULT 7038WT Viticultural Methods \& Procedures

### 4.1.2 Elective Courses

All candidates shall complete one elective course from the following:
AGRONOMY 7130WT Viticultural Engineering \& Irrigation
VITICULT 7001WT Advances in Viticultural Sciences
Plus other electives chosen from postgraduate programs offered by the Faculty, subject to prior approval of the program coordinator.
Note: a candidate who is a graduate of the University of Adelaide in the B.Agric.Sc.(Oenology) or B.Oenology will have the core courses VITICULT 7002WT Viticultural Science and VITICULT 7021WT Viticultural Production replaced by VITICULT 7001WT Advances in Viticultural Science and an elective course selected with the approval of the program coordinator.

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Certificate a candidate shall satisfactorily complete a program of study comprising 1 semester of full-time study or no more than 4 semesters of part-time study.

2 Admission
2.1 An applicant for admission to the academic program for the Graduate Certification in Wine Business shall have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Certificate.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the Graduate Certificate any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award. Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for equivalent postgraduate level studies.
2.3.3 In any case, no candidate will be awarded more than 3 units of status.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.

3 Assessment and examinations
3.1 There shall be four classifications of pass in any course for the graduate certificate: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 (a) a candidate who has failed a course twice may not reenrol in that course except by special permission of the Executive Dean or nominee and then only under such conditions as may be prescribed.
(b) supplementary examinations are allowable only in exceptional circumstances. A candidate must apply for special permission from the Executive Dean.

## 4 Qualification requirements

To qualify for the Graduate Certificate, a candidate shall satisfactorily complete courses to the value of 12 units, as follows:

### 4.1 Academic program

All candidates shall complete 4 courses from the Master of Wine Business syllabus. At least one must be:

WINEMKTG 7049WT/EX Global Market for Wine or
WINEMKTG 7034WT/EX Winery Business Management

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete two semesters of full-time study or no more than eight semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Graduate Diploma in Agricultural Business shall have qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate fields of study accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status
2.3.4 A candidate who fails a course and is allowed to repeat that course shall, unless exempted partially there from by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this program are also eligible to apply for entry to the Master of Agricultural Business program, and to be granted status for the work they have undertaken in the Graduate Diploma.
2.4.2 Students who have conferred upon them the award of Graduate Diploma in Agricultural Business who subsequently satisfy the requirements of the Masters program must surrender their Graduate Diploma before being admitted to the Master of Agricultural Business.
2.4.3 A candidate for the Master of Agricultural Business who does not complete the requirements for the Masters but satisfies the requirements for the Graduate Diploma may be admitted to the Graduate Diploma.
2.4.4 A candidate for the Graduate Diploma in Agricultural Business who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to be assessed, by examination or otherwise, shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma a candidate shall satisfactorily core courses to the value of 9 units:
AGRIBUS 7009WT Issues in Australian Agribusiness 3

AGRIBUS 7012WT International Agribusiness Environment 3

AGRIBUS 7044WT Agricultural Business Management 3

Elective courses to the value of 15 units chosen from the Master of Agricultural Business pool

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count for the award any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award; and no course or portion of a course may be counted twice towards the award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award

# Graduate Diploma in Biotechnology <br> (Plant Biotechnology) 

## Academic Program Rules

1 Duration of program
To qualify for the Graduate Certificate in Biotechnology (Plant Biotechnology), a candidate shall satisfactorily complete two semesters of full-time study or no more than 7 semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Graduate Diploma in Biotechnology (Plant Biotechnology) shall have qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Program Management Committee for the purpose as equivalent to a degree of the University.
2.2 The Program Management Committee may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Committee of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

2.3.1 1 Except with special permission of the Faculty, no candidate will be granted status for any course, which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 A candidate who fails a course and is allowed to repeat that course shall, unless exempted partially there from by the Head of School, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this program are also eligible to apply for entry to the Master of Biotechnology (Plant Biotechnology) program, and to be granted status for the work they have undertaken in the Graduate Diploma.
2.4.2 Students who have conferred upon them the award of Graduate Diploma in Biotechnology (Plant Biotechnology) who subsequently satisfy the requirements of the Masters program must surrender their Graduate Diploma before being admitted to the Master of Biotechnology (Plant Biotechnology).
2.4.3 A candidate for the Master of Biotechnology (Plant Biotechnology), who does not complete the requirements for the Masters but satisfies the requirements for the Graduate Diploma may be admitted to the Graduate Diploma.
2.4.4 A candidate for the Graduate Diploma in Biotechnology (Plant Biotechnology), who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass..
3.2 (a) a candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to be assessed, by examination or otherwise, shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma in Biotechnology (Plant Biotechnology) a candidate shall satisfactorily complete the following courses:
PLANT SC 7225WT Foundations of Plant Biotechnology
PLANT SC 7226WT Molecular Plant Breeding 3
PLANT SC 7227WT Plant Genomics 3
PLANT SC 7123WT Applications of Plant Biotechnology in Production
PLANT SC 7124WT Applications of Plant Biotechnology in Health and Nutrition ..... 3
PLANT SC 7125WT Management, Commercialisation and Regulation in Plant Biotech ..... 3
PLANT SC 7126WT Techniques in Plant Biotechnology ..... 3

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count for the award any course that, in the opinion of the Program Management Committee, contains substantially the same material as any other course that he or she has already presented for another award; and no course or portion of a course may be counted twice towards the award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma a candidate shall satisfactorily complete a program of study comprising two semester of full-time study or no more than eight semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the academic program for the Graduate Diploma in Oenology shall have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the Graduate Diploma any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award. Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for equivalent postgraduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status, except for those candidates who have completed the Graduate Certificate in Oenology.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Graduate Diploma of Oenology who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate in Oenology may be admitted to the Graduate

Certificate, subject to the student discontinuing candidature for the Graduate Diploma.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Oenology and who subsequently satisfies the requirements for the Graduate Diploma of Oenology must surrender the Graduate Certificate before being admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 (a) a candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
(b) supplementary examinations are allowable only in exceptional circumstances. A candidate must apply for special permission from the Faculty.

## 4 Qualification requirements

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 24 units, as follows:

### 4.1 Academic program

### 4.1.1 Core Courses

All candidates shall complete the following core courses:
OENOLOGY 7010WT Stabilisation and Clarification 3

OENOLOGY 7019WT Sensory Studies 3

OENOLOGY 7022WT Cellar and Winery Waste Management 3
OENOLOGY 7028WT Introductory Winemaking 3
OENOLOGY 7046WT Fermentation Technology 3 OENOLOGY 7047WT Winemaking at Vintage 3
4.1.2 Elective CoursesAll candidates shall complete elective courses selectedfrom the following:
CHEM ENG 7010WT Winery Engineering ..... 3
OENOLOGY 7038WT Distillation, Fortified and Sparkling Wine Production ..... 3
OENOLOGY 7048WT Advances in Oenology ..... 3
VITICULT 7002WT Viticultural Science ..... 3
VITICULT 7021 WT Viticultural Production ..... 3plus other electives from postgraduate programs offered bythe Faculty as deemed appropriate by the programcoordinator.
4.2 Unacceptable combinations of coursesNo candidate will be permitted to count towards an awardany course, together with any other course, which, in theopinion of the Faculty concerned, contains a substantialamount of the same material; and no course or portion of acourse may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma a candidate shall satisfactorily complete a program of full-time study extending over at least one year or part-time study extending over at least two years.

2 Admission
2.1 An applicant for admission to the program of study for the Graduate Diploma shall:
(a) have qualified for a degree of the University or for a degree of another institution accepted for the purpose by the University
(b) have obtained the approval of the Head of Physics.
2.2 Subject to the approval of the Council the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not qualify for admission to the course under 2.1 above but has given evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in each course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass.
3.2 (a) a candidate who fails to pass in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application for such exemption.
(b) a candidate who has twice failed the examination in any course or division of a course may not enroll for that course again except by special permission to be obtained in writing and then only under such conditions as may be prescribed.
(c) for the purpose of this Rule a candidate who is refused permission to sit for examination, or who, without a reason accepted by the Head of Physics as adequate, fails to attend all or part of a final examination (or supplementary examination if granted) after remaining enrolled for at least nine teaching
weeks of that semester, shall be deemed to have failed the examination.

## 4 Qualification requirements

4.1 To qualify for the degree a candidate shall:
(a) satisfy examiners in courses of study as prescribed in the academic Program Rules and
(b) present a satisfactory research report on a subject approved by the Head of Physics.
4.2 On the completion of the research report the candidate shall lodge with the Head of Physics two copies of the research report prepared in accordance with directions given to candidates from time to time. No research report or material presented for any other degree within this or any other institution shall be submitted.

### 4.3 Academic Program

Unless exempted therefrom by the Faculty every candidate for the degree shall satisfactorily complete units to the value of at least 24 units from the following components.
(a) coursework comprising options with an aggregate value of at least 18 units, including at least nine units from the courses listed in (iii). These courses may be chosen from:
(i) Level III courses in Physics
(ii) Level III courses and Honours courses offered by another area of the University where appropriate and
(iii) the following courses

PHYSICS 7002 Advanced Astrophysics 3

PHYSICS 7003 Advanced Atmospheric and Environmental Physics 3
PHYSICS 7004 Advanced Electromagnetism 3

PHYSICS 7005 Atomic and Molecular Physics 3
PHYSICS 7007 Experimental Methods 3
PHYSICS 7008 Gauge Theory 3
PHYSICS 7009 General Relativity 3
PHYSICS 7010 Laser Physics
\& Non-linear Optics
3
PHYSICS 7011 Nuclear \& Radiation Physics
3
PHYSICS 7012 Nuclear Theory \& Particle Physics

PHYSICS 7014 Relativistic Quantum Mechanics and Particle Physics
PHYSICS 7015 Statistical Mechanics and Many Body Theory

The courses to be offered in any year will be dependent on staff availability and student demand.
(b) an approved research project with a total value of 6 units:
PHYSICS 7100 Diploma Project (Physics) A
or
PHYSICS 7200 Diploma Project (Physics) B
4.4 The Faculty may require a candidate to undertake additional work needed as background to the program.

### 4.5 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.6 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma in Plant Health, a candidate shall satisfactorily complete two semester of fulltime study or no more than 7 semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Graduate Diploma in Plant Health shall have qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate fields of study accepted by the Program Management Committee for the purpose as equivalent to a degree of the University.
2.2 The Program Management Committee may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Committee of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course, which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 A candidate who fails a course and is allowed to repeat that course shall, unless exempted partially there from by the Head of School, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this program are also eligible to apply for entry to the Master of Plant Health program, and to be granted status for the work they have undertaken in the Graduate Diploma.
2.4.2 Students who have conferred upon them the award of Graduate Diploma in Plant Health who subsequently satisfy the requirements of the Masters program must surrender their Graduate Diploma before being admitted to the Master of Plant Health.
2.4.3 A candidate for the Master of Plant Health, who does not complete the requirements for the Masters but satisfies the requirements for the Graduate Diploma may be admitted to the Graduate Diploma.
2.4.4 A candidate for the Graduate Diploma in Plant Health, who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate in either Plant Health or Biosecurity may be admitted to the Graduate Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to be assessed, by examination or otherwise, shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma in Plant Health a candidate shall satisfactorily complete courses to the value of 24 units as follows:

PLANT SC 7220WT Foundations of Plant Health 6 PLANT SC 7221WT Classical Diagnostic Methods in Plant Health

PLANT SC 7222WT Advanced Pest Management Principles
PLANT SC 7020WT Integrated Pest Management in Practice

PLANT SC 7120WT Molecular and Biochemical Diagnostic Methods in Plant Health 3
PLANT SC 7121WT Biosecurity \& Incursion Management 3 PLANT SC 7122WT Management and Regulation of Plant Health

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count for the award any course that, in the opinion of the Program Management Committee, contains substantially the same material as any other course that he or she has already presented for another award; and no course or portion of a course may be counted twice towards the award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma, a candidate shall satisfactorily complete one year of full-time study or no more than two years of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Graduate Diploma in Urban Habitat Management shall have qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate fields of study accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 A candidate who fails a course and is allowed to repeat that course shall, unless exempted partially there from by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 Students who complete this program are also eligible to apply for entry to the Master of Urban Habitat Management program, and to be granted status for the work they have undertaken in the Graduate Diploma.
2.4.2 Students who have conferred upon them the award of Graduate Diploma in Urban Habitat Management who subsequently satisfy the requirements of the Masters program must surrender their Graduate Diploma before
being admitted to the Master of Urban Habitat Management.
2.4.3 A candidate for the Master of Urban Habitat Management who does not complete the requirements for the Masters but satisfies the requirements for the Graduate Diploma may be admitted to the Graduate Diploma.
2.4.4 A candidate for the Graduate Diploma in Urban Habitat Management who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate may be admitted to the Graduate Certificate.
2.4.5 A candidate for the Graduate Diploma in Urban Habitat Management who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Professional Certificate may be admitted to the Professional Certificate.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) A candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) For the purpose of this Rule, a candidate who is refused permission to be assessed, by examination or otherwise, shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.

4 Qualification requirements

### 4.1 Academic program

To qualify for the Graduate Diploma a candidate shall satisfactorily complete courses to the value of 24 units as follows:

### 4.1.1 Internship course

URBH 7202 A/B/C Internship in Urban Habitat Management
4.1.2 Elective coursesAll candidates shall satisfactorily complete elective coursesto the value of 18 units selected from the following:URBH 7100 Designing Urban Habitatsfor Biodiversity6
URBH 7101 Urban Habitats: the Ecology of Cities ..... 6
URBH 7200 Managing Wildlife in Urban Habitats ..... 6
URBH 7201 Managing Urban Vegetation ..... 6
4.2 Unacceptable combinations of coursesNo candidate will be permitted to count for the award anycourse that, in the opinion of the Faculty, containssubstantially the same material as any other course that heor she has already presented for another award; and nocourse or portion of a course may be counted twicetowards the award.
4.3 GraduationSubject to Chapter 89 of the Statutes, candidates whohave satisfied the requirements for any award of theUniversity shall be admitted to that award at a graduationceremony for the purpose.
5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma a candidate shall satisfactorily complete a program of study comprising two semester of full-time study or no more than eight semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the academic program for the Graduate Diploma in Viticulture shall have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the Graduate Diploma any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award. Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for equivalent postgraduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status, except for those candidates who have completed the Graduate Certificate in Viticulture.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Graduate Diploma of Viticulture who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate

Certificate in Viticulture may be admitted to the Graduate Certificate, subject to the student discontinuing candidature for the Graduate Diploma.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Viticulture and who subsequently satisfies the requirements for the Graduate Diploma of Viticulture must surrender the Graduate Certificate before being admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Graduate Diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 (a) a candidate who has failed a course twice may not reenrol in that course except by special permission of the Executive Dean or nominee and then only under such conditions as may be prescribed.
(b) supplementary examinations are allowable only in exceptional circumstances. A candidate must apply for special permission from the Executive Dean.

4 Qualification requirements
To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 24 units, as follows:

### 4.1 Academic program

### 4.1.1 Core Courses

All candidates shall complete the following core courses:
VITICULT 7002WT Viticultural Science 3

VITICULT 7021WT Viticultural Production 3

VITICULT 7038WT Viticultural Methods \& Procedures 3

### 4.1.2 Elective Courses

All candidates shall complete elective courses selected from the following:
AGRONOMY 7130WT Viticultural Engineering \& Irrigation ..... 3
APPECOL7006WT Integrated Pest Management A ..... 3
OENOLOGY 7019WT Sensory Studies ..... 3
OENOLOGY 7028WT Introductory Winemaking ..... 3
SOIL\&WAT 7003WT Topics in Soil and Land Systems ..... 3
SOIL\&WAT 7004WT Mineral Nutrition of Plants ..... 3
SOIL\&WAT 7020WT Soil Water Management
VITICULT 7001WT Advances in Viticultural Science ..... 3
Plus other electives chosen from postgraduate programs offered by the Faculty, subject to prior approval of the program coordinator.
Note: a candidate who is a graduate of the University of Adelaide in the B.Agric.Sc.(Oenology) or B.Oenology will have the core courses VITICULT 7002WT Viticultural Science and VITICULT 7021WT Viticultural Production replaced by VITICULT 7001WT Advances in Viticultural Science and an elective course selected with the approval of the program coordinator.

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the Graduate Diploma a candidate shall satisfactorily complete a program of study comprising 2 semester of full-time study or no more than 8 semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the academic program for the Graduate Diploma in Wine Business shall have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the Graduate Diploma a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the Graduate Diploma.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the Graduate Diploma any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award. Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for equivalent postgraduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status, except for those candidates who have completed the Graduate Certificate in Wine Business.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Graduate Diploma of Wine Business who does not complete the requirements for the Graduate Diploma but satisfies the requirements for the Graduate Certificate in Wine Business may be admitted to the

Graduate Certificate, subject to the student discontinuing candidature for the Graduate Diploma.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Wine Business and who subsequently satisfies the requirements for the Graduate Diploma of Wine Business must surrender the Graduate Certificate before being admitted to the Graduate Diploma.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the graduate diploma: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 (a) a candidate who has failed a course twice may not reenrol in that course except by special permission of the Executive Dean or nominee and then only under such conditions as may be prescribed.
(b) supplementary examinations are allowable only in exceptional circumstances. A candidate must apply for special permission from the Executive Dean.

## 4 Qualification requirements

To qualify for the degree, a candidate shall satisfactorily complete courses to the value of 24 units, as follows:

### 4.1 Academic program

All candidates shall complete the following core courses:
WINEMKTG 7034WT/EX Winery Business Management
WINEMKTG 7049WT/EX Global Market for Wine
and at least one of:
OENOLOGY 7002NW/EX Vineyard and Winery Operations I
OENOLOGY 7003NW/EX Vineyard and Winery Operations IIA
4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a a 48 unit program of study with a research project of 12 units comprising four semesters of full-time study or no more than 14 semesters of part-time study.

2 Admission
2.1 An applicant for admission to the program of study for the Master of Agricultural Business degree must have:
(a) qualified for an Honours degree from the University, at an appropriate standard in appropriate field of study, or a degree of another institution, at an appropriate standard in an appropriate field of study, accepted by the Faculty for the purpose as equivalent to an Honours degree of the University or
(b) completed the Graduate Diploma in Agricultural Business at an average credit level or higher or qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Program Management Committee for the purpose as equivalent to a degree of the University at an appropriate standard, and have relevant professional experience which is deemed by the Program Management Committee to be equivalent to at least 12 units of tertiary study or
(c) completed the Graduate Diploma in Agricultural Business at an average credit level or higher, or qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Program Management Committee for the purpose as equivalent to a degree of the University.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 Notwithstanding Rules 2.3.1, 2.3.2 and 2.3.3, candidates admitted under Rules 2.1 (a) or (b) may be granted further status as applicable.
2.3.5 A candidate who fails a course and is allowed to repeat that course shall, unless exempted partially there from by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Agricultural Business who does not complete the requirements for the Masters but satisfies the requirements for the Graduate Diploma or the Graduate Certificate in Agricultural Business may be admitted to the one or other of those awards as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Diploma in Agricultural Business and who subsequently satisfies the requirements for the Master of Agricultural Business must surrender the Graduate Diploma before being admitted to the Master degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to be assessed, by examination or otherwise, shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.4 A candidate shall complete the coursework component of the degree with a credit average, before proceeding to the research component of the degree. A candidate who is
not eligible to undertake the research component, but has satisfied the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.

## 4 Qualification requirements

4.1 Academic program

To qualify for the degree of Master of Agricultural Business candidates shall (with the exception of Notes (i), (ii), (iii) and (iv) below) complete a program of study to a total of 48 units as follows:

Core courses to the value of 9 units
AGRIBUS 7009WT Issues in Australian Agribusiness
AGRIBUS 7012WT International Agribusiness
Environment
3
AGRIBUS 7044WT Agricultural Business Management
Elective courses to the value of 27 units chosen from:
WINEMKTG 7003WT/EX Advertising \& Promotion
WINEMKTG 7005EX Wine \& Food Tourism \& Festivals
WINEMKTG 7006WT/EX Wine Retail and Distribution Management3
WINEMKTG 7031WT Topics in Agricultural Business B ..... 3
WINEMKTG 7033WT Research Methodology \& Methods ..... 3
WINEMKTG 7039WT/EX Applied Marketing Research ..... 3
WINEMKTG 7041WT Topics in Agricultural Business A ..... 3
WINEMKTG 7046WT Problems in Agricultural Business A
WINEMKTG 7047WT Problems in Agricultural Business B ..... 3
WINEMKTG 7052WT Applied Management Science ..... 3
WINEMKTG 7053EX Introduction to Managerial and Financial accounting ..... 3
WINEMKTG 7055WT/EX Wine and Food Marketing Principles ..... 3
WINEMKTG 7056WT/EX Internet Marketing and E-Commerce ..... 3
WINEMKTG 7058WT/EX International Marketing of Wine and Agricultural Products ..... 3
WINEMKTG 7059WT/EX Strategic MarketingManagement3
WINEMKTG 7060EX Consumer Behavioural Analysis ..... 3
WINEMKTG 7062EX Microeconomic Principles ..... 3
WINEMKTG 1063EX Macroeconomic Essentials for Wine \& Food Business ..... 3
WINEMKTG 7065WT/EX Database Marketing for Food\& Wine Business3

Candidates may include, within those courses presented to qualify for a coursework award, graduate level courses from outside the Master of Agricultural Business Course Pool subject to the approval of the Program Adviser

All candidates shall complete one of the following courses:
AGRIBUS 7050WT Research Project in Agribusiness P/T or

AGRIBUS 7051WT Research Project in Agribusiness F/T

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award; and no course or portion of a course may be counted twice towards the degree.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Notes:

(i) Candidates who have completed the Graduate Diploma in Agricultural Business at an average Credit level, shall be permitted to transfer all equivalent courses towards the Masters degree and will be required to complete a further 12 units of electives plus the Research Project in Agribusiness.
(ii) Candidates who have completed the Graduate Diploma in Agricultural Business at an average credit level and have two or more years of relevant professional experience shall be granted 12 units of status and permitted to transfer all equivalent Graduate Diploma courses towards the Master degree, and will only be required to complete the 12 unit Research Project in Agribusiness.
(iii) Candidates who have a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Faculty for the purpose as equivalent to a degree of the University, and have two or more years of relevant professional experience, shall be granted 12 units of status and be required to complete 9 units of core courses plus 15 units of electives plus the 12 unit Research Project in Agribusiness.
(iv) Candidates who have completed an Honours degree from the University, or equivalent, in a relevant discipline, shall be granted 12 units of status and will be required to 9 units of core courses plus 15 units of electives plus the 12 unit Research Project in Agribusiness.

## Master of Biotechnology(Plant Biotechnology)

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a 48 unit program of study comprising four semesters of full-time study or no more than 11 semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Master of Biotechnology (Plant Biotechnology) degree must have:
(a) qualified for an Honours degree from the University, at an appropriate standard in an appropriate field of study, or a degree of another institution, at an appropriate standard in an appropriate field of study, accepted by the Faculty for the purpose as equivalent to an Honours degree of the University or
(b) completed the Graduate Diploma in Biotechnology (Plant Biotechnology) at an average credit level or higher or qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Faculty for the purpose as equivalent to a degree of the University, and have relevant professional experience which is deemed by the Program Management Committee to be equivalent to at least 12 units of tertiary study or
(c) completed the Graduate Diploma in Biotechnology (Plant Biotechnology) at an average credit level or higher, or qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Program Management Committee for the purpose as equivalent to a degree of the University.
2.2 The Program Management Committee may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Committee of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Program Management Committee, no candidate will be granted status for any course, which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 12 units of status.
2.3.4 Notwithstanding Rules 2.3.1, 2.3.2 and 2.3.3, candidates admitted under Rules 2.1 (a) or (b) may be granted further status as applicable.
2.3.5 A candidate who fails a course and is allowed to repeat that course shall, unless exempted partially there from by the Head of School, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Biotechnology (Plant Biotechnology) who does not complete the requirements for the Masters but satisfies the requirements for the Graduate Diploma in Biotechnology (Plant Biotechnology), or the Graduate Certificate in Biotechnology (Plant Biotechnology) may be admitted to the one or other of those awards as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Diploma in Biotechnology (Plant Biotechnology) and who subsequently satisfies the requirements for the Master of Biotechnology (Plant Biotechnology) must surrender the Graduate Diploma before being admitted to the Master degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to be assessed, by examination or otherwise, shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.4 A candidate shall complete the coursework component of the degree with a credit average, before proceeding to the research component of the degree. A candidate who is not eligible to undertake the research component, but has satisfied the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the degree of Master of Biotechnology (Plant Biotechnology) candidates shall, with the exception of Notes (i), (ii), (iii) and (iv) below, complete a program of study to a total of 48 units.

### 4.1.1 Coursework

The following courses must be completed:
PLANT SC 7225WT Foundations of Plant Biotechnology
PLANT SC 7226WT Molecular Plant Breeding 3
PLANT SC 7227WT Plant Genomics 3
PLANT SC 7123WT Applications of Plant Biotechnology in Plant Production
PLANT SC 7124WT Applications of Plant Biotechnology
in Health and Nutrition
PLANT SC 7125WT Management, Commercialisation and Regulation in Plant Biotech
PLANT SC 7126WT Techniques in Plant Biotechnology 3

### 4.1.2 Research Project

All candidates shall complete one of the following courses
PLANT SC 7229WT Extended Project in Plant Biotechnology F/T
or
PLANT SC 7231WT Extended Project in Plant Biotechnology P/T
Or for those admitted under Rule 2.1 (a) or (b)
PLANT SC 7228WT Project in Plant Biotechnology F/T12
or
PLANT SC 7230WT Project in Plant Biotechnology P/T
4.2 To be eligible to have the degree conferred, candidates are required to provide three bound copies of the research project to the School, after the research project has been passed and accepted for the degree

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contain substantially the same material as any other course that he or she has already presented for another award; and no
course or portion of a course may be counted twice towards the degree.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Notes:

(i) Candidates who have completed the Graduate Diploma in Biotechnology (Plant Biotechnology) at an average Credit level, shall be permitted to transfer all equivalent courses towards the Masters degree and will only be required to complete the Extended Project in Plant Biotechnology.
(ii) Candidates who have completed the Graduate Diploma in Biotechnology (Plant Biotechnology) at an average credit level and have two or more years of relevant professional experience shall be granted 12 units of status and permitted to transfer all equivalent Graduate Diploma courses towards the Master degree, and will only be required to complete the 12 unit Project in Plant Biotechnology.
(iii) Candidates who have a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Faculty for the purpose as equivalent to a degree of the University, and have two or more years of relevant professional experience, shall be granted 12 units of status and be required to complete 24 units of coursework and the 12 unit Project in Plant Biotechnology.
(iv) Candidates who have completed an Honours degree from the University, or equivalent, in a relevant discipline, shall be granted 12 units of status and will be required to complete 24 units of coursework and the 12 unit Project in Plant Biotechnology.

## Academic Program Rules

## 1 Duration of program

To qualify for the degree a candidate shall satisfactorily complete a program of study comprising three semester of full-time study or no more than ten semesters of part-time study.

2 Admission
2.1 An applicant for admission to the academic program for the degree of Master of Oenology shall have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent, plus have at least two years approved relevant work experience.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3. Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award. Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for equivalent postgraduate level studies.
2.3.3 In any case, no candidate will be awarded more than 9 units of status, except for those candidates who have completed the Graduate Certificate in Oenology or the Graduate Diploma in Oenology.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Oenology who does not complete the requirements for the Masters degree but
satisfies the requirements for the Graduate Certificate in Oenology or Graduate Diploma in Oenology may be admitted to one of those awards, as appropriate, subject to the student discontinuing candidature for the higher award.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Oenology or Graduate Diploma in Oenology and who subsequently satisfies the requirements for the Master of Oenology must surrender the Graduate Certificate or Graduate Diploma before being admitted to the Masters degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 (a) a candidate who has failed a course twice may not reenrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
(b) supplementary examinations are allowable only in exceptional circumstances. A candidate must apply for special permission from the Faculty.

## 4 Qualification requirements

To qualify for the degree, a candidate shall satisfactorily complete core and elective courses to the value of 36 units, as follows:

### 4.1 Academic program

### 4.1.1 Core Courses

All candidates shall complete the following core courses:
OENOLOGY 7010WT Stabilisation and Clarification 3
OENOLOGY 7019WT Sensory Studies 3

OENOLOGY 7022WT Cellar and Winery Waste Management 3
OENOLOGY 7028WT Introductory Winemaking ..... 3
OENOLOGY 7046WT Fermentation Technology ..... 3
OENOLOGY 7047WT Winemaking at Vintage ..... 3
OENOLOGY 7048WT Advances in Oenology ..... 3
4.1.2 Elective Courses
All candidates shall complete elective courses selectedfrom the following:
AGRONOMY 7017WT Viticultural Engineering and Irrigation ..... 3
CHEM ENG 7010WT Winery Engineering ..... 3
FREN 5013WT Technical French (Oenology) ..... 3
HORTICUL 7052WT Olive Production and Marketing ..... 3
OENOLOGY 7004WT Wine Packaging and Quality Management ..... 3
OENOLOGY 7038WT Distillation, Fortified and Sparkling Wine Production ..... 3
VITICULT 7002WT Viticultural Science ..... 3
VITICULT 7008WT Grape Industry Practice, Policy and Communication ..... 2
VITICULT 7021WT Viticultural Production ..... 3
VITICULT 7024WT Table and Drying Grape Production ..... 2
VITICULT 7038WT Viticultural Methods and Procedures ..... 3
WINEMKTG 7055WT Principles of Food and Wine Marketing ..... 3
plus other electives from postgraduate programs offered bythe Faculty, with prior approval of the the programcoordinator.
4.1.3 Optional supervised research projectSubject to the approval of the the program coordinator, a12 unit supervised research project can be completed inlieu of elective courses listed above subject to theavailability of a nominated supervisor.

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the degree, a candidate shall satisfactorily complete a 48 unit program of study comprising four semesters of full-time study or no more than 11 semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Master of Plant Health degree must have:
(a) qualified for an Honours degree from the University, at an appropriate standard in appropriate field of study, or a degree of another institution, at an appropriate standard in an appropriate field of study, accepted by the Program Management Committee for the purpose as equivalent to an Honours degree of the University or
(b) completed the Graduate Diploma in Plant Health at an average credit level or higher or qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Faculty for the purpose as equivalent to a degree of the University, and have relevant professional experience which is deemed by the Program Management Committee to be equivalent to at least 12 units of tertiary study or
(c) completed the Graduate Diploma in Plant Health at an average credit level or higher, or qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Program Management Committee for the purpose as equivalent to a degree of the University.
2.2 The Program Management Committee may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Committee of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Program Management Committee, no candidate will be granted status for any course, which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status.
2.3.4 Notwithstanding Rules 2.3.1, 2.3.2 and 2.3.3, candidates admitted under Rules 2.1 (a) or (b) may be granted further status as applicable.
2.3.5 A candidate who fails a course and is allowed to repeat that course shall, unless exempted partially there from by the Head of School, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Plant Health who does not complete the requirements for the Masters but satisfies the requirements for the Graduate Diploma in Plant Health, or the Graduate Certificate in Plant Health or Biosecurity may be admitted to the one or other of those awards as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Diploma in Plant Health and who subsequently satisfies the requirements for the Master of Plant Health must surrender the Graduate Diploma before being admitted to the Master degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to be assessed, by examination or otherwise, shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.4 A candidate shall complete the coursework component of the degree with a credit average, before proceeding to the research component of the degree. A candidate who is not eligible to undertake the research component, but has
satisfied the requirements for the Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.

## 4 Qualification requirements

### 4.1 Academic program

To qualify for the degree of Master of Plant Health candidates shall, with the exception of Notes (i), (ii), (iii) and (iv) below, complete a program of study to a total of 48 units as follows.

### 4.1.1 Core Courses

All candidates shall complete the following core courses:
PLANT SC 7020WT Integrated Pest Management
in Practice

PLANT SC 7120WT Molecular and Biochemical
Diagnostic Methods in Plant Health

PLANT SC 7121WT Biosecurity and Incursion Management 3
PLANT SC 7122WT Management and Regulation of Plant Health ..... 3
PLANT SC 7220WT Foundations of Plant Health ..... 6
PLANT SC 7221WT Classical Diagnostic Methods in Plant Health ..... 3
PLANT SC 7222WT Advanced Pest Management Principles ..... 3

4.1.2 Research Project

All candidates shall complete one of the following courses

PLANT SC 7223AWT/BWT Extended Research Project (Plant Health) F/T 24
or part-time equivalent 24
or (for those admitted under Rule 2.1 (a) or (b)
PLANT SC 7224AWT/BWT Research Project (Plant Health) F/T
or part-time equivalent 12
4.2 To be eligible to have the degree conferred, candidates are required to provide three bound copies of the research project to the School, after the research project has been passed and accepted for the degree.

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award; and no course or portion of a course may be counted twice towards the degree.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Notes:

(i) Candidates who have completed the Graduate Diploma in Plant Health at an average Credit level, shall be permitted to transfer all equivalent courses towards the Masters degree and will only be required to complete the Extended Research Project (Plant Health).
(ii) Candidates who have completed the Graduate Diploma in Plant Health at an average credit level and have two or more years of relevant professional experience shall be granted 12 units of status and permitted to transfer all equivalent Graduate Diploma courses towards the Master degree, and will only be required to complete the 12 unit Research Project (Plant Health).
(iii) Candidates who have a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Faculty for the purpose as equivalent to a degree of the University, and have two or more years of relevant professional experience, shall be granted 12 units of status and be required to complete 24 units of coursework and the 12 unit Research Project (Plant Health).
(iv) Candidates who have completed an Honours degree from the University, or equivalent, in a relevant discipline, shall be granted 12 units of status and will be required to complete 24 units of coursework and the 12 unit Research Project (Plant Health).

> Master of Science (Applied Physics) Master of Science (Astrophysics) Master of Science (Atmospheric Physics) Master of Science (Optics and Lasers) Master of Science (Theoretical Physics)

## Academic Program Rules

## 1 Duration of Program

Except with the permission of the Faculty of Sciences, the courses of study and research report shall normally be completed in three semesters of full-time study or the equivalent of part-time study.

2 Admission
2.1 (a) the Faculty may accept as a candidate for the degree any person who has qualified for an Honours degree of Bachelor of Science in physics of the University of Adelaide or of another institution accepted for the purpose by the University, or
(b) the Faculty may accept as a candidate a person who has qualified for a degree of Bachelor of Science of the University of Adelaide, or another institution accepted by the University for the purpose, with a major sequence in Physics and appropriate professional experience, or
(c) subject to the approval of Council the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not hold the qualifications specified in 2.1 (a) above but who has given evidence satisfactory to the Faculty of fitness to undertake work for the degree.

## 3 Enrolment

A candidate's enrolment in courses of study and choice of supervisor or supervisors must be approved by the Head of Physics, or the program coordinator, at enrolment each year.

## 4 Assessment and examination

4.1 There shall be four classifications of pass in any course for the degree: Pass with High Distinction, Pass with Distinction, Pass with Credit, Pass.
4.2 (a) a candidate who fails in a course and desires to take the course again shall again attend lectures and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application for such exemption.
(b) a candidate who has twice failed the examination in any course or division of a course may not enrol for that course again except by special permission to be obtained in writing and then only under such conditions as may be prescribed.
(c) for the purpose of this Rule, a candidate who is refused permission to sit for examination, or who fails, without a reason accepted by the Head of Physics, to attend all or part of a final examination (or supplementary examination if granted) after remaining enrolled for at least nine teaching weeks of that semester, shall be deemed to have failed the examination.

## 5 Qualification requirements

5.1 To qualify for the degree a candidate shall:
(a) satisfy examiners in courses of study as prescribed in the Academic Program Rules and
(b) present a satisfactory research report on a subject approved by the Head of Physics.
5.2 On the completion of the research report the candidate shall lodge with the Head of Physics two copies of the research report prepared in accordance with directions given to candidates from time to time. No research report or material presented for any other degree within this or any other institution shall be submitted.

### 5.3 Academic program

Unless exempted therefrom by the Faculty every candidate for the degree shall satisfactorily complete units to the value of at least 36 units from the following components:
(a) coursework comprising options with an aggregate value of at least 18 units, including at least nine units from the courses listed in (iii). These courses may be chosen from:
(i) Level III courses in Physics
(ii) Level III courses and Honours courses offered by another area of the University where appropriate and
(iii) the following courses

PHYSICS 7002 Advanced Astrophysics
PHYSICS 7003 Advanced Atmospheric
and Environmental Physics

PHYSICS 7004 Advanced Electromagnetism 3
PHYSICS 7007 Experimental Methods 3
PHYSICS 7008 Gauge Theory 3
PHYSICS 7009 General Relativity 3
PHYSICS 7010 Laser Physics
\& Non-linear Optics
PHYSICS 7011 Nuclear
\& Radiation Physics
PHYSICS 7012 Nuclear Theory
\& Particle Physics
PHYSICS 7013 Quantum Field Theory 3
PHYSICS 7014 Relativistic Quantum Mechanics and Particle Physics*

PHYSICS 7015 Statistical Mechanics and Many Body Theory*

The courses to be offered in any year will be dependent on staff availability and student demand.
(b) an advanced topic in Applied Physics, Astrophysics, Atmospheric Physics, Optics and Lasers, Photonics or Theoretical Physics with a value of 6 units:
PHYSICS 7017 Advanced Topic in Physics
(c) an approved research project with a value of 12 units:

PHYSICS 7016 Research Project (M.Sc.Physics) 12

* not offered in 2006.


### 5.4 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 5.5 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 6 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

1 General
1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.

These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

2 Qualification requirements
2.1 As part of the Structured Program each candidate for the degree shall complete the following components of coursework:

Anatomy and Physiology (Medical Physics)
Physics of Imaging
Radiation Biology, Protection and Epidemiology Radiotherapy Physics.
2.2 Each candidate shall complete a thesis on an approved research project with clinical or field application, undertaken at an approved research institution, to the value of not less than 24 units.

## Master of Science in

## Petroleum Geology and Geophysics

## Academic Program Rules

1 General
1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.

These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

2 Assessment and examinations
There shall be four classifications of pass in any course for the degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.

3 Qualification requirements
3.1 Every candidate for the degree shall complete the following components
(a) coursework, comprising the following compulsory courses:

PETROL 7000TB Petroleum Geology and Geophysics (B) PETROL 7001TB Petroleum Geology and Geophysics (A)
(b) thesis on approved research project.
3.2 The Research Education and Development Committee may exempt candidates from the specific coursework if they have qualified for the Honours degree of Bachelor of Science (Petroleum, Geology and Geophysics) of the University or an alternative Honours program containing equivalent coursework. In such cases, candidates will undertake an extended research thesis.
3.3 At the discretion of the Head, Australian School of Petroleum, a candidate may be required to undertake a six to twelve week placement with the industry sponsor of their project, where such a placement will facilitate progress of the research project.

## Master of Science (Petroleum Geoscience)

## Academic Program Rules

## 1 Duration of Program

To qualify for the degree a candidate shall satisfactorily complete a program of study comprising 2 semesters of full-time study.

## 2 Admission

2.1 Admission to candidature by the Faculty may be granted to:
(a) persons qualified for an Honours degree (Second Class Division A or higher) from the University of Adelaide in a relevant field of study,
(b) persons qualified for an Honours degree from another university or tertiary institution equivalent to an Honours degree (Second Class Division A or higher) from the University of Adelaide in a relevant field of study,
(c) others having qualified for a Bachelor's degree of the University (with average marks of Second Class Division A or higher) in an approved field of study or an equivalent award in an institution accepted for the purpose by the Faculty and have relevant professional experience.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

## 3 Assessment and examination

3.1 There shall be four classifications of pass in any course for the degree and the research project: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.

Students failing to maintain satisfactory academic performance in the coursework may be subject to a review of academic progress and possible termination of candidature.
3.2 A candidate for the Master of Petroleum Geoscience, who does not complete the requirements for the Masters degree, but satisfies the requirements for the Graduate Certificate in Petroleum Geology and Geophysics, may be admitted to that award if appropriate.

## 4 Qualification requirements

To qualify for the degree, a candidate shall obtain a grade of Second Class Division A or higher in courses to the value of 24 units, as follows:

### 4.1 Academic Program

Every candidate for the degree shall satisfactorily complete the following compulsory units with the value of 12 units
(a) PETROL 7000TB Petroleum Geology and Geophysics 6 PETROL 7001TB Petroleum Geology and Geophysics 6 and
(b) an approved research project:

PETROL 7002 Research Project
(M.Sc. Pet. Geoscience)

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special Circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

1 General
1.1 This document must be read in conjunction with:
(a) the General Academic Program Rules for Master by Research Programs (see under Adelaide Graduate Centre, p.8) and
(b) the Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees by Research, published by the Adelaide Graduate Centre.
These documents explain procedures to be followed and contain guidelines on supervision and research for the degree of Doctor of Philosophy and the various Masters Degrees by Research, offered by the University.

All students must comply with both the General Academic Rules and the rules following below, and procedures outlined in the Code of Practice.

In addition to the General Academic Program Rules for Masters by Research degrees, in this publication, the following discipline specific rules apply.

2 Qualification requirements
2.1 Every candidate for the degree shall complete work to the value of 48 units comprising the following components:
(a) coursework comprising the following compulsory courses:
PETROL 7000TB Petroleum Geology and Geophysics (B)
PETROL 7001TB Petroleum Geology and Geophysics (A)
(b) up to 6 units of coursework chosen from PETROENG 7001 to 7043 as listed in the calendar
(c) a thesis on an approved research project with relevance to reservoir geology.
2.2 The Research Education and Development Committee may exempt candidates from the specified coursework if they have qualified for the Honours Degree of Bachelor of Science (Petroleum Geology and Geophysics) of the University, or an alternative Honours program containing equivalent coursework. In such cases, candidates shall undertake an extended research thesis.

## Academic Program Rules

## 1 Duration of program

To qualify for the degree a candidate shall satisfactorily complete a 48 unit program of study comprising four semesters of full-time study or not more than 8 semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the program of study for the Master of Urban Habitat Management degree must have:
(a) qualified for an Honours degree from the University at an appropriate standard in an appropriate field of study, or a degree of another institution at an appropriate standard in an appropriate field of study accepted by the Faculty for the purpose as equivalent to an Honours degree of the University or
(b) completed the Graduate Diploma in Urban Habitat Management at an average credit level or higher or qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Faculty for the purpose as equivalent to a degree of the University, and have relevant professional experience which is deemed by the Faculty to be equivalent to at least 12 units of tertiary study or
(c) completed the Graduate Diploma in Urban Habitat Management at an average credit level or higher, or qualified for a degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Faculty for the purpose as equivalent to a degree of the University.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 Except with special permission of the Faculty, no candidate will be granted status for any course which he or she has completed for another award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for graduate level studies.
2.3.3 In any case, no candidate will be awarded more than 6 units of status for such courses.
2.3.4 Notwithstanding Rules 2.3.1, 2.3.2 and 2.3.3, candidates admitted under Rules 2.1 (a) or (b) may be granted further status as applicable.
2.3.5 A candidate who fails a course and is allowed to repeat that course shall, unless exempted partially there from by the Executive Dean of Faculty, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Urban Habitat Management who does not complete the requirements for the Masters but satisfies the requirements for the Graduate Diploma, the Graduate Certificate or the Professional Certificate in Urban Habitat Management may be admitted to the one or other of those awards as appropriate.
2.4.2 A candidate who has been admitted to the Graduate Diploma in Urban Habitat Management and who subsequently satisfies the requirements for the Master of Urban Habitat Management must surrender the Graduate Diploma before being admitted to the Master degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to be assessed, by examination or otherwise, unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to be assessed, by examination or otherwise, shall be deemed to have failed the course.
3.3 A candidate who has failed a course twice may not re-enrol in that course except by special permission of the Faculty and then only under such conditions as may be prescribed.
3.4 A candidate shall complete the coursework component of the degree with a credit average, before proceeding to the research component of the degree. A candidate who is not eligible to undertake the research component, but has satisfied the requirements for the Professional Certificate,

Graduate Certificate or Graduate Diploma may be admitted to one or other of those awards as appropriate.

## 4 Qualification requirements

### 4.1 Academic program

4.1.1 To qualify for the degree of Master of Urban Habitat Management candidates shall, with the exception of Notes (i), (ii), (iii) and (iv) below, complete a program of study to a total of 48 units as follows.

Elective courses to the value of 24 units selected from the following:
URBH 7100 Designing Urban Habitats
for Biodiversity
URBH 7101 Urban Habitats: the Ecology of Cities 6
URBH 7102 Internship in Urban Habitat Management* 6
URBH 7200 Managing Wildlife in Urban Habitats 6
URBH 7201 Managing Urban Vegetation 6
and
URBH 7000 A/B Urban Habitat Management Research and Dissertation F/T
or
URBH 7001 A/B Urban Habitat Management Research and Dissertation P/T
or (for those candidates admitted under Rules 2.1 (a) or (b)
URBH 7002 Urban Habitat Management Research Project F/T
or
URBH 7003 A/B Urban Habitat Management Research Project P/T
*only available to those admitted under Rule 2.1 (c)
4.2 To be eligible to have the degree conferred, candidates are required to provide three bound copies of the dissertation or project to the School, after the dissertation or project has been passed and accepted for the degree

### 4.3 Unacceptable combinations of courses

No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award; and no course or portion of a course may be counted twice towards the degree.

### 4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Notes:

(i) Candidates who have completed the Graduate Diploma in Urban Habitat Management at an average Credit level, shall be permitted to transfer all equivalent courses towards the Masters degree and will only be required to complete the Urban Habitat Management Research and Dissertation.
(ii) Candidates who have completed the Graduate Diploma in Urban Habitat Management at an average Credit level and have relevant professional experience shall be permitted to transfer all equivalent courses towards the Masters degree and be granted 12 units of status, and will only be required to complete the Urban Habitat Management Research Project.
(iii) Candidates who have an Ordinary degree of the University in an appropriate field of study or a degree of another institution in an appropriate field of study accepted by the Faculty for the purpose as equivalent to an Ordinary degree of the University, and have relevant professional experience, shall be granted 12 units of status and be required to complete 24 units of coursework and the Urban Habitat Management Research Project.
(iv) Candidates who have completed an Honours degree from the University, or equivalent, in a relevant discipline may be granted 24 units of status and be required to complete only 12 units of coursework and the Urban Habitat Management Research Project.

## Academic Program Rules

## 1 Duration of program

To qualify for the degree a candidate shall satisfactorily complete a program of study comprising 3 semester of fulltime study or no more than 10 semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the academic program for the degree of Master of Viticulture shall have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent, plus have at least two years approved relevant work experience.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award. Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for equivalent postgraduate level studies.
2.3.3 In any case, no candidate will be awarded more than 9 units of status, except for those candidates who have completed the Graduate Certificate in Viticulture or the Graduate Diploma in Viticulture.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Viticulture who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate in

Viticulture or Graduate Diploma in Viticulture may be admitted to one of those awards, as appropriate, subject to the student discontinuing candidature for the higher award.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Viticulture or Graduate Diploma in Viticulture and who subsequently satisfies the requirements for the Master of Viticulture must surrender the Graduate Certificate or Graduate Diploma before being admitted to the Masters degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 (a) a candidate who has failed a course twice may not reenrol in that course except by special permission of the Executive Dean or nominee and then only under such conditions as may be prescribed.
(b) supplementary examinations are allowable only in exceptional circumstances. A candidate must apply for special permission from the Executive Dean.

## 4 Qualification requirements

To qualify for the degree, a candidate shall satisfactorily complete core and elective courses to the value of 36 units, as follows:

### 4.1 Academic program

### 4.1.1 Core Courses

All candidates shall complete the following core courses:
VITICULT 7002WT Viticultural Science 3

VITICULT 7021WT Viticultural Production 3

VITICULT 7038WT Viticultural Methods \& Procedures

### 4.1.2 Elective Courses

All candidates shall complete elective courses selected from the following:
AGRONOMY7017WT Viticultural Engineering and Irrigation ..... 3
APPECOL 7006WT Integrated Pest Management ..... 3
HORTICUL 7052WT Olive Production and Marketing ..... 3
OENOLOGY 7019WT Sensory Studies ..... 3
OENOLOGY 7028WT Introductory Winemaking ..... 3
PLANTSC 7004WT Mineral Nutrition of Plants ..... 3
SOIL\&WAT 7003WT Topics in Soil and Land Systems ..... 3
SOIL\&WAT 7020WT Soil Water Management ..... 3
VITICULT 7024WT Table and Drying Grape Production ..... 2
WINEMKTG 7055WT Principles of Food and Wine Marketing ..... 3
Plus other electives chosen from postgraduate programs offered by the Faculty, subject to prior approval of the program coordinator.

### 4.1.3 Optional supervised research project

Subject to the approval of the program coordinator, 12 units of supervised research project can be completed in lieu of elective courses listed above subject to the availability of a nominated supervisor.
Note: a candidate who is a graduate of the University of Adelaide in the B.Agric.Sc.(Oenology) or B.Oenology will have the core courses VITICULT 7002WT Viticultural Science and VITICULT 7021WT Viticultural Production replaced by VITICULT 7001WT Advances in Viticultural Science and an elective course selected with the approval of the program coordinator.

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

## 5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

## 1 Duration of program

To qualify for the degree a candidate shall satisfactorily complete a program of study comprising 3 semester of fulltime study or no more than 10 semesters of part-time study.

## 2 Admission

2.1 An applicant for admission to the academic program for the degree of Master of Wine Business shall have qualified for a Bachelor degree of the University of Adelaide in an appropriate field of study, or a degree of another institution accepted by the Faculty for the purpose as equivalent, plus have at least two years approved relevant work experience.
2.2 The Faculty may, subject to such conditions as it may see fit to impose in each case, accept as a candidate for the degree a person who does not satisfy the requirements of Rule 2.1 above but who has presented evidence satisfactory to the Faculty of fitness to undertake work for the degree.

### 2.3 Status, exemption and credit transfer

2.3.1 No candidate will be permitted to count for the degree any course that, in the opinion of the Faculty, contains substantially the same material as any other course that he or she has already presented for another award. Except with special permission of the Faculty, no candidate will be granted status for any course that he or she has presented for any award.
2.3.2 Such status as may be awarded in exceptional circumstances will only be awarded for equivalent postgraduate level studies.
2.3.3 In any case, no candidate will be awarded more than 9 units of status, except for those candidates who have completed the Graduate Certificate in Wine Business or the Graduate Diploma in Wine Business.
2.3.4 A candidate who fails a course and wishes to repeat that course shall, unless exempted partially therefrom by the Executive Dean or nominee, again complete the required work in the course to the satisfaction of the teaching staff concerned.

### 2.4 Articulation with other awards

2.4.1 A candidate for the Master of Wine Business who does not complete the requirements for the Masters degree but satisfies the requirements for the Graduate Certificate in

Wine Business or Graduate Diploma in Wine Business may be admitted to one of those awards, as appropriate, subject to the student discontinuing candidature for the higher award.
2.4.2 A candidate who has been admitted to the Graduate Certificate in Wine Business or Graduate Diploma in Wine Business and who subsequently satisfies the requirements for the Master of Wine Business must surrender the Graduate Certificate or Graduate Diploma before being admitted to the Masters degree.

## 3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Masters degree: Pass with High Distinction, Pass with Distinction, Pass with Credit and Pass.
3.2 (a) a candidate shall not be eligible to attend for examination unless the prescribed work has been completed to the satisfaction of the teaching staff concerned.
(b) for the purpose of this Rule, a candidate who is refused permission to sit for examination shall be deemed to have failed the examination.
3.3 (a) a candidate who has failed a course twice may not reenrol in that course except by special permission of the Executive Dean or nominee and then only under such conditions as may be prescribed.
(b) supplementary examinations are allowable only in exceptional circumstances. A candidate must apply for special permission from the Executive Dean.

4 Qualification requirements
To qualify for the degree, a candidate shall satisfactorily complete core and elective courses to the value of 36 units, as follows:

### 4.1 Academic program

### 4.1.1 Core Courses

All candidates shall complete the following core courses:
OENOLOGY 7002NW/EX Vineyard and Winery Operations IS
OENOLOGY 7003NW/EX Vineyard and Winery Operations IIS

WINEMKTG 7049WT/EX Global Market for Wine
WINEMKTG 7064WT/EX Advanced Wine Marketing

### 4.1.2 Elective Courses

All candidates shall complete elective courses selected from the following:

AGRIBUS 7009WT Issues in Australian Agribusiness 3
AGRIBUS 7012WT International Agribusiness Environment
AGRIBUS 7044WT Agricultural Business Management ..... 3
OENOLOGY 7000NW/EX Introduction to Grape and Wine Knowledge ..... 3
WINEMKTG 7003WT/EX Advertising and Promotion ..... 3
WINEMKTG 7005EX Wine and Food Tourism and Festivals ..... 3
WINEMKTG 7006WT/EX Retail Distribution Management ..... 3
WINEMKTG 7030WT/EX Wine and Society ..... 3
WINEMKTG 7033WT Research Methodology and Methods ..... 3
WINEMKTG 7034WT/EX Winery Business Management ..... 3
WINEMKTG 7035WT/EX International Wine Law ..... 3
WINEMKTG 7039WT/EX Applied Marketing Research ..... 3
WINEMKTG 7052WT Applied Management Science ..... 3
WINEMKTG 7053EX Introduction to Managerial and Financial Accounting ..... 3
WINEMKTG 7054EX Legal Issues in Wine Marketing ..... 3
WINEMKTG 7055WT/EX Wine and Food Marketing Principles ..... 3
WINEMKTG 7056WT/EX Internet Marketing and E-Commerce ..... 3
WINEMKTG 7057WT/EX Food Marketing ..... 3
WINEMKTG 7058WT/EX International Marketing of Wine and Agricultural Products ..... 3
WINEMKTG 7059WT/EX Strategic Marketing Management ..... 3
WINEMKTG 7060EX Consumer Behavioural Analysis ..... 3
WINEMKTG 7062EX Macroeconomic Principles ..... 3
WINEMKTG 7063EX Macroeconomic Essentials for Wine and Food Business ..... 3
WINEMKTG 7065WT/EX Database Marketing for Wine and Food Business ..... 3
4.1.3 Optional supervised research project

Subject to the approval of the program coordinator, a 12 unit of supervised research project can be completed in lieu of the core and elective courses.

### 4.2 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

### 4.3 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

5 Special circumstances
When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Academic Program Rules

(a) Subject to these Academic Program Rules a person who has been admitted in the University of Adelaide to an Honours degree of Bachelor or a degree of Master in Science, Agricultural Science, Applied Science or Engineering, or to the degree of Doctor of Philosophy in a field of study approved by the Faculty of Sciences, may proceed to the degree of Doctor of Science in the Faculty of Sciences.
(b) On the recommendation of the Faculty of Sciences the Council may accept as a candidate for the degree a person who has been admitted to a degree in the University of Adelaide other than one named in section (a) of this regulation, or who has qualified for a degree of another university or institution of higher education recognised by the University of Adelaide and has had a substantial association with the University; provided that in each case the person concerned has, in the opinion of the Faculty, had an adequate scientific training.
(c) On the recommendation of the Faculty of Sciences the Council may, in special cases, accept as a candidate for the degree a person who does not hold a degree of a University or institution of higher education, provided that in each case the candidate concerned has a substantial association with the University and has, in the opinion of the Faculty, adequate scientific credentials.
(d) Except where a person has been accepted as a candidate under regulation 1 (c), no person shall be accepted as a candidate for the degree of Doctor of Science in the Faculty of Sciences before the expiration of five years from the date of original graduation.
(a) A person who desires to become a candidate for the degree shall give notice of the intended candidature in writing to the Manager, Graduate Administration and Scholarships, Adelaide Graduate Centre and with such notice shall furnish particulars of his/her scientific achievements and of the work to be submitted for the degree.
(b) The Faculty of Sciences shall appoint a committee to examine the information submitted and to advise the Faculty on whether the Faculty should:
(i) allow the applicant to proceed, and approve the subject or subjects of the work to be submitted or
(ii) advise the applicant not to submit his/her work or
(iii) not allow the applicant to proceed; and the Faculty's decision shall be conveyed to the applicant.
(c) If the Faculty approves the subject or subjects of the work and the candidate proceeds with the submission the Faculty shall nominate examiners of whom one at least shall be an external examiner.
(a) To qualify for the degree the candidate shall furnish satisfactory evidence that he/she has made an original contribution of distinguished merit adding to the knowledge or understanding of any subject with which the Faculty is directly concerned.
(b) The degree shall be awarded primarily on a consideration of such published works as a candidate may submit for examination.
(c) The candidate in submitting published works shall state generally in a preface and specifically in notes the main sources from which the information is derived and the extent to which the candidate has made use of the work of others, especially where joint publications are concerned. The candidate may also signify in general terms the portions of the work claimed as original.
(d) The candidate is required to indicate what part, if any, of the work has been submitted for a degree in this or any other university.
4 The candidate shall lodge with the Adelaide Graduate Centre three copies of the work prepared in accordance with the directions given in sub-paragraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree two of the copies will be transmitted to the University Library.
5 A candidate who complies with the foregoing conditions and satisfies the examiners may, on the recommendation of the Faculty of Sciences, be admitted to the degree of Doctor of Science in the Faculty of Sciences.

Notwithstanding anything contained in the preceding rules, the Faculty may recommend the award of the degree to any person who is not a member of the staff of the University. Any such recommendation must be accompanied by evidence that the person for whom the award is proposed has made an original and substantial contribution of distinguished merit to the knowledge or understanding of a subject with which the Faculty is directly concerned, of a standard not less than that required by Regulation 3.

For further information please contact the Adelaide Graduate Centre.

Regulation allowed 4 November, 1965.
Amended: 28 Feb. 1974: 1, 5; 23 Jan. 1975: 1; 15 Jan. 1976: 6; 4 Feb. 1982: 2, 4; 24 Feb. 1983: 2.21 Feb. 1991: 1; 13 Feb. 1992: 1 (b).
Rule approved and Regulation repealed 18 March 1999.

Professional and
Continuing Education

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# Professional awards coordinated by 

## Professional and Continuing Education

- Professional Certificate in Arbitration
- Certificate IV in Teaching English to Speaker of Other Languages (TESOL)


## Academic Program Rules

## 1 Duration of program

Taught over two semesters, the Professional Certificate in Arbitration comprises a General and Advanced course. Programs comprise 13 weeks of Tuesday evening two-hour tutorials, and a full one-day workshop. An introductory session to the Australian Legal System is provided at the commencement of the General Course.

Online learning is offered to students unable to attend tutorials in designated locations.

## 2 Admission

### 2.1 Basic qualifications

2.1.1 The qualifications which would allow automatic admission to the Professional Certificate are recommended as one of the following:

A degree from a University recognised by the University of Adelaide in a field or discipline leading to the holder's practising in the relevant field, plus two years continuous practice in the field,

A diploma or other tertiary qualification from a University or institution (including a TAFE college) recognised by the University of Adelaide, plus not less than three years experience in the practice of the calling for which the qualification is held or
A recognised industry-based qualification (such as training in business management through the Institute of Management), the holding of a senior and responsible position within business or industry with not less than four years total experience or

The holding of a senior position in a field of practice or discipline, plus not less than five years total experience in that field.

Such other qualification or experience as the Faculty of Law, on the advice of the Advisory Board of Management, sees fit.
2.1.2 Being a person of good repute with no criminal record and holding a senior and respected position in the field of practice in which the person works.
2.1.3 Relevance of the Professional Certificate as contributing towards a masters degree:

Graduates possessing a Professional Certificate may be allowed to continue to study for the qualification of a

Masters Degree Law specialising in Arbitration provided that:
(a) They possess the necessary other qualifications required (e.g. the holding of an appropriate degree)
(b) They are acceptable to the relevant Faculty of Law admitting them as students.

### 2.2 Status

Candidates possessing a law degree may be granted exemption from the General Program, dependent on their years of experience in the field and the number of ADR cases dealt with in their professional career.

3 Assessment
General course assessment comprises three components:
(a) participation at compulsory one-day workshop 25\%
(b) 3,000 word assignment 40\%
(c) 2 hour exam $35 \%$.

The Advanced course assessment consists of three components:
(a) participation at the one-day workshop $25 \%$
(b) 4000-5000 word assignment 40\%
(c) 3 hour final exam $35 \%$.

Each course provides 12 modules, several law based relevant to arbitration.

## 4 Qualification requirements

### 4.1 Program of study

To qualify for the Professional Certificate, a candidate shall satisfactorily complete the General course, and successfully pass all components of the Advanced course.

Candidates are serviced with all program materials, including text book and Arbitration video. Website access provides on-line learning for distance education students. On-line students are provided with an additional one-day program to coincide with the full-day workshop in each course.

Email enquiries: susan.boehm@adelaide.edu.au

## Professional Certificate in Arbitration - Graduate Attributes

## Knowledge

On completion of this program, the student should have an understanding of:

- Basic legal principles applicable to simple arbitrations including the Law of Torts, the Law of Contract, Trade Practices, Law, Waiver and Estoppel and the Law of Evidence.
- Principles of Procedural Fairness including bias, notice, opportunity to a present case and rebut an opposing case(s), and the necessity to rely upon logically compelling evidence.
- The application, scope and operation of the Commercial Arbitration Act.
- The validity and enforceability of an arbitration agreement.
- The severability of dispute resolution clauses.
- The scope of an arbitrator's jurisdiction.
- Confidentiality and privacy within an arbitration.
- The principles and process governing the holding of a preliminary conference including knowledge of the various directions which the arbitrator may make to conduct the arbitration fairly and expeditiously.
- The principles underlying the arbitrator's power to conduct a mediation.
- The distinction in process between expedited and more complex and lengthy cases.
- The process of discovery.
- Subpoenas.
- The principles and process governing simple interlocutory matters.
- The distinction between 'documents only hearings' and hearing where oral evidence is taken.
- The principles governing the conduct of a fair hearing.
- The principles governing the receipt of evidence.
- The principles governing expert evidence.
- The process governing the receipt of expert evidence.
- The principles and process governing the recording of evidence.
- The legal requirements of a valid award.
- The professional requirements of a well crafted award.
- The powers of the courts to review the arbitration process.
- The powers of the courts on appeal from an arbitration.


## Skills

On completion of this program the student should demonstrate the ability to:

- Work within the system/rules governing the accepting and handling of cases.
- Allocate time, effort and other resources so as to deal expeditiously with information, issues, scheduling, witnesses, parties and the conduct of an arbitration.
- Explain the role of the arbitrator.
- Conduct a simple preliminary conference.
- Determine simple questions of legitimacy and jurisdiction.
- Supervise the parties to an arbitration.
- Handle simple interlocutory matters.
- Keep proper records of arbitration.
- Speak clearly.
- Maintain a conducive atmosphere throughout the arbitration.
- Conduct a fair hearing.
- Conduct a simple hearing according to the requisite procedural requirements.
- Organise and analyse data.
- Differentiate between different types of evidence (oral, documentary, direct, indirect, hearsay).
- Correctly apply basic legal principles to simple fact scenarios.
- Observe and accurately interpret evidence.
- Differentiate between the value and reliability of evidence.
- Determine inferences that can be properly drawn from data presented and omitted.
- Bring simple cases to completion.
- Summarise facts and conclusions.
- Reference any law relied upon.
- Convey a decision clearly to the parties.


## Attitudes

On completion of this program the student should demonstrate an:

- Understanding of the appropriate relationship between an arbitrator and the parties to dispute.
- Understanding of the need to remain impartial and independent.
- Understanding of the need to maintain legitimacy.
- Understanding of the need to remain informed, responsible and critically discriminating in his or her participation in the community.
- Commitment to ethical and personal standards of professional behaviour.


## Certificate IV in Teaching English to Speakers of Other Languages (TESOL)

## Academic Program Rules

1 General
1.1 A Certificate IV in Teaching English to Speakers of Other Languages (TESOL).

2 Duration of program
2.1 The program of study for the Certificate IV in TESOL is undertaken in an intensive 4 -week block, 120 hours contact time and an additional 100 hours project work. The program can only be undertaken full time.

3 Admission
3.1 For admission to the program of study for Certificate IV in TESOL applicants must have:
(a) a minimum language proficiency of IELTS with an overall band score of at least 6.0 and a minimum band score of 6.0 in Writing and Speaking and 5.5 in Reading and Listening or TOEFL Score of at least 550 with a minimum score of 4.0 in the Test of Written English (TWE)
(b) a tertiary level entry qualification
(c) previous teaching experience or other relevant vocational experience
(d) met the minimum requirements of the pre-interview tasks and interview.

A candidate will not be permitted to defer an offer of admission to the program.

## 4 Enrolment

4.1 Candidates must obtain the approval of the Director of Studies of the University's English Language Centre (ELC) or their nominee for the proposed program of study.
4.2 The requirements of the program must be completed within the 4 -week intensive block.

5 Assessment and Examination
5.1 Students are required to attend all course sessions. Students who do not comply may be failed.
5.2 In determining a candidate's final result in the program examiners will take into account assignments, attendance,
participation, and delivery and presentation of practical teaching sessions.
5.3 There shall be three classifications of pass in the final assessment of the program for the Certificate award: Pass with Distinction, Pass with Credit and Pass.
5.4 A candidate who fails a course and who desires to take that course again shall, unless exempted wholly or partially there from by the Centre, again complete the required work in the course to that satisfaction of the teaching staff concerned.
5.5 A candidate who has twice failed may not resubmit except by special permission of the Director of Studies of the ELC and then only under such conditions as prescribed.

6 Qualification requirements
6.1 To qualify for the Certificate IV in TESOL a candidate shall satisfactorily complete all theoretical courses and practical courses.
6.2 Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award at a graduation ceremony for the purpose.

### 6.2.1 Academic Program

Candidates shall satisfactorily complete the course:
Teaching English to Speakers of Other Languages
This course consists of the following core modules:

- Analysing Communication
- Basic Grammar
- Classroom Management and Organisation
- Cross Cultural Factors and TESOL Contexts
- Development of Reading Writing Speaking and Listening Skills
- Introduction to Grammar (prerequisite module)
- Language Teaching and Learning
- Language Teaching Materials
- Language Teaching Methodologies
- Lesson Planning
- Practice Teaching and Observation
- Presentation of New Language
- Pronunciation
- Syllabus Design.


## Notes (not forming part of the Academic Program Rules)

1. The Certificate IV in TESOL is a nationally accredited award.
2. Special Circumstances

When in the opinion of the ELC special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.

## Certificate IV in Teaching English to Speakers of Other Languages (TESOL) - Graduate Attributes

The following attributes are developed by this program

## Knowledge

On completion of this program the trainee teacher should be able to:

- Discuss factors involved in second language acquisition by adults.
- Describe features of different learning styles in relation to language learning.
- Be aware of the linguistic knowledge that a native speaker of English has.
- Identify and explain the relevance of functions and notions in the TESOL context relevant to learners at difference stages of language development.
- Identify and explain the relevance of genre in the TESOL context.
- Name and discuss a range of grammatical structures.
- Demonstrate effective strategies for managing student activities.
- Discuss the processes involved in developing the skills of reading, writing, listening and speaking in a TESOL context.
- Describe various communicative teaching strategies applicable to the TESOL environment.
- Identify the elements of good or poor teaching materials.
- Describe and explain the application of a range of common assessment tools.


## Skills

On completion of this program, the trainee teacher should demonstrate the ability to:

- Use grammatical terms accurately in lesson planning and classroom delivery.
- Identify and correct grammatical errors and explain corrections.
- Develop appropriate lesson materials.
- Manage time in class effectively and sensitively.
- Analyse personal cultural assumptions and expectations in relation to working in a TESOL classroom.
- Flexibly and effectively use classroom resources, realia and authentic materials in language teaching .
- Describe and apply various communicative teaching strategies applicable to the TESOL environment.
- Evaluate various styles of teaching in relation to own performance.
- Construct effective teaching plans for individual lessons.
- Identify the elements of syllabus design.


## Qualities

On completion of this program, the trainee teacher should demonstrate the following qualities:

- Taking responsibility for further learning and professional development.
- Applying logical, critical and innovative thinking to a range of issues and ideas.
- Engaging effectively with the cultural and intellectual ideas of others.
- Being a competent, creative and a critical user of information communication.
- Being committed to the interests of the learners.
- Being aware and empathetic to the concerns of individuals which may impact on learning.
- Being committed to ethical and personal standards of professional behaviour.
- Being committed to the implementation of policies of equity and diversity in the profession.


## Syllabuses

Courses are listed in alphabetical order under the following disciplines:
Accounting ..... 469
English ..... 581
Agricultural Business ..... 470
Agriculture ..... 471
Agronomy ..... 471
Anatomical Science ..... 474
Animal Science ..... 474
Applied Ecology ..... 476
Architecture ..... 476
Architecture (Digital Media) ..... 479
Art History ..... 480
Biometry ..... 483
Commerce ..... 483
Commercial Law. ..... 484
Computer Science. ..... 485
Corporate Finance. ..... 494
Defence Science. ..... 496
Dentistry ..... 505
Design Studies ..... 521
Design Studies (Digital Media) ..... 523
Economics ..... 524
Education. ..... 535
Engineering:
Chemical. ..... 545
Civil \& Environmental. ..... 549
Electrical \& Electronic. ..... 555
Mechanical ..... 560
Petroleum ..... 563
Technology \& Telecommunications ..... 568
Environmental Studies. ..... 581
French Studies ..... 582
Gastronomy. ..... 582
Geology \& Geophysics. ..... 584
Grief \& Palliative Care ..... 585
Horticulture. ..... 588
Information Systems ..... 588
International Studies ..... 588
Landscape Architecture. ..... 589
Law. ..... 591
Linguistics. ..... 599
Management ..... 600
Marketing ..... 612
Mathematics ..... 614
Music. ..... 623
Nursing ..... 624
Occupational Health \& Safety ..... 642
Oenology ..... 644
Pharmacology. ..... 647
Philosophy ..... 649
Physics. ..... 649
Plant Science ..... 654
Psychology ..... 658
Public Health ..... 664
Soil \& Water ..... 669
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Statistics ..... 672
Urban Habitat Management ..... 678
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## ACCOUNTING

## ACCTING 7000

## Accounting and Decision Making (M)

- 3 units - semester 1 or 2
- 2 hour seminar, 1 hour tutorial per week
- Assessment: assignments, exam as determined at first class

The course introduces students to the use of accounting information by external users and management. Topics: accounting information in its decision making contexts, external financial reports, principles of double entry book-keeping: worksheets, the adjustment process, trial balance, inventory systems, receivables and payables, non-current assets and liabilities, owner's equity, introduction to financial statement analysis, the time value of money, capital budgeting, cost-volume-profit analysis, management accounting tools of analysis and budgeting.

## ACCTING 7008

## Financial Accounting Issues (M)

- 3 units - semester 2
- 3 hour seminar per week
- Assumed Knowledge: ACCTING 7012 Commercial Law and Accounting Regulation (M)
- Assessment: assignments, exam as determined at first class

The course examines the issues related to selected accounting standards, and the theories and debates underpinning the development of financial accounting principles and practices. Topics: theory development in accounting, general prescriptive theories, capital market-based research, standard setting in a theoretical and political framework, positive accounting theories, social and environmental accounting issues, valuation and impairment of non-current assets, and accounting for intangibles and intellectual capital.

## ACCTING 7009

Auditing \& Assurance Services (M)

- 3 units - semester 2
- 3 hour seminar per week
- Assumed Knowledge: ACCTING 7000 Accounting and Decision Making (M), ACCTING 7012 Commercial Law and Accounting Regulation (M)
- Assessment: assignments, exam as determined at first class

The course examines the principles and practices of internal and external auditing. Topics: auditing as a component of recurrent and strategic activities, risk assessment, internal control, systems evaluation, forensic accountability, and contemporary audit issues and challenges.

## ACCTING 7010

Corporate Accounting (M)

- 3 units - semester 1
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: COMMERCE 7005 Principles of Finance, ACCTING 7012 Commercial Law and Accounting Regulation (M)
- Assessment: assignments, exam as determined at first class

The objective of the course is to understand and apply the standards and methods of accounting for companies and corporate groups. Topics: inter-corporate investments and consolidated accounts, issue of shares and debt securities, company reconstructions, accounts of liquidators and receivers, amalgamations and takeovers, foreign currency translations and joint ventures.

## ACCTING 7012

## Commercial Law \& Accounting Regulation (M)

- 3 units - semester 1 or 2
- 3 hour seminar per week
- Corequisite: ACCTING 7000 Accounting and Decision Making (M)
- Assessment: assignments, exam as determined at first class

The course aims to help students understand the legal and regulatory framework of commercial transactions and financial reporting, and to examine issues relating to selected accounting standards. Topics: introduction to the legal system including the roles of the Constitution, parliaments and the courts, an introduction to basic rules of contracts, Australian and international accounting standards setting, corporate governance, financial statement disclosures, earnings per share, lease accounting, and income tax accounting.

## ACCTING 7014

## Management Accounting (M)

- 3 units - semester 2
- 3 hour seminar per week
- Assumed Knowledge: ACCTING 7000 Accounting and Decision Making (M)
- Assessment: assignments, exam as determined at first class

The course introduces students to contemporary management accounting concepts and techniques. Topics: the role of accountants in internal decision-making, tools used to design and develop costing systems, preparation of budgets and their role as a planning and control tool, other decision-making tools including CVP analysis, pricing decisions, inventory issues and costs of quality.

## ACCTING 7015

## Advanced Financial Reporting (M)

- 3 units - semester 1
- 3 hour seminar per week
- Assumed Knowledge: at least 2 accounting specialisation courses
- Assessment: assignments, exam as determined at first class

The course will investigate current developments and issues for corporate governance and financial reporting in Australia and internationally. Topics: corporate governance and corporate disclosure reforms in Australia, the adoption of IFRSs and major changes to AASBs, impairment of assets, intangibles and intellectual capital, international accounting classification schemes, national culture and diversity/harmonisation of accounting systems, financial reporting in transitional economies, comparative country studies of accounting and reporting, disclosure practices of initial public offerings.

## ACCTING 7017

## Financial Statement Analysis (M)

- 3 units - semester 2
- 3 hour seminar per week
- Assumed Knowledge: ACCTING 7000 Accounting and Decision Making (M) and COMMERCE 7005 Principles of Finance
- Assessment: assignments, exam as determined at first class

The course will help students understand the properties of information derived from financial statements and the factors that influence the presentation of such information. Topics: demand and supply forces underlying the provision of corporate data, financial statement numbers and alternative accounting methods, international case studies based on listed companies in various industries, restate-translate issues, construction of projected financial statements, capital markets and corporate information releases, business combinations and financial information, distress analysis and financial information.

## ACCTING 7018

## Public Sector \& Not-For-Profit Accounting (M)

- 3 units - semester 2
- 3 hour seminar per week
- Assumed Knowledge: at least 2 accounting specialisation courses
- Assessment: assignments, exam as determined at first class

The course examines the concepts, methods and contexts of governance, financial management and financial reporting in public sector and not-for-profit entities. Topics: the nature and directions of public sector and not-for-profit sector governance, the new public sector era, dimensions of accountability, financial
statements for government departments, local governments and whole-of-governments, infrastructure and heritage assets, outputbased accrual reporting and budgeting systems, governance and accountability in non-for-profit organisations, quantitative and qualitative performance measures, and financial reporting approaches and issues for not-for-profit entities.

## ACCTING 7019

Accounting Concepts and Methods (M)

- 3 units - semester 1 or 2
- 2 hour lecture, 1 hour tutorial per week
- Assessment: practice sets, assignment, exam as determined at first class

This course introduces students to the fundamentals of financial accounting practice. It develops students' understanding of key accounting concepts, recording methods and measuring and disclosing requirements. Topics include an introduction to accounting information in decision contexts, the conceptual framework (SAC 1, SAC 2, the Framework), Income Statement and Balance Sheet, recording financial transactions, adjusting entries and the accounting cycle, inventory, revaluations, cost of acquisition, depreciation, introductory financial statement analysis, organisational structures (sole proprietors, partnerships, companies, not for profit), cash flow statements, and other selected issues relating to financial reporting standards.

## AGRICULTURAL BUSINESS

## AGRIBUS 7009WT

## Issues in Australian Agribusiness

- 3 units - semester 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: general marketing concepts
- Assessment: to be advised

This course focuses on current agribusiness issues in Australia. Of particular importance are inter-relationships between businesses and the macro environment. Topics will include world food balances, market failure, WTO, globalisation, value adding, diversification, quality and quality management, value chains and other developments in strategic marketing. Student seminar presentations are a critical component of this course.

## AGRIBUS 7012WT

## International Agri-Business Environment

- 3 units - semester 2
- 3 hours lectures/seminars per week
- Assessment: to be advised

This course provides an overview of the international business environment within which agribusinesses function. Topics include Australian trade and investment policies, international cooperation arrangements, legal and political issues, cross-cultural issues, strategies for entering foreign markets, strategic alliance issues, logistics, international human resource management issues, regional case studies. Student seminar presentations are a critical component of this course.

## AGRIBUS 7044RW

Agricultural Business Management

- 3 units - semester 1 or 2
- Multi-modal - 3 hour seminar each week

The aim of this course is to provide perspective and understanding of the overall management role, and to demonstrate linkages between various management functions. Aspects covered include, introducing management and agricultural business, accounting management, financial management, risk management, investment appraisal, legal aspects of agricultural business, and human resources management.

## AGRIBUS 7044WT

## Agricultural Business Management

- 3 units - semester 1 or 2
- Multi-modal - 3 hour seminar each week

The aim of this course is to provide perspective and understanding of the overall management role, and to demonstrate linkages between various management functions. Aspects covered include, introducing management and agricultural business, accounting management, financial management, risk management, investment appraisal, legal aspects of agricultural business, and human resources management.

## AGRICULTURE

## AGRIC 7004A/B

## Project F (AW)

- 12 units - full year
- Contact by arrangement with Supervisor
- Prerequisite: In preparation for the project, students are required to complete relevant courses, as judged by the Program Coordinator and Project Supervisor

Projects comprise some or all of laboratory experiments, field trials, case studies, and critical literature reviews, and normally culminate in a seminar and a substantial written report. Topics for projects are chosen in consultation with the Project Supervisor. This course is the second half of a project that is completed over 2 semesters.

## AGRIC 7007RW <br> Research Proposal

- 3 units - semester 1 or 2
- Assessment: written report, seminar as arranged by Department

The proposal will include a review of the relevant literature on a research topic, a justification of the proposal in terms of its academic and, if appropriate, industry value and a summary of the methodology which would be used in the investigation. The candidate will also present a seminar as part of the research proposal.

## AGRIC 7007WT <br> Research Proposal

- 3 units - semester 1 or 2
- Assessment: written report, seminar as arranged by Department

The proposal will include a review of the relevant literature on a research topic, a justification of the proposal in terms of its academic and, if appropriate, industry value and a summary of the methodology which would be used in the investigation. The candidate will also present a seminar as part of the research proposal.

## AGRIC 7008ARW/BRW

## AGRIC 7008AWT/BWT

## Project G (ANR)

- 21 units - not offered in 2006
- Contact with supervisor by arrangement
- Assumed Knowledge: Students may be required to take certain courses in preparation for the project

Projects may comprise literature reviews, field trials, laboratory experiments, seminars and written assignments. Topics for projects may be chosen from any of the subjects included in the course.

## AGRONOMY

## AGRONOMY 7000RW

## Rural Sociology

- 4 units
- Internal each year, External even years only
- 3 hours per week
- Assessment: assignment

This course provides an introduction to sociology and the sociology of agriculture and natural resources. Topics include classical sociological theories, sociology of agriculture, sociology of natural resources, implications for Australian farmers, and research methods and their application and interpretation.

## AGRONOMY 7001RW

## Agroforestry

- 3 units - semester 2
- 2 hours lectures, 4 hours associated practical work excursions per week - option to take course online with attendance at 2-3 full day field trips
- Assessment: to be advised

Topics include: Agroforestry for functional mimicry of natural ecosystems; Landuse systems with balanced water use; Trees for shelter, shade and soil conservation; Biodiversity and habitat management; Farm sawlog, firewood and pulpwood production systems; Trees in grazing and fodder systems; Specialty tree products; Integrated production systems; Design and evaluation of agroforestry; Establishing trees on farms; Socio-economic evaluation of agroforestry for the management of dryland salinity; Adoption of agroforestry in Australia; Institutions supporting the implementation of agroforestry.

## AGRONOMY 7003RW

## Managing Agricultural Development

- 3 units - semester 1
- 3 hour seminar per week
- Assumed Knowledge: degree in Agriculture or equivalent
- Assessment: as arranged by supervisor/lecturer

The course aims to provide students with an analytical and structural framework for management of agricultural development in developing countries. It deals with functions, structures and organisation in managing agricultural development. Various types of management, for example financial, information and marketing, are studied which link and involve the production and marketing programs. Applications will be studied, eg credit and input supply, land reform, extension and research. Other aspects include: policy making and agricultural development planning, management in government and non-government organisations, and participation at the community level.

## AGRONOMY 7004RW

## Advanced Agronomy

- 6 units
- Assessment: literature reviews, associated assignments

Agronomy requires specialist knowledge and skills to be able to integrate biophysical and financial parameters in the practical management of farming systems. This course concentrates on the understanding and development of complex interactions which occur in agronomic systems. Further, the course exposes the student to cutting edge research, technology and understanding which is not yet in the text books. Students will engage in
focussed studies of climate, soil, nutrient, weed disease interrelations with plant growth and the impacts of management such as tillage, rotation and farming to land type. The course is undertaken with consideration of management decision making and information technology in agronomy.

## AGRONOMY 7006RW

## Social Psychology

- 4 units - semester 1 or 2
- 3 hours per week
- Assessment: to be advised

Introductory social psychology on educational objectives in learning programs, perception, attitudes, attitude theory and attitude measurement, balanced theories, motivation, needs, wants, goals; groups, group dynamics; principles of educational learning theories, classical conditioning, operant conditioning, Gestalt psychology, cognitive theories, social learning, personality and motivational theories applied to learning, self concept, defence mechanisms, non-Freudian personality and learning theories, elements of educational psychology, thinking methods and intelligence; adult education, agricultural education; human transactions, conflict resolutions; expectancy, role theory, social psychology of organisations, formal organisations, psychological implications of technological development, application of social psychology to working in developing countries.

## AGRONOMY 7008RW

## Agroforestry Research Principles

- 3 units - not offered in 2006
- Assessment: literature reviews, assignments

Agroforestry is a relatively new discipline which is developing its own set of principles, techniques and institutions. This is due to the extended temporal and spatial dimensions of agroforestry systems which complicate the experimental design and statistical analysis of agroforestry research; and the wide range of socioeconomic contexts within which the research is based. The course examines case studies of agroforestry research across a wide range of systems hierarchy (i.e. physiological to landscape levels) in both developing and developed countries. This will also introduce the biophysical and economic modelling of agroforestry systems and Australian and international agroforestry research institutions.

## AGRONOMY 7009RW

## Measurement of Plant and Soil Water

- 3 units - semester 1
- Assessment: literature reviews, associated assignments

Agronomic research uses a wide range of techniques to measure the water status in plants and soil. This course leads the student
through an integrated study of the theory and practical measurement of transpiration, soil water, groundwater and agrometeorology. The student will prepare focussed reviews of each of these sub-topics and learn the techniques for measurement of plant and soil water, groundwater and climate. The student will also be instructed in the general use of data loggers and specific measurement software.

## AGRONOMY 7012RW

## Development of New Crops and Markets

- 6 units - semester 1 or 2
- Assessment: literature reviews, associated assignments

Sustainable economic development demands that national and regional agricultural systems have the capacity to diversify. This requires individuals with a multi-disciplinary understanding of the whole process to develop new crops and markets as well as those with specific knowledge of various industry and market structures along the process. This course begins with a market perspective of crop diversification. The influences of international influence, gene sources and potential new crops are covered. Seed development technology and developing new production systems, industry infrastructure, seeking processing and quality control are introduced in the second semester. Finally, new technology issues are studied. Students will also engage in focused projects on specific stages on the market development or production process, eg. Seed and propagule technology; post harvest handling, processing and quality control of field crops; and the role of biotechnology in new crop development.

## AGRONOMY 7013EX

## Crops and Pastures G

- 4 units
- External - odd years only
- 3 hours per week
- Assumed Knowledge: degree in Agriculture
- Assessment: to be advised

An advanced course providing a detailed knowledge of recent technological developments in the production of crops and pastures in southern Australia with particular reference to dryland farming and promoting the ability to conduct field experiments and interpret the results of agronomic research.

The syllabus includes the technology of cereal, grain legume and oilseed crop production, with particular emphasis on the effects of crop rotations, tillage systems and fertiliser usage on crop production; the selection and evaluation of herbage plants in relation to physical and biological factors in the environment; methods of pasture establishment, management, conservation and utilisation; recent advances in the control and management of weeds, pests and diseases of crops and pastures.

## AGRONOMY 7016EX

Communications and Agricultural Extension

- 4 units
- External - odd years only
- 3 hours per week
- Assessment: assignments

Theory and models of communication. Language, meaning, culture, written and oral communications. Report writing. Readability. Style in writing. Application of learning and communications theories to the presentation of information. Role of different extension techniques in the education process. Credibility, empathy and rapport. Communications for various audiences. The scope, purpose, structure and organisation of the agricultural extension services in the different states of Australia. Comparison of the history and underlying philosophy of agricultural extension services in Australia with those of other countries. Organisations and agencies (government and non-government) with a role in agricultural extension. The audience for agricultural extension. Agricultural extension in developing countries. Legal liability in extension. Group process and leadership. The preparation of press articles, tape recordings, video tape programs and micro-teaching presentations are included in practical exercises.

## AGRONOMY 7018RW

Agricultural Engineering

- 2 units - semester 1 or 2
- 3 hours - per week
- Assessment: written reports

The course consists of a project, negotiated between the student and Discipline of and assignment and tutorial work as directed by the Discipline. Each component is complementary in that the assignment and tutorial work is directed toward the theoretical and analytic basis of the topic in which the project has been selected.

## AGRONOMY 7019RW

## Theories of Social Change for Developing Countries

- 3 units - semester 1 or 2

In order to appreciate contemporary theories of rural and agricultural change in the third world, the background of these theories in general social theories will be examined. The logic and assumptions of contemporary theories of social change specifically related to 'development' can then more easily be identified. Practical and policy consequences flowing from these approaches can also be more easily analysed. With this background substantive issues in development can be considered, such as colonialism and its legacy, gender, power and inequality together with issues of ecological damage and sustainability.

## AGRONOMY 7021WT

## Irrigation Science

- 3 units - semester 1
- 6 hours per week
- Prerequisite: AGRONOMY 2012RW Engineering Science or AGRONOMY 1001RW Engineering in Agriculture or CHEM ENG 1001 Engineering Physics or AGRONOMY 2012RW Engineering Principles
- Assessment: practicals, assignments, written exams

Irrigation principles: evapotranspiration and soil moisture budget, crop requirements (peak rate and crop factor), adjustments for salinity (leaching fraction), sprinkler and dripper characteristics, sprinkler and dripper layout, hydraulics of pressure irrigation systems, irrigation scheduling, leveling, automatic controllers.

## AGRONOMY 7022RW

## Indigenous Australians and Environmental Management

- 3 units - not offered in 2006
- Equivalent of 5 hours per week (includes vacation field camp)
- Assessment: practicals/assignments

Contemporary land and resource use and management by Aboriginal people, and its relationship to sustainable development. Theoretical frameworks drawing on development studies, emphasising concepts of empowerment and indigenous self determination, and participatory approaches to resource management. Exploration of the positive and negative impacts of Australian resource management on indigenous people. Aboriginal world views, social organisation and relationships to country. Skills in communicating and negotiating with Aboriginal people. Specific topics covered include Aboriginal ecologies; subsistence economies; land and sea rights including native title; comanagement regimes; heritage management; the role of Aboriginal organisations in environmental management.

## AGRONOMY 7130WT

## Viticultural Engineering and Irrigation

- 3 units - semester 1
- 2 hour lecture, 1 hour tutorial, 3 hour practical, some field work
- Assumed Knowledge: CHEM ENG 1001 Intro to Process Engineering, SOIL\&WAT 2013RW Intro to Engineering in Agriculture or equivalent
- Restriction: AGRONOMY 7021WT Irrigation Science
- Assessment: may include practical reports, assignments, trip reports, individual projects and examination

Students will be introduced to concepts and techniques used in the engineering aspects of trellis design, tractor operation and maintenance, oil hydraulic systems and irrigation systems.

## ANATOMICAL SCIENCE

## ANAT SC 5000

## Human Anatomy for Graduate Certificate

- 6 units - semester 1
- $4 \times 2.5$ hour late afternoon/evening tutorial/practical sessions per week
- Eligibility: Grad. Cert. Anatomy students only
- Prerequisite: UG degree, or equivalent, which includes Biology
- Assessment: to be advised at start of year

This is a course of detailed human gross anatomy that permits students to gain an in-depth knowledge of systematic/regional gross anatomy by dissection of the human cadaver. The majority of coursework will be of a problem-based, self directed type as students will be given dissection tasks introducing them in depth to the structure of systems and all regions of the human body. During the last 2 months of the course each student will do a project which involves preparation of a display quality prosection and presentation of a lecture on the anatomy of the prosected part of the body.

## ANIMAL SCIENCE

## ANIML SC 7004RW

## Topics in Animal Science

- 3 units - semester 1 or 2
- 26 lectures or equivalent, associated practical work
- Assumed Knowledge: degree in Agricultural Science or Science
- Assessment: to be advised

The course will offer the opportunity to cover a range of topics on Animal Science related to the teaching and research interests of staff. Candidates should consult the Head of Discipline for topics currently available.

## ANIML SC 7011RW

Comparative Animal Physiology

- 3 units - semester 1
- 6 hours per week
- Assumed Knowledge: ENV BIOL 1001 Biology I, or APP ECOL 1004RW Cell Biology \& Genetics and APP ECOL 1003RW Biology of Plants \& Animals
- Restriction: ANIML SC 2015RW Physiology of Farm Animals
- Assessment: exam 30\%, practicals 40\%, assignments 30\%

This course deals with animal physiology: the tissues; physiology of the major systems including skeletal and muscular, circulatory, respiratory, digestive, excretory, nervous, endocrine, reproductive, environmental physiology.

## ANIML SC 7012RW

## Fauna Management

- 3 units - semester 2
- Presented online
- Restriction: ANIML SC 2014RW Wildlife Management
- Assessment: theory (online) 20\%, assignments 70\%, online discussion group 10\%

The course deals with the management of captive and wild populations. Topics covered include: the reasons for management; conflicts between humans and wildlife; the philosophical rationale for maintaining captive collections; management of diseases; development of ecologically based management strategies for the purpose of conservation, commercial harvesting and pest control; management of captive collections; legal and administrative framework.

## ANIML SC 7021RW

## Animal Health

- 3 units - semester 2
- Assumed Knowledge: ENV BIOL 1000A/B Biology I, APP ECOL 1004RW Cell Biology \& Genetics, APP ECOL 1003RW Biology of Plants \& Animals
- Restriction: ANIML SC 3010RW Diseases \& Nutrition of Livestock
- Assessment: exam, assignments, case studies

Diseases of farm animals caused by viral, bacterial, fungal and parasitic infections, metabolic disturbances, trace element deficiencies and genetic diseases. Disease symptoms, the scientific basis of diagnosis and treatment. Interactions between nutrition and immune responses. Detection and treatment for deficiencies and toxicities. The metabolic roles of vitamins, minerals, amino acids, carbohydrates and fatty acids. Regulation of feed intake, diet selection and feed preference/palatability.

## ANIML SC 7022RW

Animal Nutrition and Metabolism

- 3 units - semester 2
- Assumed Knowledge: ENV BIOL 1000A/B Biology I or APP ECOL 1004RW Cell Biology \& Genetics \& APP ECOL 1003RW Biology of Plants \& Animals
- Restriction: ANIML SC 3010RW Diseases \& Nutrition of Livestock
- Assessment: exam, practicals, assignments

This course will discuss the principles and application of animal nutrition across a range of species, focusing mostly, although not exclusively, on livestock species. Students will develop an understanding of the nutritional components of feedstuffs and nutrient requirements, including requirements for energy, protein, carbohydrate, fat, minerals and vitamins. The effects of nutrient supply on growth, reproduction, body composition (eg, fatness), health and welfare and product quality (for agricultural animals) are considered. The hormonal regulation of nutrient partitioning is also discussed, with particular reference to the changing requirements associated with growth, pregnancy and lactation. The role of nutritionists in animal-based enterprises, including the use of leastcost ration formulation is discussed. The course includes lectures and practicals, including hands-on animal trials.

## ANIML SC 7023RW

Pig Production - Science into Management

- 4 units - summer semester
- Assumed Knowledge: ENV BIOL 1000A/B Biology, APP ECOL 1004RW Cell Biology \& Genetics, APP ECOL 1003RW Biology of Plants \& Animals, ANIML SC 2030RW Livestock Production Science
- Restriction: ANIML SC 7023RW Intensive Livestock Management

Pork is the most consumed meat in the world and the second largest agricultural commodity. The management of modern pork production systems is based on detailed information on all aspects of the enterprise, including genetics and breeding, animal nutrition and growth performance, environmental and welfare requirements, health status, reproductive efficiency and product (meat) quality. This course will consider the advantages and disadvantages of various modern pork production systems (including welfare considerations, economic factors, the demand for product consistency, food safety issues, and other consumer expectations). The main factors that are required for the successful management of pigs are discussed, focusing on the management of suckling piglet, the weaner/grower pig and the breeding sow. This course is offered by the National Centre for Pork Industry Training and Education, based at Roseworthy Campus. The course includes lectures; site visits to commercial operations, and other practical sessions. It is intended that students completing the course will understand both commercial pork production and the science that underlies it.

## ANIML SC 7024RW

Ecology and Management of Vertebrate Pests

- 3 units - summer semester
- 10 days during summer vacation
- Quota will apply
- Assumed Knowledge: ENV BIOL 2010RW Population Ecology or equivalent
- Assessment: proposal, progress report, final report

This course strongly emphasises the field application of vertebrate pest control techniques and provides the theoretical bases for these techniques. Topics covered are the biology and ecology of vertebrate pests; the damage caused by pest animals; the legislative and administrative aspects of vertebrate pest control; district organisations; extension; vertebrate pest control practice.

## APPLIED ECOLOGY

## APP ECOL 7001RW

## Ecology and Management of Rangelands

- 3 units - semester 2
- Part semester, winter vacation - includes 10-day field camp
- Assumed Knowledge: APP ECOL 2010WT Population Ecology or SOIL\&WAT 2001RW Community Ecology, or equivalent
- Assessment: project reports 50\%, theory exam 50\%

A course in ecology emphasising the study of interactions between grazing animals and the vegetation in arid areas, the principles involved and their application to management practices. Particular attention is paid to the impact of domestic, feral and native herbivores on the population dynamics of the dominant woody perennials, and the maintenance of their stabilising influence on the landscape. The bulk of the teaching is done at Middleback, a working sheep station set in the western myall woodlands on the southern margins of the north-west pastoral district of South Australia. The main focus on ecology of these arid woodlands and their highly productive saltbush-bluebush understorey, is taught in the context of the history of land use, subsequent research, the ensuing legislation, and its administration, with input from pastoralists and government officers where appropriate.

## APP ECOL 7006WT

## Integrated Pest Management A

- 3 units - semester 1
- 2 lectures; 4-5 hour practicals/computer exercises per week
- Assessment: exam 50\%, practical exercises, assignments 50\%

This course provides an introduction to the theory and practice of pest management. Topics considered are: the development, regulation and use of pesticides; strategies and tactics for managing pests (biological, cultural, genetic and chemical control); integrated pest management; economics of pest management; the diagnosis of disease; strategies and tactics for managing disease outbreaks; integrated weed management.

## APP ECOL 7010WT

## Topics in Plant and Pest Science

- 3 units - semester 2
- 26 lectures or equiv. (essays, tutorials, seminars), associated practical work
- Prerequisite: degree in Science, Environmental Science, Agriculture or equivalent
- Assessment: to be advised

The course will review some of the following topics: population dynamics and seasonal occurrence of insect, plant pathogen and weed pests; biology of pests; quantitative methods of sampling, decision making and damage assessment; chemical control; plant resistance and biotechnology; biological control; quarantine procedures; integration and implementation of crop protection practices. Candidates should consult the Head of Discipline for topics currently available.

## APP ECOL 7014AEX/BEX

## Integrated Weed Management

- 3 units - full year
- 2 day residency for practicals in first mid-semester break modules at students pace
- Students must enrol in both APP ECOL 7014AEX \& APP ECOL 7014BEX Integrated Weed Management
- Assumed Knowledge: completion of Level II Plant Biology course
- Assessment: six assignments during the year

The impact of weeds on agricultural and natural ecosystems. Important characteristics of weed biology. Ecology of weeds. Methods of sampling and monitoring weed infestations. Biological, cultural and chemical methods for weed management. Integrating management techniques for weeds in a range of ecosystems, including: cropping enterprises, perennial pastures, national parks and recreation areas and horticultural systems.

## ARCHITECTURE

## ARCH 7006A/B

## Architecture Masters Project II

- 12 units - full year
- Up to 20 hours a week studio work, with specialist lectures irregularly spaced
- Eligibility: M.Arch. (Coursework) students only
- Prerequisite: ARCH 7013 Architecture Studio II
- Corequisite: ARCH 7007A/B Architecture Masters Dissertation
- Assessment: masters project

This course entails the preparation of a design response to a student devised brief. The substance and scope of the design may embrace aspects of nature and/or culture in urban and/or rural settings but is specifically intended to display the students' mastery at architectural design and an attuned understanding of the factors, theories, and opportunities that may influence and underpin the design.

The project will be of moderate to high complexity. Tuition will entail both individual and group seminar and studio classes resulting in an individual exposition. Responses should demonstrate an advanced level of knowledge and ability in several areas of architecture thought and practice, including evidence of the student's ability to collect and evaluate information, construct, test and defend arguments or hypotheses, and to critically self-examine architectural design proposals. The final presentation or exhibition of the project should display a thorough integration of all major aspects of the Program.

## ARCH 7007A/B

## Architecture Masters Dissertation

- 12 units - full year
- 2 hour tutorial/seminar weekly
- Eligibility: M.Arch.(Coursework) students only
- Corequisite: ARCH 7006A/B Architecture Masters Project II
- Assumed Knowledge: design at postgraduate degree level
- Restriction: enrolment subject to application to the Head of the School and contingent upon prior results
- Assessment: seminar paper and/or exhibition, final essay or report articulating and supporting the project

This course comprises an individual research inquiry into a topic or theme or theory within the discipline of architecture. The dissertation research culmination needs to display an adept fluency in period and contemporary literature and debates about the topic, evidence of a logical argument and analysis of available information or test results, an appreciation and use of a research methodology including its assumptions and validity, and the presentation of this research in a robust discussion paper or through an exhibition with catalogue.

Students will be required to undertake supervised research into a particular topic, leading to the presentation of a seminar paper, and submission of a final report/essay of 6000-12000 words.

## ARCH 7015

## Architecture Elective Studio A (M)

- 6 units - semester 1
- Up to 9 hours lectures/tutorials/workshops including an average 6 hours studio; contact hours vary from week to week
- Eligibility: M.Arch. (Cswk), M.L.Arch. students only
- Restriction: ARCH 7011 Architecture Studio IC
- Assessment: assignments, projects

This course explores the theory and practice of the adaptive re-use of existing buildings. It examines examples of projects that successfully combine 'new' and 'old' work, the survey and documentation of existing buildings, and strategies for design and construction. The course will also discuss heritage listing and the Burra Charter as frameworks for the protection of culturally important existing buildings.

## ARCH 7016

Architecture Studio (M)

- 6 units - semester 1
- Up to 9 hours lectures/tutorials/workshops including an average 6 hours studio; contact hours vary from week to week
- Eligibility: M.Arch. (Cswk) students only
- Restriction: ARCH 7010 Architecture Studio IB
- Assessment: assignments, projects

This course focuses on the design and construction of a house or similar small building. Students will develop a brief from a client's instructions, develop design options that respond to the brief, the site and environmental objectives, predict and analyse the potential performance of the chosen design, and develop a set of construction specifications and drawings. The analysis and documentation will be carried out using digital media.

## ARCH 7017

## Urban Design Studio (M)

- 6 units - semester 2
- Intensive studio in approx. Weeks 1-8; up to 18 hours lectures/tutorials/workshops including an average 6 hours studio; contact hours vary from week to week
- Eligibility: M.Arch. (Cswk) and M.L.Arch. students only
- Restriction: ARCH 7012 Architecture Studio ID or LARCH 7012 Landscape Architecture Studio ID
- Assessment: assignments, projects

This course addresses the theory and practice of urban design and its expression in two kinds of urban design projects: 'hard landscape' urban projects such as an alley, square or street; and large-scale elements in the urban landscape such as a footbridge or shade structure. Projects are developed from conceptual levels to outline construction strategies and details. Design processes and presentation emphasise the role of digital media in urban design modelling and simulation.

## ARCH 7018

## Architecture Elective Studio B (M)

- 6 units - semester 2
- Intensive studio in approx Weeks 8-13; up to 18 hours lectures/tutorials/workshops including an average 6 hours studio; contact hours vary from week to week
- Eligibility: M.Arch. (Cswk), M.L.Arch. students only
- Restriction: ARCH 7009 Architecture Studio IA
- Assessment: assignments, projects

This course will explore connections between architectural design and avant-garde trends, culture, aesthetics and/or aspects of architecture theory. The course is intended to be an opportunity to expand creative design boundaries. It may include cross-disciplinary connections with landscape architecture, art and urban design.

## ARCH 7019

## Architecture Processes (M)

- 6 units - semester 1
- Up to 18 hours lectures/tutorials/workshops including an average 6 hours studio; contact hours vary from week to week
- Eligibility: M.Arch. (Cswk) students only
- Prerequisite: 18 units of Level I M.Arch.(Cswk) including at least 12 units of core courses
- Corequisite: ARCH 7020 Professional Practice (M) \& ARCH 7021 Design Seminar (M)
- Restriction: ARCH 7013 Architecture Studio II
- Assessment: assignments, projects

This course will mirror in an educational setting the processes by which medium to large scale architecture projects are managed, initiated, developed and documented. Students will develop integrated proposals for a mixed-use urban project or projects raising significant urban design issues, linking stages from project conception and planning to construction and documentation. It will address the stakeholders, environment, and means of achieving design objectives.

## ARCH 7020

## Professional Practice (M)

-4 units - semester 1

- Up to 6 hours lectures per week
- Eligibility: M.Arch. (Cswk) and M.L.Arch. students only
- Corequisite: ARCH 7019 Architecture Processes (M) or LARCH 7019 Landscape Architecture Processes (M); ARCH 7021 Design Seminar (M)
- Restriction: ARCH 7014 Architecture Practice II or LARCH 7014 Landscape Architecture Practice II
- Assessment: work diaries, seminar papers, projects

This course examines practice management and project management in the built environment professions, particularly architecture and landscape architecture. Topics in practice management include: ethical practice; the character and operation of practices; legal requirements; cash flow and profitability; running a business; professional memberships and registration; risk and professional liability; and personal career planning. Topics in project management include: project stages; procurement and feasibility; statutory requirements; management of time, cost and quality; and contracts and contract administration in private and public realms. The course is articulated with Architecture Processes ( M ) and Landscape Architecture Processes (M), one of which is taken concurrently.

## ARCH 7021

## Design Seminar (M)

## - 2 units - semester 1

- 2-3 hours lectures/tutorials/workshops/field trips; contact hours vary week to week
- Eligibility: M.Arch. (Cswk), M.L.Arch. students only
- Corequisite: ARCH 7019 Architecture Processes (M) or LARCH 7019 Landscape Architecture Processes (M); ARCH 7020 Professional Practice (M)
- Restriction: LARCH 7015 Landscape Architecture Seminar II
- Assessment: projects, seminar papers

This course examines contemporary issues and theory in design and design practice, including themes such as critique, precedents, the ways in which design is presented and represented in professional and popular media, design heritage and its recognition and conservation, globalisation, and the cultural and cross-cultural contexts of design. Students are encouraged to engage in the international discourse about design and to establish a personal theory agenda and to locate appropriate resources as references and support for their design work.

## ARCH 7022A/B

## Architecture Project (M)

- 10 units - full year
- Up to 20 hours a week studio work with specialist lectures irregularly spaced
- Eligibility: M.Arch. (Cswk) students only
- Prerequisite: ARCH 7019 Architecture Processes (M)
- Corequisite: ARCH 7023A/B Architecture Dissertation (M), ARCH 7024 Architecture Seminar (M)
- Restriction: ARCH 7006A/B Architecture Masters Project
- Assessment: final project

A single project, of a student's own choice, which will be of moderate to high complexity. Responses should demonstrate all phases of architectural designing; sketch plans, technical development including one specialised topic, and a final presentation which should show a thorough integration of all major aspects of the academic program.

## ARCH 7023A/B

## Architecture Dissertation (M)

- 12 units - full year
- 2 hour tutorial/seminar weekly
- Eligibility: M.Arch. (Cswk) students only
- Prerequisite: ARCH 7019 Architecture Processes (M)
- Corequisite: ARCH 7022A/B Architecture Project (M), ARCH 7024 Architecture Seminar (M)
- Restriction: ARCH 7006A/B Architecture Masters Dissertation
- Assessment: seminar paper and/or exhibition, final essay or report articulating and supporting the project

This course comprises an individual research inquiry into a topic or theme or theory within the discipline of architecture. The dissertation research culmination needs to display an adept fluency in period and contemporary literature and debates about the topic, evidence of a logical argument and analysis of available information or test results, an appreciation and use of a research methodology including its assumptions and validity, and the presentation of this research in a robust discussion paper or through an exhibition with catalogue.Students will be required to undertake supervised research into a particular topic, leading to the presentation of a seminar paper, and submission of a final report/essay of 6000-12000 words.

## ARCH 7024

## Architecture Seminar (M)

- 2 units - semester 2
- 2-3 hours lectures/tutorials/workshops; contact hours vary week to week
- Eligibility: M.Arch. (Cswk) students only
- Prerequisite: ARCH 7019 Architecture Processes (M)
- Corequisite: ARCH 7022A Architecture Project (M), ARCH 7023A Architecture Dissertation (M)
- Assessment: assignments, seminar papers

This course examines contemporary issues, theories and philosophies in architectural design. It will engage in the critical review of influential and cutting edge practice and practitioners. It
supports the concurrent course Architecture Project ( $M$ ) in which the critical thinking developed in this course is expressed as creative work.

## Architecture - Digital Media

## ARCHDM 7001

## Arch.Design Digital Media Masters Project

- 12 units - semester 1 or 2
- Contact hours vary
- Eligibility: M.Arch.(Digital Media) students only
- Prerequisite: all required courses in Grad.Dip.Arch.(Dig.Mdia.)
- Assessment: assignments/projects

This course comprises an individual or group culminating design, planning and/or research project that addresses an aspect of architectural design, professional practice or architectural design education in the context of digital media. Students will negotiate with the course coordinator a topic that reflects their own particular interests and the mode of digital and/or printed submission that is to be adopted.

## ARCHDM 7007

## Rules and Contingency in Design with Digital Media

- 6 units - semester 1
- Contact hours vary - periods of intensive group contact and periods of less frequent individual tutorials
- Eligibility: Architecture (DM), Design Studies (DM) students only
- Corequisite: ARCHDM 7008 Interactivity in Virtual Architecture; or DESSTDM 7006 Interactivity in Design with Digital Media
- Restriction: ARCHDM 7004 Architectural Design with Digital Media A; DESSTDM 7001 Design Studies with Digital Media A
- Assessment: projects, digital journal

This course highlights and explores the underlying existence of consistent rules in the ways that nature, design and the processes of digital media software all operate. Taking metaphors of 'grammar' and 'vocabulary' from natural language and emphasising the contingency of specific situations, the course shows how an understanding of these phenomena can empower and enrich design practice. It demonstrates how creativity can be recognised and promoted as the informed understanding, modification and breaking of existing rules.

## ARCHDM 7008

## Interactivity in Virtual Architecture

- 6 units - semester 1
- Contact hours vary - periods of intensive group contact and periods of less frequent individual tutorials
- Eligibility: Architecture (Digital Media) students only
- Corequisite: ARCHDM 7007 Rules and Contingency in Design with Digital Media
- Restriction: ARCHDM 7006 Architectural Design with Digital Media B
- Assessment: projects, digital journal

This course applies concepts of rules, grammar and contingency to the design of virtual architecture, that is architecture that is not intended to be built. It examines precedents of unbuilt and unbuildable architecture and the tradition of exploring theoretical, technical and social issues through the postulation of imaginary architectural imagery. Typical projects include the design and production of interactive virtual architecture.

## ARCHDM 7009

## Representing Real and Virtual Architecture

- 6 units - semester 2
- Contact hours vary - periods of intensive group contact and periods of less frequent individual tutorials
- Eligibility: Architecture (Digital Media) students only
- Corequisite: ARCHDM 7010 Designing Architecture with Digital Media
- Restriction: ARCHDM 7003 Architectural Design with Digital Media C
- Assessment: projects, digital journal

This course focuses on the interrelationship of abstraction, modification and realism in the making and representation of architecture with digital media. As with traditional media, effective representations of existing or proposed scenes and objects often seek to abstract the 'essentials' and emphasise them rather than mirror reality. Conversely, apparent effects of realism can be achieved by accentuating visual phenomena. Issues of accuracy, authenticity and authorship arise, most obviously in the digital manipulation of images. The course examines these issues while developing skills in surface representation, lighting simulation and effects, and the architecture concepts of making series and derivations. Typical projects include collage and image processing of architecture design in real and virtual space.

## ARCHDM 7010

## Designing Architecture with Digital Media

- 6 units - semester 2
- Contact hours vary - periods of intensive group contact \& periods of less frequent individual tutorials
- Eligibility: Architecture (Digital Media) students only
- Corequisite: ARCHDM 7009 Representing Real and Virtual Architecture
- Restriction: ARCHDM 7003 Architectural Design with Digital Media C
- Assessment: projects, digital journal

This course applies concepts of the nature of digital image-making to the design of a small building, exploring the accurate simulation and performance prediction of energy use, internal and external lighting, space sequences through animation, and effective representation. The course emphasises issues of sustainable and ecologically responsible design and how the use of digital media can promote and give confidence to this aim. The course typically results in a design project.

## ART HISTORY

## ARTH 5200

## Studies in European Paintings Connoisseurship

- 6 units - not offered in 2006
- 30 hours Art Gallery sessions, lectures, tutorials
- Eligibility: postgraduate Art History students

This course will look critically at the development of connoisseurship in Europe, concentrating on the ideas and techniques of analysis and classification adopted by Leon Battista Alberti, Giorgio Vasari, Roger de Piles, William Hogarth, Jonathan Richardson, Giovanni Morelli, Heinrich Wolfflin, Max J. Friedlander, Bernard Berenson, Alois Riegl and Richard Offner. Students will be encouraged to exercise their own eye on as many original works of art as possible from the collection of the Art Gallery of South Australia.

## ARTH 5201

## Studies in Australian Colonial Art

- 6 units - not offered in 2006
- 30 hours Art Gallery sessions, lecture, tutorials
- Eligibility: postgraduate Art History students

The course examines the arts of colonial Australia from 1788 to 1901. It draws on the extensive collection of colonial works in the Gallery's collection, paying particular attention to early paintings and works on paper by John Lewin, Thomas Bock, John Glover,

Eugene von Guerard, William Strutt, Alexander Schramm, S.T. Gill, and others. Some attention will also be paid to the decorative arts of colonial Australia, and to the early history of photography. The representation of Indigenous Australians by colonial artists will also be discussed, as well as issues such as the role and function of art for developing colonies.

## ARTH 5202

## Studies in Asian Art

- 6 units - not offered in 2006
- 30 hours Art Gallery sessions, lectures, tutorials
- Eligibility: postgraduate Art History students

This course surveys the history of religious art in Asia over the past two millennia. The course focus will shift each year according to the current exhibition and display program of the Art Gallery of South Australia to variously include the art of Buddhist, Hindu and Jain traditions. The evolution of aesthesis and iconography in India and its wider influence in the rest of Asia and the context of the philosophy and practice of these religions will be explored and discussed.

## ARTH 5203

## Studies in Australian Art

- 6 units - semester 2
- 30 hours Art Gallery sessions, lectures, tutorials
- Eligibility: postgraduate Art History students

The course focuses around the large collection of Australian art at the Art Gallery of South Australia. Discussion and analysis of the art will be in terms of the principal issues underpinning Australian art and recent re-readings of particular works. Topics to be explored include colonial art, later nineteenth-century nationalist and Federation art, the rise of modernism particularly among women artists, abstraction, minimalism, conceptualism, the emergence of Central and Western Desert painting and trends in contemporary Australian art.

## ARTH 5204

## Studies in European Art since the Renaissance

- 6 units - semester 1
- 30 hours Art Gallery sessions, lectures, tutorials
- Eligibility: postgraduate Art History students

In 'hands-on' sessions in the Art Gallery and in lectures, the course focuses on the fascinating history of European Art from the early Renaissance through to the post impressionist era concentrating on the Gallery's collection of paintings, drawings, prints, sculpture and decorative arts. This course looks at the High Renaissance, Baroque and Mannerist art, Neo-Classical and Romantic art,

Realist and Impressionist art and nineteenth century British art. The course also looks at recent theoretical approaches to Art History which affect the discourses of art.

## ARTH 5206

## Art Museum Internship

- 6 units - semester 1
- Eligibility: postgraduate Art History students
- Quota may apply
- Prerequisite: satisfactory completion of 3 ARTH courses

Interns will be exposed to a broad experience of the life of the Art Gallery of South Australia, or some other appropriate museum or organisation, working not only in the curatorial department but as far as possible in the areas of public programs, marketing and public relations, sponsorship and registration. The exact program will depend upon the time of year and the specific needs and commitments of the participating staff.

## ARTH 5207

## Curatorial Placement

- 6 units - semester 2
- Eligibility: postgraduate Art History students
- Quota may apply
- Prerequisite: satisfactory completion of three ARTH courses

Students will embark upon a minor writing, cataloguing, exhibition, display or other curatorial project to be proposed, developed and executed under the joint supervision of a nominated Gallery curator and the program coordinator. This project differs substantially from the internship in that it concentrates exclusively on curatorial and research work in an agreed area. Ideally, students working on this project would be able to participate in the preparation of a published exhibition or permanent collection catalogue.

## ARTH 5208

## Studies in Contemporary Art

- 6 units - semester 1
- 30 hours Art Gallery sessions, lectures, tutorials
- Eligibility: postgraduate Art History students

The course looks at contemporary art as 'cutting edge' art, how its origins are to be found in modernist notions of the avant garde and on recent national and international developments including installation, new media, performance art, the resilience of painting and the place of Indigenous art in the contemporary scene and differing genres of arts writing. The course will focus around contemporary work in the collection of the Art Gallery of South Australia.

## ARTH 5209

## Studies in Australian Indigenous Art

- 6 units - not offered in 2006
- 30 hours Art Gallery sessions, lectures, tutorials
- Eligibility: postgraduate Art History students

The course explores the vast diversity of historical and contemporary Indigenous art practice, with a focus on several painting traditions including bark painting from various parts of Arnhem Land and the Kimberley, Central and Western Desert dot painting, and watercolours from Hermannsburg in Central Australia. Other aspects covered include Indigenous decorated and woven objects and contemporary urban Aboriginal prints and photographs. The course draws heavily on the comprehensive Indigenous collection of the Art Gallery of South Australia. Key anthropological, ethnographic and philosophical issues arising from the collecting and display of Indigenous art and objects in museums and galleries are also discussed.

## ARTH 5210

## Studies in British Art

- 6 units - not offered in 2006
- 30 hours Art Gallery sessions, lectures, tutorials
- Eligibility: postgraduate Art History students

This course focuses on the art of England, Scotland, Wales, Ireland and other parts of the British Isles from the reign of Henry VIII to the reign of Queen Victoria, concentrating on the rise of British portraiture in the era of the Flemish expatriate artist Anthony van Dyck; the invention of the Conversation Piece; the adaptation in Britain of the Classical landscape tradition, particularly by Richard Wilson and his followers; and the evolution of the Victorian art world through the mid to late nineteenth century.

## ARTH 5211

## Studies in Decorative Art

- 6 units - not offered in 2006
- 30 hours Art Gallery sessions, lectures, tutorials
- Eligibility: postgraduate Art History students

This course will focus on selected developments in British and Australian decorative arts. The implications of the term 'decorative' will be considered as well as the distinctive position of the decorative arts in the history of the modern museum. The British component of the course will focus on objects in the collection of the Art Gallery of South Australia that relate to William Morris and the Arts \& Crafts Movement. The Australian component will cover all aspects of the decorative arts in Australia since European settlement

## ARTH 5212

## Studies in Japanese Art

- 6 units - not offered in 2006
- 30 hours Art Gallery sessions, lectures, tutorials
- Eligibility: postgraduate Art History students

The course encompasses the history of Japanese Art and a study of its distinctive culture and aesthetics. It focuses around works in the collection of the Art Gallery of South Australia, including major works of sculpture, screen painting, wood-block prints, ceramics and metalwork including Shinto and Buddhist sculptures, ukiyo-e prints by Hiroshige, Hokusai and others, sword mounts of the Samurai and ceramics by Shoji Hamada and his circle. Attention will also be focused on issues surrounding the intersection between Japanese and Western Art and trends in modern and contemporary Japanese art.

## ARTH 5213

## Studies in South East Asian Art

- 6 units - not offered in 2006
- 30 hours Art Gallery sessions, lectures, tutorials
- Eligibility: postgraduate Art History students

This course surveys the development of Southeast Asian aesthetics with a focus on the ways that ceramics and textiles have articulated the region's cultural and spiritual identity.The growth of Vietnamese, Thai, and Cambodian ceramic production will be explored as will the role of high-fired pottery documenting social history and cultural exchange in Southeast Asia. The study in textiles concentrates mainly on Indonesia and East Timor where textile artists have transformed designs imported into the archipelago from India and China into a rich indigenous art tradition. The course draws on the Gallery's rich collection and may also include a field trip to Southeast Asia.

## ARTH 5214

## Studies in Modern Art

- 6 units - semester 2
- 30 hours Art Gallery sessions, lectures, tutorials
- Eligibility: Postgraduate Art History students

This course focuses on the origins of modern art in Paris and London, the meaning of 'modern' art and on the main modern art movements of the twentieth century including dadaism and surrealism, cubism, expressionism, futurism, constructivism, abstraction, abstract expressionism and the moments of decline in modern art: minimalism and conceptualism. Attention will also focus on the shift from Paris to New York as the cultural centre and how modern art was taken up in Australia. Much of the course will be shaped around works in the collection of the Art Gallery of South Australia.

## ARTH 5520

## Research Project in Art History F/T

- 12 units - semester 1 or 2
- Eligibility: M.A.(Art History) students
- Assessment: dissertation/report up to 18000 words or equivalent

The dissertation/exhibition project must be up to 18000 words in length, or equivalent. It can be a thesis by research or a project. A project might take the form of working to a brief negotiated jointly with the program coordinator and the Gallery. For example, it might comprise the work required to mount an exhibition, prepare a catalogue, feature a particular part of the collection or research work in the Art Gallery's collection. Depending on the proposed area of interest, one or two supervisors may be allocated to supervise the dissertation (by thesis or project) and they may be from the University, the Gallery or both. There may be instances where an outside supervisor is co-opted.

## ARTH 5521A/B

## Research Project in Art History P/T

- 12 units - full year
- Eligibility: M.A. (Art History) students
- Assessment: dissertation/report up to 18000 words or equivalent

The dissertation/exhibition project must be up to 18000 words in length, or equivalent. It can be a thesis by research or a project. A project might take the form of working to a brief negotiated jointly with the program coordinator and the Gallery. For example, it might comprise the work required to mount an exhibition, prepare a catalogue, feature a particular part of the collection or research work in the Art Gallery's collection. Depending on the proposed area of interest, one or two supervisors may be allocated to supervise the dissertation (by thesis or project) and they may be from the University, the Gallery or both. There may be instances where an outside supervisor is co-opted.

## BIOMETRY

## BIOMET 7000WT

## Research Methodology and Experimentation

- 3 units - semester 2
- 3 lectures, 3 hour tutorial per week, or 9-5 Mon - Fri/ 2 weeks inclusive in mid year break
- Prerequisite: degree in Agricultural Science or Science
- Assumed Knowledge: first program in Biometry or Introductory Statistics
- Assessment: written assignment, final written exam

The Statistical Package GENSTAT 5 for Windows is introduced and utilised extensively throughout the course. Revision of basic regression and analysis of variance methodology. A selection of topics from the following: extension of regression (both linear and non linear); design and analysis of complicated multi-factor experiments; Latin squares; analysis of covariance; generalised linear models (including probit analysis and logistic regression); multiple comparisons.

As part of the course a selection of case studies will be discussed to illustrate the important steps involved during a research program (ie development of aims, setting of hypotheses, design of the experiment, collection of data, analysis and interpretation of results).

## COMMERCE

## COMMERCE 7005

## Principles of Finance

- 3 units - semester 1 or 2
- Assessment: exam, written assignments, case study analyses, group or individual projects as determined at first class

Risk and return are key concepts in investment. This module discusses the measurement of risk and return. The relationship between risk and return is examined through the various methods of valuation and asset pricing models. Capital budgeting techniques, cost of capital and issues of capital structure are also covered as these enable the student to assess the investment plans of companies.

## COMMERCE 7033

Quantitative Methods (M)

- 3 units - semester 1 or 2
- 3 hour seminar per week
- Assessment: assignments, exam as determined at first class

The course will examine quantitative analysis approaches essential for both academic and applied research with an emphasis on what procedures are most useful. Topics: revision of principles, characteristics of data and its collection, hypothesis testing with well behaved variables, financial econometrics, heteroscedasticity, autocorrelation, multi-collinearity, simultaneous equation (or system) solution, time series modelling and co-integration, logit and probit, non-linear regression, other approaches to developing models, hypothesis testing when variables are not well behaved.

## COMMERCE 7034

## Project Management (M)

- 3 units - semester 1 or 2
- 3 hour seminar per week
- Assumed Knowledge: at least 2 courses at specialisation level
- Assessment: assignments, exam as determined at first class

The object of the course is to help students understand the development and management of the phases of limited-life commercial projects (such as staging of events, campaigns and emergency operations) using a multi-disciplinary project team approach. Topics: project management life-cycle, project team's role, project scope planning, planning and sequencing project activities, project cost baseline creation, learning curve cost estimates, procurement management assessment, budgeting and monitoring, project funding requirements, venture capital, financial risk assessment, evaluation of markets and targeting opportunities, promotion strategies and public relations tools.

## COMMERCE 7035

## Contemporary Issues in Commerce (M)

- 3 units - not offered in 2006
- 3 hour seminar per week
- Assumed Knowledge: at least 2 courses at specialisation level
- Assessment: assignments as determined at first class

The course critically evaluates the contribution of a stream of study to the broader discipline of accounting, finance or marketing. Topics: choosing a contemporary research topic or issue, searching the focal literature, and critically reviewing a selected body of literature by analysing and comparing the articles' objectives, motivation, theory development, choice of methods, adequacy of evidence and arguments in supporting conclusions.

## COMMERCE 7036

## Knowledge Management \& Measurement (M)

- 3 units - semester 1
- 3 hour seminar per week
- Assumed Knowledge: at least 2 courses at specialisation level
- Assessment: assignments, exam as determined at first class

The course explores the emerging art and science of managing knowledge and measuring intellectual capital in modern organisations. Topics: the parameters of knowledge management, the knowledge-based economy, paradigms and principles for knowledge management, implementation and electronic tools for knowledge management, knowledge measurement and valuation.

## COMMERCE 7037

## Research Methodology in Commerce (M)

- 3 units - semester 1
- 3 hour seminar per week
- Assumed Knowledge: at least 2 courses at specialisation level
- Assessment: assignments, exam as determined at first class

The course introduces a range of concepts, methods and skills which are used in scholarly and professional research in commerce. Topics: research and theory, method and methodology, deductive empirical research, inductive qualitative research, variables and their measurement, field surveys, experimental design, case studies and interviews, secondary data content analysis, action research, literature reviews, ethics in research.

## COMMERCE 7041

## Business Communications (M)

- 3 units - semester 1 or 2
- 3 hours seminar per week
- Assessment: assignments, exam as determined at first class


## COMMERCIAL LAW

## COMMLAW 7011

## Corporate Law (M)

- 3 units - semester 1 or 2
- 3 hour seminar per week
- Assumed Knowledge: ACCTING 7012 Commercial Law and Accounting Regulation (M)
- Assessment: assignments, exam as determined at first class

The course will help students understand the laws relating to business structures including sole traders, partnerships, joint ventures and trusts. Topics: constitutional background and history of companies legislation, the concept of corporate personality, distinguishing features of different types of companies, authority of agents to bind the company, pre-registration contracts, company capital, management of the company, company financial reporting, auditors and directors duties, members' rights, voluntary administration, receivers, and winding up of companies.

## COMMLAW 7013

## Income Taxation (M)

- 3 units - semester 1
- 3 hour seminar per week
- Assumed Knowledge: COMMLAW 7011 Corporate Law (M)
- Assessment: assignments, exam as determined at first class

The objective of the course is to help students understand the fundamental concepts of income tax law. Topics: jurisdiction to tax, assessable income, including capital gains and losses, nonassessable income, deductions, tax accounting, tax entities, antiavoidance, and tax administration.

## COMMLAW 7016

## Business Taxation \& GST (M)

- 3 units - semester 2
- 3 hour seminar per week
- Assumed Knowledge: COMMLAW 7013 Income Taxation (M)
- Assessment: assignments, exam as determined at first class

The objective of the course is to help students understand the law and application of key types of business tax and the goods and services tax. Topics: Introduction to Business Taxes, including review of taxation of business income and review of business tax reforms; Business Tax Entity Issues, including taxation of entity distributions, treatment of losses and entity consolidations; Capital Gains Tax Special Topics, including business roll-over relief and Small Business concessions; Goods and Services Tax and business activity statements; Remuneration Taxes, including fringe benefits tax and superannuation guarantee charge; State Business Taxes, including payroll tax and stamp duties; Tax Planning, including issues on acquisition and disposal of a business, remuneration planning and retirement planning.

## COMPUTER SCIENCE

## COMP SCI 7004

## Concurrent and Distributed Systems

- 3 units - semester 2
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Restriction: cannot be counted with COMP SCI 7004 Advanced Operating Systems A
- Assessment: exam and/or assignments

The aim of the course is to introduce the concepts, theory and formal notations, and tools which are necessary to understand, analyse and design concurrent and distributed systems. Firstly, the model checking approach is introduced where an automaton model of the system is developed and properties to be checked are specified in temporal logic. Secondly, the formal theory of Communicating Sequential Processes (CSP) is presented and used as a descriptive and reasoning tool. Concepts, such as behaviour, complete and partial specifications, design, design refinement, safety and liveness properties, as well as proof of correctness are then defined in a rigorous manner.

Several case studies, such as communication protocols, message passing networks, and distributed databases, will be used to illustrate the concepts covered in the course. A set of simulation, analysis, and formal verification tools, the model-checking tool SPIN, the CSP based tools ARC and FDR are introduced and applied in practice. These tools are widely used in the concurrent, safety critical, protocol system, and telecommunications domains.

## COMP SCI 7006

## Programming Techniques

- 3 units - semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div.1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures and Algorithms
- Restriction: cannot be counted with 1006 Programming and Data Structures B
- Assessment: written exam, compulsory projects

Program development: methods of specification, design, implementations, testing and debugging, case studies, design patterns, Graphs: construction, traversal, topological sorting, applications. Sorting and searching: internal and external algorithms, correctness and complexity analysis.

## COMP SCI 7009

## Modern Heuristic Methods

- 3 units - not offered in 2006
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Restriction: cannot be counted with COMP SCI 7009 Advanced Artificial Intelligence B
- Assessment: exam and/or assignments

The course will cover problem-solving methods, in particular those arising out of evolutionary computing of value in solving ubiquitous optimisation problems (e.g. travelling salesman type problems).

Al Search methods. Hill-climbing. Simulated Annealing \& Tabu search. Evolution Programming. Handling constrained problems. Parameter control in Evolution Methods. Genetic Algorithms, mutation, crossover. Aspects of Neural Networks and Fuzzy Systems.

## COMP SCI 7011

## Master Project B

- 3 units - semester 1 or 2
- Project based
- Assessment: survey of research material, thesis. seminar, project, programming, conceptual understanding

A student undertaking the project component of M . Comp.Sc. will enrol in 12-18 units worth of individual master project courses over 2 consecutive semesters. The number of units reflects the scope of the project. The project will be assessed as a single entity - the student receiving this mark for all the master project courses in which they are enrolled. The project will consist of an investigation in an area of computer science. Projects are supervised by one or more members of the lecturing staff, sometimes in association with one of the School's research groups.

## COMP SCI 7013

## Master Project E

- 3 units - semester 1 or 2
- Project based
- Assessment: survey of research material, thesis. seminar, project, programming, conceptual understanding

A student undertaking the project component of M.Comp.Sc. will enrol in 12-18 units worth of individual master project courses over 2 consecutive semesters. The number of units reflects the scope of the project. The project will be assessed as a single entity - the student receiving this mark for all the master project courses in which they are enrolled. The project will consist of an investigation in an area of computer science. Projects are supervised by one or more members of the lecturing staff, sometimes in association with one of the School's research groups.

## COMP SCI 7015

## Software Engineering and Project

- 3 units - semester 2
- 2 lectures, 4 hours practical work per week, weekly project meeting
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 3002 Programming Techniques, COMP SCI 2004 Data Structures and Algorithms
- Assessment: written exam, compulsory group project

This course in software engineering provides an introduction to the production of high quality software solutions to large tasks. Among the topics covered in this course are the following: models of the software life-cycle, requirements analysis and specification, program design techniques and paradigms, software specification techniques, configuration management and version control, quality assurance, integration and testing, project management, risk analysis, case study of ethical considerations in Software Engineering.

## COMP SCI 7019

## Master Project C

- 3 units - semester 1 or 2
- Project based
- Assessment: survey of research material, thesis. seminar, project, programming, conceptual understanding

A student undertaking the project component of M.Comp.Sc. will enrol in 12-18 units worth of individual master project courses over 2 consecutive semesters. The number of units reflects the scope of the project. The project will be assessed as a single entity - the student receiving this mark for all the master project courses in which they are enrolled. The project will consist of an investigation in an area of computer science. Projects are supervised by one or more members of the lecturing staff, sometimes in association with one of the School's research groups.

## COMP SCI 7022

## Computer Vision

- 3 units - semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Assumed Knowledge: first year mathematics
- Restriction: cannot be counted with COMP SCI 7022 Advanced Artificial Intelligence A
- Assessment: exam and/or assignments

Over the last 30 years, researchers in artificial intelligence have endeavoured to develop computers with the capacity to "see" the world around them. This course aims to convey the nature of some of the fundamental problems in vision, and to explain a variety of techniques used to overcome them. Emphasis is placed on aspects of 3-D vision and the gaining of practical experience in imageprocessing via TV-camera facilities. Various vision problems are considered, including: the detection of edges in images, and the accumulation of edge data to form lines; the use of a stereo image pair to derive 3D surface information; the exploitation of image shading (or intensity variation) to obtain surface normal data; motion detection in video images; forming image mosaics; tracking objects in video; video surveillance techniques; Marr's theory as a framework for visual information processing; object recognition.

Several assignments enable the student to gain practical experience in aspects of the above.

## COMP SCI 7023

## Software Process Improvement

- 3 units - not offered in 2006
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Restriction: not available to Honours students. Cannot be counted with COMP SCI 7023 Advanced Software Engineering C
- Assessment: exam and/or assignments

The course introduces students to elements of the Software Engineering Institute's Personal Software Process, PSP. The PSP is introduced in increasing levels of sophistication with the essential elements illustrated by programming assignments and report writing.

## COMP SCI 7025

## Master Project D

- 3 units - semester 1 or 2
- Project based
- Assessment: survey of research material, thesis. seminar, project, programming, conceptual understanding

A student undertaking the project component of M.Comp.Sc. will enrol in 12-18 units worth of individual master project courses over 2 consecutive semesters. The number of units reflects the scope of the project. The project will be assessed as a single entity - the student receiving this mark for all the master project courses in which they are enrolled. The project will consist of an investigation in an area of computer science. Projects are supervised by one or more members of the lecturing staff, sometimes in association with one of the School's research groups.

## COMP SCI 7026

## Computer Architecture

- 3 units - semester 1
- 2 lectures, 4 hours practical work per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2000 Computer Systems and COMP SCI 6005 Data Structures and Algorithms
- Assessment: written exam, compulsory projects

Fundamentals of computer design; quantifying cost and performance; instruction set architecture; program behaviour and measurement of instruction set use; processor datapaths and control; pipelining, handling pipeline hazards; memory hierarchies and performance; $I / O$ devices, controllers and drivers; I/O and system performance.

## COMP SCI 7031

## Advanced Programming Paradigms

- 3 units - semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures and Algorithms
- Assessment: written exam, compulsory projects

A selection of topics from the following: Fundamental models of computation, illustrated by the lambda calculus. Different approaches to programming: functional and logic paradigms. Fundamental concepts of programming languages, including abstraction, binding, parameter passing, scope, control abstractions. Programming models expressed via Scheme: substitution model; map/reduce programming; environment model; object oriented model; a compositional programming model. Introduction to parallel computing: data parallelism, Java threads, and relationship to distributed computing. Examples in application: map/reduce programming in Google; flow-oriented programming for composition of web-services. Ontologies in the semantic web.

## COMP SCI 7036

## Software Engineering in Industry

- 3 units - semester 2
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Assumed Knowledge: COMP SCI 3006 Software Engineering and Project or equivalent
- Restriction: Advanced Software Engineering D
- Assessment: exam and/or assignments

In this course software engineering practitioners will lecture on how software engineering methodologies are implemented in their industry. Lectures will be accompanied by site visits where students will gain a better understanding of the sort of products produced and the challenges involved in producing these products. There will also be an opportunity to talk with members of actual
development teams who are responsible for particular software engineering related roles.

Lecturers have been chosen to represent a diverse range of industries, e.g.: Defence infrastructure and deployable systems, Computer games, Telecommunications, Embedded Systems, Commercial applications.

## COMP SCI 7037

## Advanced Programming Language Concepts

- 3 units - not offered in 2006
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Restriction: cannot be counted with COMP SCI 7037 Advanced Programming Languages A
- Assessment: exam and/or assignments

The course attempts to bring an overview of the way new concepts have influenced programming language design and how in turn, the application of new languages has influenced the task of program design. The course pays particular attention to ways in which higher-level concepts such as concurrency, distribution, inter-process communications and synchronisation have evolved and been introduced into programming languages.

## COMP SCI 7039

## Computer Networks and Applications

- 3 units - semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div I) or COMP SCI 7080 Computer Science Concepts or pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assessment: written exam, compulsory projects

Introduction to networks and digital communications with a focus on Internet protocols: Network layer model, Internet application protocols, UDP, TCP (reliable transport, congestion and flow control), IP (routing, addressing), Data Link layer operation (Ethernet, 802.11), physical transmission media, selected current topics such as: security, multimedia protocols, Quality of Service, mobility, emerging protocols (IPv6).

## COMP SCI 7041

## Compiler Construction and Project

- 3 units - not offered in 2006
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science I (Pass Div 1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2000 Computer Systems, COMP SCI 2004 Data Structures and Algorithms and COMP SCI 3002 Programming Techniques
- Assessment: written exam, compulsory project

The structure of compilers: lexical analysis, syntax analysis (topdown and bottom-up techniques), the handling of context-sensitive and context-free errors, type checking and code generation. BNF languages and grammars. This course is closely coupled with the writing of a large, compulsory programming project

## COMP SCI 7044

## Computer System Security

- 3 units - semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Restriction: cannot be counted with COMP SCI 7044 Advanced Operating Systems B
- Assessment: exam and/or assignments

This course provides an introduction to computer system security at all levels. The course includes: computer security models, hardware systems, operating system mechanisms and policy, network security, and application security. The course will also cover some of the current security threats. Introduction to Computer Security: Threats, vulnerabilities, controls; risk; cost; method, opportunity, motive; technical, administrative, physical controls; prevention, detection, deterrence. Basic cryptography terms, symmetric and asymmetric cyphers; Cryptographic protocols: digital signatures, key exchange, certificates, cryptographic hash functions. Security Models : Introduction to Military Security; Bell La Padula models, BIPA. Security in programs: Flaws - Malicious code: viruses, Trojan horses, worms; Program flaws: buffer overflows, time-of-check to time-of-use flaws, incomplete mediation. Defenses - Software development controls, Testing techniques. Security in Operating Systems : Memory, time, file, object protection requirements and techniques; Protection in contemporary operating systems. Identification and authentication : Identification goals; Authentication requirements; human authentication, machine authentication, authentication technologies. Trusted operating systems : Assurance; trust; Design principles; Evaluation criteria; Evaluation process. Network security: Threats - Network technology; eavesdropping, spoofing, modification, denial of service attacks. Controls - architectural controls ; cryptographic controls; technological controls; administrative and physical controls; overlapping controls. Technologies - Firewalls; Intrusion detection systems; Monitoring systems; Virtual private networking; Remote
authentication systems. Management of security: Security policies; Risk analysis; Physical threats and controls.

## COMP SCI 7045

## Distributed High Performance Computing

- 3 units - semester 2
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Assumed Knowledge: at least one of C, Fortran or Java, and code presented in any of these languages; Advanced Parallel Programming, Distributed Systems
- Restriction: cannot be counted with COMP SCI 7045 Advanced Operating Systems D
- Assessment: exam and/or assignments

The course gives an overview of current technologies for programming and using parallel and distributed high-performance computing systems. The course provides material in parallel computing, cluster computing, distributed computing and grid computing technologies, including an introduction to web services and grid services. Some background is given on architectures for high performance computing, but the emphasis is on what the software developer needs to know to exploit high performance distributed computing architectures. The course has a strongly applied outlook.

## COMP SCI 7049A/B

## Software Engineering Project

- 9 units - full year
- 175 hours practical work
- Assessment: software developed, written report

To give students experience in the development of a large piece of software. The project involves the students solving a problem. They are expected to show independence, initiative and research skills. Writing skills are also examined through the writing of a detailed report. Projects are determined in consultation with a supervisor. This course is equivalent to the project that is undertaken as part of the honours degree in Computer Science.

## COMP SCI 7050

## Parallel Computation

- 3 units - not offered in 2006
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Assessment: exam and/or assignments

We will briefly examine some common parallel machine architectures, with emphasis on the CM-5. We will look briefly at
fundamental primitives for explicit expression of parallelism, and languages which use them. We also consider data parallel programming, using CM-5 programs (probably in FORTRAN) as examples. We will concentrate on techniques for implicit expression of parallelism, using the dataflow model of computation and functional languages such as SISAL and Id, and consider the advantages (such as a higher level of abstraction and easy analysis of data dependencies) and disadvantages (such as necessity for copy avoidance) of such languages. Other aspects of parallel programming, such as performance measurement, visualisation and resource management, will be considered. Type inference in functional languages will also be studied.

## COMP SCI 7053

## Advanced Operating Systems

- 3 units - semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Assumed Knowledge: computer networks, program design, basic knowledge of Operating Systems
- Restriction: cannot be counted with COMP SCI 7053 Advanced Operating Systems C
- Assessment: exam and/or assignments

The course breaks down into 4 major sections. Part 1 describes the provision and implementation of concurrent actions through operating systems processes, threads and language systems. The course then explores how a group of related actions can work in isolation from or co-operation with other actions. A study of transactions, persistence and recovery is investigated completing with detailed case studies of a number of operating systems.

## COMP SCI 7054

## High Integrity Software Engineering

- 3 units - semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Assumed Knowledge: COMP SCI 3006 Software Engineering and Project, or equivalent
- Restriction: cannot be counted with COMP SCI 7054 Advanced Software Engineering A
- Assessment: exam and/or assignments

This course introduces students to high-integrity software engineering, with a focus on the development of safety-critical software.Lectures will cover hazard analysis, risk analysis, safetycritical software, formal methods, safety cases and safety management. Students will apply a variety of practical techniques in assignments.

## COMP SCI 7055

## Numerical Analysis

- 3 units - not offered in 2006
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2003 Numerical Methods
- Assessment: written exam, compulsory projects

This course deals with practical numerical computing techniques for solving problems that typically arise in computer applications, science and engineering. The emphasis is on practical methods and the issues that arise from them with reference to the principles for the engineering of numerical software. Students will learn to use the package Matlab which is used extensively in the course. The symbolic package Maple may also be used, but to a lesser extent. Topics include: condition and stability, analysis of algorithms, solution of linear systems of equations, the singular value decomposition in least squares data fitting and image compression, solution of systems of non-linear equations. Students will be required to undertake a programming project which develops a suite of methods applicable to the numerical solution of scientific problems.

## COMP SCI 7056

## Master Project A

- 3 units - semester 1 or 2
- Project based
- Assessment: survey of research material, thesis. seminar, project, programming, conceptual understanding

A student undertaking the project component of M.Comp.Sc. will enrol in 12-18 units worth of individual master project courses over 2 consecutive semesters. The number of units reflects the scope of the project. The project will be assessed as a single entity - the student receiving this mark for all the master project courses in which they are enrolled. The project will consist of an investigation in an area of computer science. Projects are supervised by one or more members of the lecturing staff, sometimes in association with one of the School's research groups.

## COMP SCI 7059

## Artificial Intelligence

- 3 units - semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures and Algorithms
- Assessment: written exam, compulsory projects

Al methodology and fundamentals: philosophy of Al, representation techniques, goal reduction. Search techniques: hill-climbing, beam, best-first, $A^{*}$, game playing techniques with minimax and alphabeta pruning. Learning: Winston's methods, neural networks. Rule based systems; forward and backward chaining methods. AI systems: ANALOGY, MYCIN, GPS, Xcon. Fuzzy systems. Computer vision, Evolutionary computation: genetic algorithms, evolution strategies, genetic programming.

## COMP SCI 7060

## Master Project $F$

- 3 units - semester 1 or 2
- Project based
- Assessment: survey of research material, thesis. seminar, project, programming, conceptual understanding

A student undertaking the project component of M.Comp.Sc. will enrol in 5 or 6 individual master project subjects over 2 consecutive semesters. The number of subjects reflects the scope of the project. The project will be assessed as a single entity - the student receiving this mark for all the master project subjects they are enrolled in. The project will consist of an investigation in an area of computer science. Projects are supervised by one or more members of the lecturing staff, sometimes in association with one of the School's research groups.

## COMP SCI 7064

## Operating Systems

- 3 units - semester 2
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCl 2000 Computer Systems and COMP SCI 2004 Data Structures and Algorithms
- Assessment: written exam, compulsory projects

OS purposes: resource management and the extended virtual computer; historical development. Processes: critical sections and mutual exclusion, semaphores, monitors, classical problems,
deadlock; process scheduling. Input and Output: hardware and software control. Memory management: multi-programming; swapping; virtual memory, paging and symbolic segmentation; File System: operations, implementation, performance. Protection mechanisms: protection domains, access lists, capability systems, principle of minimum privilege. Distributed systems: communication, RPC, synchronisation, distributed file systems, authentication.

## COMP SCI 7065A/B

## Software Development Studio

- 6 units - full year
- Project based
- Prerequisite: COMP SCI 7015 Software Engineering and Project
- Assessment: performance \& quality of delivered materials (software \& documentation) in project determined by academic staff, team peers $\&$ employer

To give the student experience in the management of an industrial project on the premises of an employer (either the student's employer, or a company which sponsors the student). It is the industry based equivalent of the course Software Management Project. The Studio provides an opportunity for students to apply the knowledge and skills gained in other programs as they synthesise a solution to a significant, realistic, and practical problem. Students work in teams to analyse the problem, plan a software development project, and implement a solution. After delivering a product, students evaluate the efficacy of their solution as used by customers. The work for the Studio is typically done for an outside customer who might well be the student's employer. The Studio teams work closely with staff (academic or industry) mentors during all phases of the project and periodically make presentations about the technical work and process issues. These presentations are attended by customers, academic staff, industry participants and other experts. Students are encouraged to gain knowledge about how they solve software problems through the application of 'reflective practice' in which students not only do the work, but assist in managing the process and analyse how it was done.

## COMP SCI 7074

## Software Management Project

- 3 units - semester 2
- Project based
- Prerequisite: COMPSCI 7015 Software Engineering and Project
- Assessment: documentation submitted, peer review from undergraduate students in team

To give the students experience with managing the software process and a group of people building a software product. Students are required to go through the process of preparing a bid for a contract and developing appropriate documentation which may be required by the management of the company or through
legal requirements, as well as documentation to accompany the delivered software. Cost accounting techniques are employed to track the development of the software and to identify the real cost of developing the software.

## COMP SCI 7075

## Knowledge Representation

- 3 units - not offered in 2006
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science B (Pass Div.1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures and Algorithms
- Assessment: written exam, compulsory projects

Intelligent Agents: agents that reason logically, knowledge acquisition, agents that use statistics, Bayesian networks, fuzzy logic; Expert Systems: rule-based systems, conflict resolution, explanations; Knowledge Representation: frames, predicate logic, inheritance, semantic nets, belief maintenance.

## COMP SCI 7076

## Distributed Systems

- 3 units - semester 2
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2000 Computer Systems, COMP SCI 2004 Data Structures \& Algorithms, COMP SCI 3001 Computer Networks \& Applications; exposure to SQL programming as in COMP SCI 2002 Database \& Information Systems
- Restriction: cannot be counted with COMP SCI 7076 Open Systems and Client/Server Computing
- Assessment: written exam, compulsory projects

A selection of topics from the following: the challenges faced in constructing client/server software: partial system failures, multiple address spaces, absence of a single clock, latency of communication, heterogeneity, absence of a trusted operating system, system management, binding and naming. Techniques for meeting these challenges: RPC and middleware, naming and directory services, distributed transaction processing, 'thin' clients, data replication, cryptographic security, mobile code. Introduction to Java RMI.

## COMP SCI 7077

## System Modelling and Simulation

- 3 units - semester 1
- 2 lectures, 1 tutorial, 4 hours practical work per week
- Available for Non-Award Study
- Assumed Knowledge: basic level of proficiency in some programming language \& Engineering mathematics
- Assessment: exam $\mathcal{F} /$ or assignments

This course concerns techniques for the modelling and simulation of complex systems using a variety of methods and software tools.Students are introduced to the packages Matlab and Simulink and are taken through a study of the techniques used in these and other sophisticated modelling packages to solve common engineering problems.

The Matlab programming language is used extensively and students learn to program their own solutions for these problems. In addition to studying the equations for these models and their solutions, students study the stability, accuracy and reliability of the solution methods.

## COMP SCI 7080

## Computer Science Concepts

- 3 units - summer semester or winter semester
- 8 lectures, 6 hours practical work per week
- Eligibility: approved students only
- Available for Non-Award Study
- Assessment: written exam, compulsory projects

Programming in Java: variables, control structures, methods, classes, input/output; object orientation, interfaces, inheritance; introduction to graphical user interfaces. Introduction to computer systems, system software and basic Unix.

## COMP SCI 7081

## Computer Systems

- 3 units - semester 1 or 2
- 2 lectures, 4 hours practical work per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: Mathematics as in MATHS 1011/1012 Mathematics IA/IB, or MATHS 1000A/B Mathematics IM or MATHS 1008 Mathematics for Information Technology I
- Assessment: written exam, compulsory projects

Information storage representation, Memory organisation and hierarchy, Processor fundamentals, assembler programming, assembler operation, subroutine calling mechanisms, linking/loading, Input-output and device controllers, requirements for supporting an operating system and device drivers.

## COMP SCI 7082

## Data Structures and Algorithms

- 3 units - semester 1 or 2
- 2 lectures, 4 hours practical work per week; 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div I) or Pass in COMP SCI 7080 Computer Science Concepts; or Pass in both COMP SCI 1000 Engineering Programming IE and ELEC ENG 1004 Logic Design
- Assumed Knowledge: Mathematics such as in MATHS 1011/1012 Mathematics IA/B, MATHS 1000A/B Mathematics IM or MATHS 1008 Mathematics for Information Technology I
- Assessment: written exam, compulsory projects

Program development techniques including basic ideas of correctness; representation of lists, stacks, queues, sets, trees and hash tables. Notions of complexity and analysis; notion of abstract data type; sets and sequences as examples; searching and information retrieval illustrated with a 'table' abstract data type; various representations of a 'table' abstract data type; recursion.

## COMP SCI 7083

## Database and Information Systems

- 3 units - semester 1
- 2 lectures, 4 hours practical work per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 7080 Computer Science Concepts; or Pass in both COMP SCI 1000 Engineering Programming IE and ELEC ENG 1004 Logic Design or, for B.Inf.Sc. students only, 1073 Programming \& Applications 1
- Assumed Knowledge: Mathematics as in MATHS 1011/1012 Mathematics IA/B, MATHS 1000A/B Mathematics IM or MATHS 1008 Mathematics for Information Technology I
- Restriction: cannot be counted with previously offered Databases and Information Systems
- Assessment: written exam, compulsory projects

Characteristics of secondary storage media, Database algorithms for projection, selection, join, union, intersection, difference updating and grouping illustrated in Cobol. The use of SOL to create query databases. Implementation issues. Integrity and security of data, professional practice.

## COMP SCI 7084

## Introduction to Software Engineering

- 3 units - semester 2
- 2 lectures, 4 hours practical work per week; 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div I); or Pass in COMP SCI 7080 Computer Science Concepts; or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures and Algorithms; knowledge of Mathematics as in MATHS 1011/1012 Mathematics IA/IB or MATHS 1000A/B Mathematics IM or MATHS 1008 Mathematics for Information Technology I.
- Assessment: written exam, compulsory projects

Design: software design, UML notation, static models - identifying classes and associations; dynamic models - identifying states, events, transitions, use cases, mapping designs into code. Specification: the scope, role and styles of software specification. Testing: modes of testing, organising test suites. Human issues: managing object-oriented projects, ethics, professional practice.

## COMP SCI 7085

## Numerical Methods

- 3 units - semester 1
- 2 lectures, 4 hours practical work per week; 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div I), or 7780 Computational Methods I (Pass Div I), or Pass in COMP SCI 7080 Computer Science Concepts; or Pass in both COMP SCI 1000 Engineering Programming IE and ELEC ENG 1004 Logic Design
- Assumed Knowledge: MATHS 1011/1012 Mathematics IA/IB or MATHS 1000A/B Mathematics IM
- Assessment: written exam, compulsory projects

Floating point numbers; representation, subtractive cancellation, machine epsilon. Solution of non-linear equations by fixed point iteration methods. Interpolation and least squares, approximation of functions by polynomial and spline functions. Methods of numerical integration: simple and composite rules. Numerical solution of differential equations.

## COMP SCI 7088

## Systems Programming in $\mathbf{C}$ and $\mathrm{C}++$

[^2]- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div I) or Pass in COMP SCI 7080 Computer Science Concepts; or Pass in both COMP SCI 1000 Engineering Programming IE and ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures and Algorithms
- Assessment: written exam, compulsory projects

Introduction to C; syntax of functions and basic structure, keywords, expressions. Variables; scoping and lifetime, structures, arrays and pointers. Run time stack; function invocation, parameter passing, passing arrays. Memory; segmentation, dynamic allocation, leaks and buffer over-runs. Compilation process; preprocessor, compiling object code, static and dynamic linking. File I/O; streams, reading and writing files. UNIX tools; design philosophy, combining programs using pipes and I/O redirection. Profiling tools, binary tools, debugging. Basic shell scripting. Build tools. Compiler flags.

C++; class syntax, $\mathrm{C}++$ object model, inheritance, virtual and pure virtual functions. Copy and assignment semantics and their consequences. Overloading operators. I/O using the $\mathrm{C}++$ STL. Templates; syntax, use with the STL, default types, run time performance.

## COMP SCI 7089

## Event Driven Computing

- 3 units - semester 2
- 2 lectures, 4 hours practical work per week, 1 tutorial per 3 weeks
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures and Algorithms, COMP SCI 2006 Introduction to Software Engineering
- Assessment: written exam, compulsory projects

Event driven paradigm: Finite State Automata, their behaviour, synchronisation, correspondence with regular expressions.
Manifestation as Statecharts, Petri Nets, handling concurrency, differences. Environments and their expected behaviour, state space coverage and relation to testing. Examples of embedded systems. Building Graphical User Interfaces: Model-View-Controller paradigm. Design Patterns for managing complexity. Building GUls in Java with the Swing library. Contrast with other GUI toolkits. Ease of use and HCl issues.

Practical project to cover both the use of FSA for control logic and for GUI design.

## COMP SCI 7090

## Computer Graphics

- 3 units - semester 2
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: PURE MTH 2000 Discrete Mathematics II or MATHS 1012 Mathematics IB, COMP SCI 2005 Systems Programming in C and $\mathrm{C}++$
- Restriction: cannot be counted with COMP SCI 7016 Advanced Artificial Intelligence C
- Assessment: written exam, compulsory projects

Light and the human visual system. Colour. Images, quantisation and sampling. Image manipulations. Raster graphics. Coordinate systems and transformations. The viewing frustum. The graphics pipeline and toolkits. Clipping and culling. Visibility. Lighting and shadows. Transparency and blending. Texture mapping. Local shading models. Environment mapping techniques. Multi-pass rendering. Level of detail. Raytracing. Animation. Particles. Implementation Efficiency.

## COMP SCI 7091

## Commercialising IT Research

- 3 units - semester 1
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Restriction: not available to Honours students
- Assessment: exam and/or assignments

This course covers the process of transforming IT research into commercial products for the marketplace. Topics include: Protection of intellectual property (IP) - patents, trade secrets, copyrights. Creation of business plans for IT companies and products. Choosing a company structure, starting up, and avoiding early pitfalls. Understanding business ethics. Building out a management team and board. Raising capital - angel investors, venture capital, debt financing. Marketing - branding, positioning, media outlets, analysts. Sales - IP licensing, support infrastructure, joint ventures, partnerships. Differences between US and Australian commercialisation environments.

## COMP SCI 7092

## Mobile and Wireless Networks

- 3 units - semester 2
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Assumed Knowledge: Internet protocols, architecture and basic network performance analysis - equivalent to that taught in Computer Networks and Applications
- Assessment: exam and/or assignments

Mobile \& wireless networks - mobile IP, mobile agents, ad hoc networks (discovering routes, fairness), problems with existing protocols (bandwidth-delay product affect on performance, TCP ACK-based congestion control in lossy wireless networks, need for power aware protocols), architectures for wireless mobility - 4G networks, Wi-Fi, Wi-Max. Network security in IP networks, IPSec, secure transactions (SET, e-commerce), anonymity and authentication (zero knowledge proof systems, binding, X. 509 and CA's), wireless \& mobile security - WEP, 802.11 wireless vulnerabilities.

## COMP SCI 7093

## Evolutionary Computation

- 3 units - semester 2
- 2 lectures, 4 hours practical work per week
- Available for Non-Award Study
- Assumed Knowledge: Al, data structures \& algorithms
- Assessment: exam and/or assignments

History of evolutionary computation; major areas: genetic algorithms, evolution strategies, evolution programming, genetic programming, classifier systems; constraint handling; multiobjective cases; dynamic environments; parallel implementations; coevolutionary systems; parameter control; hybrid approaches; commercial applications.

## CORPORATE FINANCE

## CORPFIN 7019

## Portfolio Theory \& Management (M)

- 3 units - semester 1 or 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: COMMERCE 7005 Principles of Finance
- Assessment: assignments, exam as determined at first class

This course identifies investments that are available and those mandated in the context of managed funds, and to apply CAPM and APT theories to the pricing of risky assets. Topics: simple asset
allocation techniques, hedging strategies using derivative securities, the theory of bond pricing, techniques in fixed interest portfolio management, international portfolio management, and financial planning.

## CORPFIN 7020

Options Futures \& Risk Management (M)

- 3 units - semester 1 or 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: COMMERCE 7005 Principles of Finance
- Assessment: assignments, exam as determined at first class

The course examines futures and options markets and the different ways they are used. Topics: simple market relationships for no arbitrage opportunities, dealing strategies and their applications to hedging and risk management, the binomial distribution and Black and Scholes approach to pricing of standard options, stock indices, currencies, futures markets and options, other derivatives, and corporate hedging practices.

## CORPFIN 7021

## Corporate Investment \& Strategy (M)

- 3 units - semester 1
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ACCTING 7000 Accounting and Decision Making (M) and COMMERCE 7005 Principles of Finance
- Assessment: assignments, tests, exam as determined at first class

This course examines techniques and issues in corporate finance with a focus on corporate investment decisions. Topics include stock valuation using free cash flow technique, valuation of growth opportunities, determining sustainable growth rates, estimation of beta using online data, techniques for evaluating international investment proposals, application of option pricing models in a corporate setting, and evaluation of techniques for measuring financial performance.

## CORPFIN 7022

## Corporate Finance Theory (M)

- 3 units - semester 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ACCTING 7000 Accounting and Decision Making (M) and COMMERCE 7005 Principles of Finance
- Assessment: assignments, tests, exam as determined at first class

The objective of the course is to gain an appreciation of the theoretical controversies surrounding corporate finance policies, leading to formulation of financing strategies. Topics: competing capital structure theories including financial distress and agency
costs, dividend policy and taxation, IPOs in both debt and equity markets, motives for convertibles and warrants, valuing real options, rationales for corporate diversification including internal capital markets and agency theory.

## CORPFIN 7023

## Financial Modelling Techniques (M)

- 3 units - semester 2
- 3 lectures per week, some tutorials
- Assumed Knowledge: Excel spreadsheets; finance such as may be obtained from FINANCE 1000 International Financial Institutions and Markets I
- Assessment: exam, assignments

The course deals with discrete time financial modelling of various financial assets, interest rates, exchange rates. It will deal with the hedging and valuation of financial products (derivative products), the modelling of yield curves and interest rate management. The emphasis will be on practical modelling, real world applications, conforming with market models used in the financial industry at the current time. Binomial lattice type models, with implementation of spreadsheets, Ho and Lee type term structure models for interest rates and their application to interest rate risk management.

## CORPFIN 7039

## Equity Valuation \& Analysis (M)

- 3 units - semester 1 or 2
- 3 hour seminar per week
- Assumed Knowledge: ACCTING 7000 Accounting and Decision Making (M) and COMMERCE 7005 Principles of Finance
- Assessment: assignments, exam as determined at first class

The course analyses companies from a fundamental perspective in order to derive an intrinsic value for stock. Topics: Fundamental analysis, determination of growth, discount cash flows models including dividend discount models, free cash flow models and residual income models; relative valuation models including priceearnings and price-book multiples; valuation of private companies, start up companies, companies with negative earnings and mergers and acquisitions.

## CORPFIN 7040

## Fixed Income Securities (M)

- 3 units - semester 1 or 2
- 3 hour seminar per week
- Assumed Knowledge: at least 2 finance specialisation courses
- Assessment: assignments, exam as determined at first class

The course examines the valuation of fixed-income securities. Topics: pricing of bonds and interest rate changes, the term structure of interest rates, the varieties of debt instruments, types of risk including default and country risk, immunisation strategies, institutional aspects of the fixed income market including credit ratings.

## CORPFIN 7042

## Treasury \& Financial Risk Management (M)

- 3 units - semester 2
- 3 hour seminar per week
- Assumed Knowledge: at least 2 finance specialisation courses
- Assessment: assignments, exam as determined at first class

The course examines the process and instruments used in treasury management and their application in hedging risk and creating risk profiles. Topics: money market instruments and management including yield curve, convexity and price value of basis point, bond portfolio management, bond hedging and trading; derivatives including futures, interest rate swaps, currency swaps, credit derivatives; the management of market, credit, liquidity and operations risks, and computing the value of risk. These issues are examined from the view point of both financial and non-financial organisations.

## CORPFIN 7044

## Financial Planning (M)

- 3 units - semester 1 or 2
- 3 hour seminar per week
- Assumed Knowledge: COMMERCE 7005 Principles of Finance
- Assessment: exam 50\%, assignments 50\%

The course aims to provide key knowledge about, and applications of, financial planning and superannuation, focusing on the process and development of financial plans for clients with different financial objectives. Topics: Overview of the financial planning industry and its environment, key elements in the financial planning process, strategic investment of funds, the superannuation life cycle, the regulatory and tax framework for superannuation funds, termination and retirement benefits and estate planning, developing a financial plan. An outline of the regulatory framework for providing financial advice is also covered, along with the necessary material to ensure ASIC p146 compliance.

## DEFENCE SCIENCE

## DEFSCI 7000

Cognitive Science: Minds, Brains and Computers

- 3 units - semester 1
- 2 lectures, 1 tutorial per week
- Prerequisite: 6 units Level I Humanities/Social Science (incl. 3 units Philosophy), or 6 units Psychology, Computer Science or Mathematics; or alternative approved by Head of Department
- Assessment: essay totaling 4800-6000 words

This course provides an introduction to the philosophical foundations of Cognitive Science, which is a relatively new inter-disciplinary field of study that embraces aspects of philosophy, psychology, computer science and neuroscience. Topics to be discussed include: the computer as a model of the mind; classical (digital) and connectionist (analog) computational theories of cognition; the science and philosophy of perception: psycho-pathology, including delusions and schizophrenia; and the role of the emotions in cognition.

## DEFSCI 7001

## Decision Making in Real Environments

- 3 units - semester 2
- Eligibility: M.Psych. (Organisational \& Human Factors) students, or permission of Head of Dept
- Assessment: assignment

This course aims to examine models of human decision making in their application to a variety of real-world problems. It will develop an understanding of the way in which people make decisions in a variety of real-world situations. It will describe and critically evaluate a number of competing models of human decision making. Particular emphasis will be given to those models that consider the role that heuristics (rules-of-thumb) play in decision making, and to models that consider the way in which the environment guides decision making. Throughout the course, applications of the decision making models to real-world problems will be highlighted, including examples drawn from the domains of fire-fighting, human-computer interaction and military decision making.

## DEFSCI 7002

## Distributed Systems

- 3 units - semester 2
- 2 lectures, 4 hours practical work per week
- Check with School for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2000 Computer Systems, COMP SCI 2004 Data Structures \& Algorithms, COMP SCI 3001 Computer Networks \& Applications; exposure to SQL programming as from COMP SCI 2002 Database and Information Systems
- Assessment: written exam, compulsory projects

A selection of topics from the following: the challenges faced in constructing client/server software: partial system failures, multiple address spaces, absence of a single clock, latency of communication, heterogeneity, absence of a trusted operating system, system management, binding and naming. Techniques for meeting these challenges: RPC and middleware, naming and directory services, distributed transaction processing, 'thin' clients, data replication, cryptographic security, mobile code. Introduction to Java RMI.

## DEFSCI 7003

## Artificial Intelligence

- 3 units - semester 1
- 2 lectures, 4 hours practical work a week
- Check with School for Non-Award Study
- Prerequisite: COMP SCI 1009 Computer Science IB (Pass Div 1) or Pass in COMP SCI 7080 Computer Science Concepts or Pass in both COMP SCI 1000 Engineering Programming IE, ELEC ENG 1004 Logic Design
- Assumed Knowledge: COMP SCI 2004 Data Structures and Algorithms
- Assessment: written exam, compulsory projects

Al methodology and fundamentals: philosophy of AI, representation techniques, goal reduction. Search techniques: hill-climbing, beam, best-first, $A^{*}$, game playing techniques with minimax and alphabeta pruning. Learning: Winston's methods, neural networks. Rule based systems; forward and backward chaining methods. AI systems: ANALOGY, MYCIN, GPS, Xcon. Fuzzy systems. Computer vision. Evolutionary computation: genetic algorithms, evolution strategies, genetic programming.

## DEFSCI 7004

## Aerospace Navigation and Guidance

- 3 units - semester 2
- 36 hours lectures \& tutorials
- Eligibility: available to students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Assessment: assignment, final exam

The course will comprise two components: Navigation: this will cover theory, and the principles of operation and performance modeling of navigation technologies with particular emphasis on technologies that are used to support aeronautical applications. This material will cover inertial navigation technologies, satellite
navigation technologies such as GPS and terrestrially based navigation systems such as Loran-C. Technologies which support astronautic applications will also be considered. Guidance: this will cover the principles on which aircraft flight plans and space vehicle orbital manoeuvres are designed and to which a flight vehicle's motion is controlled. This section will cover both open loop flight path generation and closed loop autopilot aspects of the control of flight vehicles.

## DEFSCI 7005

## Principles of Control Systems

- 3 units - semester 2
- 24 hours lectures, 6 tutorials
- Assumed Knowledge: ELEC ENG 2007 Signals \& Systems or equiv
- Assessment: exam, assessments and design project

The aims of the course are to introduce the fundamentals of theory of continuous and discrete time control systems, techniques for the design of closed loop systems. Topics covered are mathematical models; modes of responses; pole-zero plot; Stability and Routh's test; Root locus techniques; Nyquist criterion; Bode plots; Steady-state error analysis; Lead-lag compensation; PID controller; Minor loop feedback; State-space control systems; State feedback control; Digital control.

## DEFSCI 7006

## Antennas and Propagation

- 3 units - not offered in 2006

Theory of radiation, wire antennas, antenna arrays, aperture antennas, broadband antennas, numerical analysis, communications and radar systems, propagation.

## DEFSCI 7007

Principles of RF Engineering

- 3 units - semester 1
- Assumed Knowledge: foundation course in electronics, some familiarity with electromagnetic ideas
- Assessment: hardware design assignment, tests

RF System Basics: Radio waves, antennas, analogue modulation, noise, sensitivity, selectivity, non-linearity, digital modulation, spread spectrum and radar. Tuned Circuits: Resonance, 0 , bandwidth, transformers and matching networks. Amplifiers: BJT amplifiers, Miller effect, differential amplifiers, feedback, FET amplifiers, amplifier noise. Scattering Parameters: Transmission lines, impedance transformation, Smith charts, S parameters and S parameter amplifier design. Multi-port networks. Power Amplifiers: Class A, B, C and E amplification. Broadband matching. Filters: Basic lumped component designs. Filter realisation in microstrip form. Oscillators: Basic oscillator design and negative resistance
approach. Phase noise and stability issues. Mixers, Modulation and Demodulation: Diode, BJT and FET mixers. The generation and demodulation of AM, SSB, FM and PM signals. Introduction to Phase Locked Loops: Basic principles and some applications. Frequency synthesisers.

## DEFSCI 7008

## RF Measurements and Testing

- 3 units - not offered in 2006

Network analysis, spectrum analysis, noise measurements, active device characterisation.

## DEFSCI 7009

## Modelling Telecommunication Traffic

- 3 units - semester 2
- 30 hours lectures and tutorials
- Assessment: written and computing assignments $30 \%$, final exam 70\%

The aim of this course is to introduce students to fundamental methods of the modelling of telecommunication systems. On completion of this course, students should be able to understand how to model traffic streams using stochastic models: and be familiar with basic methods used to analyse traffic congestion and loss in telecommunication networks. Traffic streams. Loss and delay systems. Communications networks. Loss networks. Modelling internet traffic.

## DEFSCI 7014

## Parallel Computation

- 3 units - not offered in 2006
- 2 lectures, 4 hours practical work per week
- Check with School for Non-Award Study
- Assessment: written exam, compulsory projects

We will briefly examine some common parallel machine architectures, with emphasis on the CM-5. We will look briefly at fundamental primitives for explicit expression of parallelism, and languages which use them. We also consider data parallel programming, using CM-5 programs (probably in FORTRAN) as examples. We will concentrate on techniques for implicit expression of parallelism, using the dataflow model of computation and functional languages such as SISAL and Id, and consider the advantages (such as a higher level of abstraction and easy analysis of data dependencies) and disadvantages (such as necessity for copy avoidance) of such languages. Other aspects of parallel programming, such as performance measurement, visualisation and resource management, will be considered. Type inference in functional languages will also be studied.

## DEFSCI 7016

## Master of Sciences (Defence) Research Project

- 12 units - semester 1 or 2
- Assessment: thesis

A supervised research project in a topic agreed between the University and DSTO and jointly supervised by these bodies.

## DEFSCI 7019

## Statistics in Engineering

- 3 units - semester 2
- 3 hours per week, including 2 hours lectures
- Available for Non-Award Study
- Prerequisite: Level I Mathematics or equivalent, introductory statistics course or equivalent background reading
- Assignment: assignment $15 \%$, mini-project $25 \%$, open book exam 60\%

Introduction to theory and practice of probability and statistics in the context of engineering, with an emphasis on modelling. To provide students with experience of using Excel, SAS, Splus and Matlab for statistical analysis.

Revision - probability, descriptive statistics, binomial, uniform, Gaussian (normal) distributions, and expectation. Covariance, correlation, linear combinations of random variables, sampling distribution of the mean, confidence intervals for means and proportions. Further probability - Bayes' theorem, decision trees, Poisson processes and the Poisson and exponential distributions, Markov chains, processes. Further distributions - Moment generating functions. Transformation of variables. Weibull in the context of reliability, Gumbel and generalised extreme value distributions in the context of flood prediction. Random number generation. Multivariate distributions - Bivariate distributions, marginal and conditional distributions. Approximate mean and variance of functions of random variables. Bivariate normal distribution, multivariate normal distribution, bivariate Gumbel distribution, Gibbs sampler. SPC - Shewhart and CUSUM charts. Regression - of response on a single predictor. Log-regression. Multiple regression. Logistic regression. Design of Experiments Simple designed experiments-paired and unpaired comparison of means, approximate comparison of standard deviations and proportions. Factorial experiments and half factorial designs. Central composite designs. Response surface analysis. Taguchi's contribution to experimental design. Time series - Identification of trend and seasonal effects. Correlogram. Autoregressive processes of order 1 and 2 . Forecasting and simulation.

## DEFSCI 7020

## System Modelling and Simulation

- 3 units - semester 1
- 2 lectures per week, tutorial when required
- Available for Non-Award Study
- Assumed Knowledge: Basic statistics such as that covered in probability and statistics part of STATS 2004 Laplace
- Assessment: project work 40\%, final exam 60\%

The course will provide students with the skills to analyse and design systems using modelling and simulation techniques. It will involve an introduction to modelling and simulation techniques.

The theory and application of simulation modelling will be discussed. Case studies will be undertaken involving hands -on use of simulation packages. The application of simulation in areas such as manufacturing, telecommunications and transport will be investigated. At the end of this course, students will be capable of identifying practical situations where simulation modelling can be helpful, reporting to management on how they would undertake such a project, collecting relevant data, building and validating a model, analysing the output and reporting their findings to management. Students are also expected to complete a project in groups of two or three, to write a concise summary of what they have done and to report their findings to the class

## DEFSCI 7021

## Telecommunications Systems Modelling III

- 3 units - semester 2
- 36 hours lectures and tutorial
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2008 Operations Research II, familiarity with STATS 2002 Introduction to Mathematical Statistics or STATS 2004 Laplace Transforms and Probability and Statistics is advantageous
- Assessment: written assignment, project work 20\%, final exam 80\%

Definition of continuous-time Markov-chains, classical queueing examples, transient behaviour, the stationary distribution, hitting probabilities and expected hitting times. Stochastic Modelling of traffic streams. Effective bandwidth and quality of service. Evaluation of exact and approximate performance measures for both queueing networks and loss networks. TCP/IP protocols and performance measures. Applications of the above concepts to complex models of telecommunication systems.

## DEFSCI 7022

## Multimedia Communications

- 3 units - semester 2
- 30 hours lectures, tutorials
- Assumed Knowledge: ELEC ENG 4046 Telecommunications IV or equivalent
- Assessment: exam, assignments

Third generation mobile systems: W-CDMA implementation and dimensioning. Core network evolution including 2.5 G solutions. Orthogonal Frequency Division Multiplexing: principles and implementation including 802.11a OFDM PHY. Ad-hoc networking: principles and implementation including 802.11 IBSS and Bluetooth. Consumer broadband distribution: principles and implementation including DSL and HFC. Satellite communications: principles and applications including link models, system parameters and multiple access (FAMA/DAMA). INTELSAT, Iridium, Globalstar. Lossy compression for image, audio and video coding. Video coding for videoconferencing and low data rate applications (H.261, H.263, H.26L, MPEG4 VLBV). Audiovisual system standards (H.324, H.221, H.223, H.245). MPEG standards family (MPEG-1, MPEG-2, MPEG-4, MPEG-7, MPEG-21) and applications. Video and voice over IP

## DEFSCI 7023

## Photonics for Communications

- 3 units - semester 2
- 23 hours lectures, tutorials \& major assignment
- Assumed Knowledge: Familiarity with the principles of transmission line propagation and electronics, communication systems and communication theory
- Assignment: formal exam, assignment

The fundamental principles with which students should be familiar are reviewed in the early lectures within this course. Review of optics and lightwave propagation. Introduction to communication systems. Optical waveguides. Integrated optic waveguide. Dispersion and distortion effects. Single-mode and multi-mode optical fibres. Attenuation characteristics. Practical configurations. Light sources. Light emitting diodes. Laser operation. Laser diodes. Coupling considerations. Optical amplifiers. Light detectors. Photoelectric effects. PIN photodiodes. Avalanche photodiodes. Receiver circuits. Modulation. Analogue modulation formats. Digital modulation formats. Subcarrier techniques and multiplexing. Harmonic distortion and intermodulation. Noise and detection. Thermal and shot noise effects. Signal-to-noise ratios for digital and analogue systems. Thermal-noise limited and Shot-noise limited systems. Receiver design. System design. Analogue and digital point-to-point link design. Fibre distribution networks. Optical storage concepts. Dense Wave Division Multiplexing (DWDM), Compact Disc, DVD and other optical storage.

## DEFSCI 7024

## Specialised Studies A

- 3 units - semester 1

Topics as approved by Head of School

## DEFSCI 7025

## Specialised Studies B

- 3 units - semester 1

Topics as approved by Head of School

## DEFSCI 7026

## Specialised Studies C

- 3 units - semester 1

Topics as approved by Head of School

## DEFSCI 7027A/B <br> Master of Sciences (Defence) Research Project

12 units - full year

- Assessment: Thesis

A supervised research project in a topic agreed between the University and DSTO and jointly supervised by these bodies.

## DEFSCI 7028

## Information Theory

- 3 units - semester 1
- Online, possibility of weekly tutorials at Mawson Lakes or 3-5 day short course
- Assumed Knowledge: probability theory, communication theory, MATLAB
- Assessment: assignments 60\%, exam 40\%, percentages indicative only - details at start of semester

Information Measures: entropy, relative entropy and mutual information. Source coding: Discrete memoryless sources, Shannon's first (noiseless) coding theorem, Shannon-Fano-Elias coding, Huffman coding. Sources with memory. Universal source coding theorem. Ziv-Lempel Coding. Channel coding: Discrete memoryless channels, channel capacity, Shannon's second (noisy) coding theorem, error control coding, performance bounds. Advanced topics: multiple-user information theory, fading channels, multiple-antenna channels.

## DEFSCI 7029

## Kalman Filtering and Tracking

- 3 units - semester 2
- Online, possibility of short course
- Assumed Knowledge: Linear algebra (matrices), probability theory, linear systems and MATLAB
- Assessment: details provided at start of semester

The Kalman Filter: Stochastic state-variable systems, Optimality criteria for the estimation of state variables; The Maximumlikelihood solution for independent Gaussian noise processes; The innovations sequence; The least-squares Kalman filter; Systems with correlated noise processes; Stochastic systems with timeinvariant coefficients; The square-root algorithm; The extended Kalman filter, Adaptive system identification. Tracking Theory: Alphabeta trackers, Kalman-filter tracking; Probability Data Association Tracking Hidden Markov models and the Viterbi Algorithm.

## DEFSCI 7031

## Mobile Communications

- 3 units - semester 2
- Online with fortnightly tutorials at Mawson Lakes
- Assessment: details provided at start of semester

Introduction, mobile radio propagation, channel modelling, modulation, diversity, terminal mobility and teletraffic models, cellular systems, the AMPS cellular system, time division multiple access cellular, personal communications networks and intelligent networks, low earth orbit.

## DEFSCI 7032

## Image Processing

- 3 units - semester 1
- On-line with possibility of weekly lectures
- Assumed Knowledge: Linear algebra (matrices), differential equations (linear systems) and probability theory, MATLAB
- Assessment: details provided at start of semester

Image enhancement: Histogram modification (quantisation): image space, Fourier smoothing; Sharpening: highpass filters, differential operators; Model based; Masking. Image segmentation: thresholding: global, local; Feature detection and representation: point detection, edge detection, boundary detection, line detection; Region growing; Texture analysis; Classification. Compression: Model based; Quantisation, Filter based. Image registration: many techniques listed above; Geometric transformations.

## DEFSCI 7035

## Detection, Estimation and Classification

- 3 units - semester 1 or 2
- Online only
- Assumed Knowledge: probability theory and statistics
- Assessment: exam 50\%, 5 assignments \& essay $50 \%$, percentages indicative only - details at start of semester

Basic Ideas: Probability - Probability distributions, expectations, multivariate normals; Random variables; Independence; Conditional probability; Covariance matrix. Hypothesis testing: Bayes Rule; Likelihood; Applications to detection and classification problems; Priors and MAP; Cost functions and decision rules; Minimum risk; Composite testing: ROC's; Kernel Estimator method for finding pdf. Karhunen-Loeve and Linear Discriminate analysis: Review of eigenvalues and eigenvectors, singular value decomposition; Karhunen-Loeve method: reduction of continuous to discrete data; Linear discriminant analysis; Linear detection; Linear classifier. Parameter estimation: Bias and consistency; Efficiency; Maximum Likelihood; Bayesian Estimates; Linear Mean-Square Estimation. Advanced parametric methods: Minimax method; Neyman-Pearson method; The EM algorithm; Robust parameter estimation and detection. Evaluation: Probability of error in hypothesis testing; Chernoff bounds; Probability of error in parameter estimation; Cramer-Rao lower bounds; Dimension and misclassification.

## DEFSCI 7036

## Introduction to Discrete Linear Systems

- 3 units - semester 1
- Online only
- Assumed Knowledge: Linear algebra (matrices), differential equations (linear systems) \& complex analysis (Laplace transforms), probability theory, MATLAB
- Assessment: 2 assignments 40\%, intermediate exam 20\%, final exam $40 \%$, indicative only - details at start of semester

Deterministic time-invariant linear systems: discrete-time and continuous-time state vector equations and state variable diagrams; solution of state vector equations, matrix exponentials, statetransition matrices; controllability and observability; solution by Ztransforms and Laplace transforms, transfer functions; stability, asymptotic stability, state feedback and pole placement. Introduction to stochastic linear systems: stochastic processes, ergodic series, autocorrelation function, the ARMAX model, special cases of the ARMAX process, Yule-Walker equations and system parameter estimation.

## DEFSCI 7037

## Signal Synthesis and Analysis

- 3 units - semester 1 or 2
- Online with possibility of weekly lectures
- Assumed Knowledge: Fourier transforms and Z-transforms, Linear Algebra
- Assessment: mid-term \& final exam $50 \%, 5$ assignments \& essay $50 \%$, indicative only - details provided at start of semester

Hilbert space: Inner product, completeness, L2, orthogonality and Reisz basis, Parsevaal's theorem, linear operators and resolutions of unity. Fourier Series: Basis, L2(Rn), Plancherel Theorem, Uncertainty Theorem, Multidimensional Fourier transform, Short Time Fourier transform. Discrete Fourier Transform Properties, DFT Matrix, factorisation, Fast Fourier transform, sampling and Interpolation, Shannon sampling. Wavelets Multiresolution Analysis: Scaling function and dilation, orthogonal wavelets, compact supported wavelets, Quadrature Mirror filters, Finite discrete wavelet transform, wavelet design. Overview of other transforms. The Course includes example/s like how wavelet analysis can be used with coding for data transmission.

## DEFSCI 7038

## Specialised Studies D

- 3 units - semester 1 or 2
-3-4 day short courses
Short courses to be offered during the semester will be advised on MSIP website.


## DEFSCI 7039

## Satellite Communications

- 3 units - semester 2
- Online and once a week at Mawson Lakes
- Assessment: details provided at start of semester

Satellite link models. Link budget calculations. Space segment. Propagation and interference. Modulation for non-linear satellite channels. Combined modulation and coding. Multiple access techniques. Case studies.

## DEFSCI 7203

## Photonics IVD

- 3 units - semester 1
- 2 hour lecture, 1 hour tutorial, 3 hour practical
- Eligibility: M.Sc. (Defence Science) or equivalent only
- Assumed Knowledge: Electromagnetism III, Physical Optics IIID, Photonics IIID
- Assessment: end of semester exam $50 \%$, assignments $20 \%$, practical assessment $30 \%$

Nonlinear optics: second harmonic generation (SHG), sum (SFG) and difference frequency generation (DFG), optical parametric oscillators (OPO) and amplifiers (OPA), injection-seeded OPA's, phase matching, optical phase conjugation, four-wave mixing, stimulated Brillouin scattering (SBS), stimulated Raman scattering (SRS), Kerr mode-locking, nonlinear effects in fibres (SPM, SBS, SRS, solitons, supercontinuum), nonlinear photonic crystals.

## DEFSCI 7204

## Photonics IIID

- 3 units - semester 2
- 2 hour lecture, 1 hour tutorial and, 3 hour practical
- Eligibility: M.Sc.(Defence Science) or equivalent only
- Assumed Knowledge: Physics IIA, Physics IIB, Electromagnetism III Optical fibres, microstructured optical fibres, fibre Bragg gratings, fibre sensors, optical materials, photonic crystals, interaction of light with matter, time dependent perturbation theory, stimulated and spontaneous emission and absorption, optical gain, Gaussian beams, stability of resonators, pulsed lasers, Q -switching, mode locking, review of common lasers, laser safety.


## DEFSCI 7205

## Experimental Methods IVD

- 3 units - semester 1
- 2 hour lecture, 1 hour tutorial, 3 hour practical
- Eligibility: M.Sc. (Defence Science) or equivalent only
- An introduction to statistical and Fourier techniques, with applications to experimental design and data analysis.


## DEFSCI 7206

## Physical Optics IIID

- 3 units - semester 1
- 2 hour lecture, 1 hour tutorial, 3 hour practical
- Eligibility: M.Sc.(Defence Science) or equivalent only
- Assumed Knowledge: Physics IIA, Physics IIB, Electromagnetism III
- Assessment: end of semester exam $50 \%$, assignments $20 \%$, practical assessment 30\%

Maxwell's equations, EM waves in free space, plane waves; Maxwell's equations in matter; waveguides, dispersion, interaction of electromagnetic waves with media, Lorentz electron oscillator, reflection and refraction at interfaces, multi-layer dielectric coatings, polarisation and birefringence.

Solutions of wave equation, numerical beam propagation, FresnelKirchhoff integral, Fresnel diffraction, Fraunhofer diffraction, Fourier optics, Array theorem, Abbe's theory of imaging, apodization, amplitude and phase spatial filtering.

## SIP 7001

## Information Theory

- 3 units - semester 1
- Online, possibility of weekly tutorials at Mawson Lakes or 3-5 day short course
- Assumed Knowledge: probability theory, communication theory, MATLAB
- Assessment: assignments $60 \%$, exam $40 \%$, percentages indicative only - details at start of semester

Information Measures: entropy, relative entropy and mutual information. Source coding: Discrete memoryless sources, Shannon's first (noiseless) coding theorem, Shannon-Fano-Elias coding, Huffman coding. Sources with memory. Universal source coding theorem. Ziv-Lempel Coding. Channel coding: Discrete memoryless channels, channel capacity, Shannon's second (noisy) coding theorem, error control coding, performance bounds. Advanced topics: multiple-user information theory, fading channels, multiple-antenna channels.

## SIP 7002

## Kalman Filtering and Tracking

- 3 units - semester 2
- Online, possibility of short course
- Assumed Knowledge: Linear algebra (matrices), probability theory, linear systems and MATLAB
- Assessment: details provided at start of semester

The Kalman Filter: Stochastic state-variable systems, Optimality criteria for the estimation of state variables; The Maximumlikelihood solution for independent Gaussian noise processes; The innovations sequence; The least-squares Kalman filter; Systems with correlated noise processes; Stochastic systems with timeinvariant coefficients; The square-root algorithm; The extended Kalman filter, Adaptive system identification. Tracking Theory: Alphabeta trackers, Kalman-filter tracking; Probability Data Association Tracking Hidden Markov models and the Viterbi Algorithm.

## SIP 7004

## Mobile Communications

- 3 units - semester 2
- Online with fortnightly tutorials at Mawson Lakes
- Assessment: details provided at start of semester

Introduction, mobile radio propagation, channel modelling, modulation, diversity, terminal mobility and teletraffic models, cellular systems, the AMPS cellular system, time division multiple access cellular, personal communications networks and intelligent networks, low earth orbit.

## SIP 7005

Multisensor Data Fusion

- 3 units - semester 2
- Online only
- Assumed Knowledge: Linear algebra (matrices), differential equations (linear systems) \& complex analysis (Laplace transforms), probability theory, MATLAB
- Assessment: details provided at start of semester

Elementary applications and techniques for data fusion in military and civilian systems; inference, classification, multisensor classification, tracking, multisensor registration, image registration, and graphical statistical models for expert systems. Case studies.

## SIP 7007

## Image Processing

- 3 units - semester 1
- On-line with possibility of weekly lectures
- Assumed Knowledge: Linear algebra (matrices), differential equations (linear systems) and probability theory, MATLAB
- Assessment: details provided at start of semester

Image enhancement: Histogram modification (quantisation): image space, Fourier smoothing; Sharpening: highpass filters, differential operators; Model based; Masking. Image segmentation: thresholding: global, local; Feature detection and representation: point detection, edge detection, boundary detection, line detection; Region growing; Texture analysis; Classification. Compression: Model based; Quantisation, Filter based. Image registration: many techniques listed above; Geometric transformations.

## SIP 7012

## Detection, Estimation and Classification

- 3 units - semester 1 or 2
- Online only
- Assumed Knowledge: probability theory and statistics
- Assessment: exam 50\%, 5 assignments \& essay $50 \%$, percentages indicative only - details at start of semester

Basic Ideas: Probability - Probability distributions, expectations, multivariate normals; Random variables; Independence; Conditional probability; Covariance matrix. Hypothesis testing: Bayes Rule; Likelihood; Applications to detection and classification problems;

Priors and MAP; Cost functions and decision rules; Minimum risk; Composite testing: ROC's; Kernel Estimator method for finding pdf. Karhunen-Loeve and Linear Discriminate analysis: Review of eigenvalues and eigenvectors, singular value decomposition; Karhunen-Loeve method: reduction of continuous to discrete data; Linear discriminant analysis; Linear detection; Linear classifier. Parameter estimation: Bias and consistency; Efficiency; Maximum Likelihood; Bayesian Estimates; Linear Mean-Square Estimation. Advanced parametric methods: Minimax method; Neyman-Pearson method; The EM algorithm; Robust parameter estimation and detection. Evaluation: Probability of error in hypothesis testing; Chernoff bounds; Probability of error in parameter estimation; Cramer-Rao lower bounds; Dimension and misclassification.

## SIP 7013

## Introduction to Discrete Linear Systems

- 3 units - semester 1
- Online only
- Assumed Knowledge: Linear algebra (matrices), differential equations (linear systems) \& complex analysis (Laplace transforms), probability theory, MATLAB
- Assessment: 2 assignments $40 \%$, intermediate exam 20\%, final exam $40 \%$, indicative only - details at start of semester

Deterministic time-invariant linear systems: discrete-time and continuous-time state vector equations and state variable diagrams; solution of state vector equations, matrix exponentials, statetransition matrices; controllability and observability; solution by Ztransforms and Laplace transforms, transfer functions; stability, asymptotic stability, state feedback and pole placement. Introduction to stochastic linear systems: stochastic processes, ergodic series, autocorrelation function, the ARMAX model, special cases of the ARMAX process, Yule-Walker equations and system parameter estimation.

## SIP 7015

## Signal Synthesis and Analysis

- 3 units - semester 1 or 2
- Online with possibility of weekly lectures
- Assumed Knowledge: Fourier transforms and Z-transforms, Linear Algebra
- Assessment: mid-term \& final exam $50 \%, 5$ assignments \& essay $50 \%$, indicative only-details provided at start of semester

Hilbert space: Inner product, completeness, L2, orthogonality and Reisz basis, Parsevaal's theorem, linear operators and resolutions of unity. Fourier Series: Basis, L2(Rn), Plancherel Theorem, Uncertainty Theorem, Multidimensional Fourier transform, Short Time Fourier transform. Discrete Fourier Transform Properties, DFT Matrix, factorisation, Fast Fourier transform, sampling and Interpolation, Shannon sampling. Wavelets Multiresolution Analysis: Scaling
function and dilation, orthogonal wavelets, compact supported wavelets, Quadrature Mirror filters, Finite discrete wavelet transform, wavelet design. Overview of other transforms.

The Course includes example/s like how wavelet analysis can be used with coding for data transmission.

## SIP 7017

## Specialised Studies A

- 3 units - semester 1 or 2
- 3-4 day short courses

Short courses to be offered during the semester will be advised on MSIP website.

## SIP 7018

## Specialised Studies B

- 3 units - semester 1 or 2
-3-4 day short courses
Short courses to be offered during the semester will be advised on MSIP website.


## SIP 7019

Specialised Studies C

- 3 units - semester 1 or 2
-3-4 day short courses
Short courses to be offered during the semester will be advised on MSIP website.


## SIP 7020

## Specialised Studies D

- 3 units - semester 1 or 2
- 3-4 day short courses

Short courses to be offered during the semester will be advised on MSIP website.

## SIP 7023

## Satellite Communications

- 3 units - semester 2
- Online and once a week at Mawson Lakes
- Assessment: details provided at start of semester

Satellite link models. Link budget calculations. Space segment. Propagation and interference. Modulation for non-linear satellite channels. Combined modulation and coding. Multiple access techniques. Case studies.

## SIP 7024

## Adaptive Signal Processing

- 3 units - semester 1
- Online with possibility of 3-5 day short course or weekly lecture delivery.
- Assumed Knowledge: Linear algebra (matrices), differential equations (linear systems) and probability theory, MATLAB
- Assessment: 5 assignments $50 \%$, exam $25 \%$, quizzes $25 \%$, percentages indicative only - details provided at start of semester Introductory and Preliminary material: Introduction to the concepts, key issues and motivating examples for adaptive filters; Discrete time linear systems and filters; Random variables and random processes, covariance matrices; Z transforms and spectra of stationary random processes. Optimum Linear Systems: Error surfaces and minimum mean square error; Optimum discrete time Wiener filter; Principle of orthogonality and canonical forms; Constrained optimisation; Method of steepest descent convergence issues; Stochastic gradient descent LMS convergence in the mean and misadjustment; Case study Least squares and recursive least squares. Linear Prediction: Forward and backward linear prediction; Levinson Durbin; Lattice filters.


## SIP 7025

## Beamforming and Array Processing

- 3 units - semester 1
- Mixed mode: online and short course/weekly lectures
- Assumed Knowledge: Linear Systems (discrete \& continuous), Linear Algebra (matrices), Probability Theory, Fourier and Z Transforms and MATLAB
- Assessment: 5 assignments $50 \%$, exam $25 \%$, quizzes $25 \%$, percentages indicative only - details provided at start of semester Introductory Material: Concepts, key issues and motivating array examples; Simple propagating field models. Deterministic Signals: Conventional beamforming concepts: narrowband beamforming; Beam patterns: beamwidth, sidelobes and grating lobes, Array shading real weights, Array factor theorems; Multiple simultaneous beams; Wavevectors and frequency wavenumber beamforming; Time delay and sum beamforming. Random Signals: Probability and random processes for arrays; Cross-spectral matrices. Frequency Domain Beamforming: Frequency domain Approach single and multiple beams; Array Gain; Frequency wavenumber; Array shading and null steering. Optimum Beamforming in Frequency Domain: Optimisation criteria constrained minimum mean square and Conventional and Optimum Comparisons; Constraints: minbeam and nulls; Sample Matrix Inverse and statistical considerations. Adaptive Beamforming in Frequency Domain: Sample Matrix Inverse update, Gradient descent and optimisation surfaces with constraints; Convergence requirements; Stochastic Descent Methods: Least Mean Square; Convergence in the mean and mean
square convergence. Optimum and Adaptive Beamforming in Time Domain: Multichannel tapped delay line approach; Optimum solution; Adaptive solution with passband constraints.


## SIP 7026

## Mathematical Coding and Cryptology

- 3 units - semester 2
- Online, possibility of twice weekly lectures at North Terrace
- Assessment: details provided at the start of semester

The first part of the course concentrates on linear codes, with topics including syndrome decoding, perfect codes and cyclic codes. The Hamming and Golay codes, and others, are discussed. The second part is an introduction to contemporary cryptology, including both symmetric and public key systems. Examples of cryptosystems studied include the Data Encryption Standard and the RSA algorithm.

The course concludes with a selection of topics from authentication, identification and digital signatures.

## DENTISTRY

## DENT 6001EX

## DENT 6001HO

## Contemporary Dental Practice A

- 3 units - semester 1 or 2
- 5 hours per week minimum
- Eligibility: Graduate Certificate in Dentistry students only
- Available for Non-Award Study
- Assessment: multiple choice questions, treatment plans, essays, scientific reports

An external study mode course which aims to review and update current concepts for all practitioner types in modern general dental practice. All candidates complete study in the areas of dynamics of the oral environment and non-surgical minimum intervention. Then candidates select four additional topics within their field of practice.

## DENT 6002EX

## DENT 6002HO

Contemporary Dental Practice - Continuing

- 0 units - semester 1 or 2
- 5 hours per week minimum
- Eligibility: Graduate Certificate in Dentistry students only
- Prerequisite: DENT 6001/6071 Contemporary Dental Practice A/B
- Assessment: multiple choice questions, treatment plans, essays, scientific reports

This is the continuation of Contemporary Dental Practice A and B. Having completed dynamics of the oral environment and nonsurgical minimum intervention, candidates select four additional topics within their field of practice.

## DENT 6003EX

## DENT 6003HO

## Basic and Applied Dental Sciences

- 2 units - semester 2
- Prerequisite: 6004HO Research Methods and Ethics
- Assessment: seminar participation

This course of seminars, some of which are presented online, aims to provide postgraduate students with a broad appreciation of current knowledge in the basic and applied dental sciences, and to enable them to become acquainted with research programs within the Dental School.

## DENT 6004EX

## DENT 6004HO

## Research Methods and Ethics

- 2 units - semester 1
- Assessment: short test in biostatistics, evaluation of short written critique of given scientific paper

The course of seminars provides an appreciation of the scientific method and of ethics as well as practical aspects of biostatistics, experimental design, research methodology, laboratory safety and infection control, use of computers and bibliographic databases, preparation of initial research proposal, evaluation of research papers, scientific writing and presentation of research findings. Where possible, the material presented will be selected to meet the specific requirements of the students enrolled.

## DENT 6021EX

## DENT 6021HO

## Adhesive Dentistry C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate students only
- Available for Non-Award Study
- Assessment: operative skills \& case report

This course covers both the theory and practice of adhesive dentistry. Students will use online readings and resources prior to attending a hands-on course. Topics covered include adhesive materials, bonding systems, mechanisms of adhesion of materials to teeth, and reasons for success and failure of adhesive
restorations. A variety of current operative/restorative techniques will be explored including techniques for aesthetic dentistry.

## DENT 6022EX

## DENT 6022HO

## Advanced Restorative Dentistry C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Assessment: may include written assessment, technique work \& case report

This course looks at recent trends in crown and bridge work including relevant dental materials. Topics covered include diagnosis and treatment planning for crown and bridge work, design of preparations, occlusion, impression materials, recording intermaxillary relationships, fabrication and cementation of temporary restorations, and selection and manipulation of crown and bridge cements.

## DENT 6023EX

## DENT 6023HO

## Endodontics C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Assessment: may include written assessment, technique work \& case report

This course covers the diagnosis of pulpal and periapical conditions, emergency endodontic procedures, vital pulp therapy and non vital pulp therapy. Other areas explored include microbiology and immunology, instrumentation, medicaments and root filling techniques. Periapical surgery, management of traumatic injuries, bleaching and apexification will also be reviewed.

## DENT 6024EX

## DENT 6024HO

High Caries Risk C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Available for Non-Award Study
- Assessment: may include written assignment, MCQs, technical work \& case report

This course reviews the structure of dental hard tissues of tooth, current concepts in cariology including microbiology and the nature
of saliva and its role. Both traditional and minimum intervention approaches to the management of patients at high risk of caries are explored. The course also looks at practical assessment of caries risk including saliva testing, materials and products suitable for professional and home care, prevention, and short- and longterm care. Students have access to online resources and attend a four-day hands-on course during which they are encouraged to discuss cases.

## DENT 6025EX

## DENT 6025HO

## Implantology C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Assessment: may include seminar performance, written exercises or case report

This course covers anatomy of the jaws, basic principles of osseointegration for the placement of single tooth implants, treatment of edentulous ridges, case selection, assessment of sites for implant placement and treatment planning.

## DENT 6026EX

## DENT 6026HO

## Orofacial Pain C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Available for Non-Award Study
- Assessment: may include seminar performance, clinical exercises \& written assignments

This course is designed to update the general practitioner in current concepts of craniomandibular disorders. The course will cover differential diagnosis of craniomandibular disorders, clinical examination, the sequellae of masticatory muscle hyperactivity and the progression from myogenous to arthrogenous dysfunction.

## DENT 6027EX

## DENT 6027HO

## Oral Pathology C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Available for Non-Award Study
- Assessment: may include seminar performance, clinical exercises \& written assignments

This course reviews common topics in oral pathology that are of importance in daily practice. It aims to demonstrate their laboratory and clinical applications. The course is a combination of review presentations, interactive seminars and clinical demonstrations. Participants will need to complete readings prior to an intensive three day course. Participants are asked to bring along interesting or problem cases for discussion. Completion of the oral pathology study module will be an advantage to candidates.

## DENT 6028EX

## DENT 6028HO

## Dento-Alveolar Surgery C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Assessment: may include seminar performance, clinical work, \& written assignment

The course covers academic and clinical aspects of modern dentoalveolar surgery relevant to general dental practitioners including removal of impacted teeth. Readings and resources will be provided.

## DENT 6029EX

## DENT 6029HO

Orthodontics C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry in students only
- Assessment: seminar performance, multiple choice questions \& written assignment

This course covers the principles of examination and orthodontic diagnosis including the use of cephalometrics and the application of clinical orthodontic treatment relevant to the general practitioner. Prior completion of the orthodontics learning module is recommended. Readings and resources will be provided.

## DENT 6030EX

## DENT 6030HO

## Periodontics C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Available for Non-Award Study
- Assessment: may include written assignment \& case report or essay

This course is aimed at the general practitioner wishing to upgrade skills in diagnosis, treatment planning and simple surgical procedures. Prior completion of the learning module Periodontics for the General Practitioner is an advantage.

## DENT 6031EX

## DENT 6031HO

## Removable Prosthodontics Full C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Assessment: clinical exercises \& case report

This course covers at an advanced level the management of edentulous patients. Students will undertake diagnosis and treatment planning for complete and immediate dentures and explore the evidence base for treatment options. Completion of the prosthodontic learning module would be an advantage.

## DENT 6032EX

DENT 6032HO

## Removable Prosthodontics Partial C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Assessment: clinical exercises \& case report

This course covers at an advanced level the management of partially edentulous patients. Students will undertake diagnosis and treatment planning for removable partial dentures and explore the evidence base for treatment options. Completion of the Prosthodontics learning module would be an advantage.

## DENT 6033EX

DENT 6033HO

## Special Needs Dentistry C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Assessment: case report or written assignment

This course will help students acquire an appreciation of reasonable treatment goals, dental management, and ethical and legal issues in relation to medically-challenged, intellectually-
disabled, psychiatrically-disabled and functionally-impaired aged patients, including patients requiring hospital management.

## DENT 6034EX

## DENT 6034HO

## Dental Wear C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Available for Non-Award Study
- Assessment: written exercise or case report

This course will involve an interdisciplinary approach to management of the worn dentition. Students will learn to identify and understand the nature of the forms of non-carious loss of tooth structure including erosion, attrition and abrasion. The course will focus on how to clinically assess patients, identify their risk factors and plan short and long-term management. Participants will be brought up to date with current research. Case discussions will be part of the course.

## DENT 6035EX

DENT 6035HO

## Contemporary Restorative Practice C

- 4 units - semester 1 or 2
- 35 hours on campus
- Available for Non-Award Study
- Assumed Knowledge: BDS qualification or equivalent
- Assessment: will include short written assignments, interview $\&$ technique exercises

This course is specifically designed for overseas-qualified dental practitioners preparing for entry to Bridging Dentistry, the examinations of the Australian Dental Council and/or studying toward a Graduate Certificate or Graduate Diploma. The theory and practice of current techniques in the basic clinical disciplines are covered. Topics include intra-oral radiography, local anaesthesia, current operative techniques, adhesive dentistry and endodontic techniques. Online and paper resources support student learning in addition to a week of hands -on technical exercises on campus.

## DENT 6036EX

## DENT 6036HO

## Aesthetic Dentistry C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Available for Non-Award Study
- Assessment: may include written assignment, MCOs, technical work \& case report

This course covers both the theory and practice of aesthetic dentistry. It explores new and existing techniques, case selection and treatment planning. Dental materials important to this discipline are also covered. Students have access to online resources and will need to complete key readings before attending an intensive hands-on course.

## DENT 6037EX

## DENT 6037HO

## Panoramic Radiography C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Available for Non-Award Study
- Assessment: may include written assignments, exams, technical exercises

This course covers both the theory and practice of film-based and digital panoramic radiology. Theory topics are supported by online resources and include tomography, radiographic anatomy, image formation, equipment and patient management. Students wishing to be licensed in their own state should contact the relevant government authority and are likely to need access to supervised practice following the on-campus practical sessions.

## DENT 6038EX

## DENT 6038HO

## Extra Oral Radiography C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Available for Non-Award Study
- Assessment: may include written assignments, exams, technical exercises

This course is primarily aimed at dental auxiliaries requiring the skills to safely produce the extra-oral images associated with orthodontic practice: lateral cephalometric and hand-wrist films. Theory topics are supported by online resources include radiographic anatomy, image formation, equipment and patient management. Exercises in cephalometric tracing and age determination will also form part of the course. Students wishing to be licensed in their own state should contact the relevant government authority and may need access to supervised practice following the course. It is recommended that students also complete a course in panoramic radiography.

## DENT 6039EX

DENT 6039HO

## Dental Trauma C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Available for Non-Award Study
- Assessment: may include written assignment or case report, technical exercises

This course explores a multidisciplinary approach to the management of dental trauma. In addition to emergency management in the field, this course includes the theory and practice of examination/ assessment of the dental, oral and facial injuries, early dental management and endodontic treatment. The role of orthodontics, prosthodontics and other specialist disciplines in the short- and long-term management of dental trauma will also be covered. Students are supported by online reading material and resources.

## DENT 6040EX

## DENT 6040HO

## Dental Laboratory Technology C

- 2 units - semester 1 or 2
- 30 hours
- Eligibility: Graduate Certificate in Dentistry students only
- Available for Non-Award Study
- Assessment: may include written assignment, technical exercises

This course is primarily aimed at practitioners requiring basic laboratory skills. It aims to review and update students in areas such as the laboratory stages of partial and full denture construction, denture repairs, production of mouthguards and ceramic techniques. Students are supported by online reading material and resources.

## DENT 6055EX

## Advanced Dental Selective

- 3 units - semester 1 or 2
- Eligibility: Graduate Diploma in Clinical Dentistry students only
- Prerequisite: DENT 6055HO Dental Selective
- Assessment: satisfactory completion of chosen project

This course offers candidates the opportunity to undertake advanced dental studies in a number of areas. It can include completion of an essay, development of a website, preparation for the Royal Australasian College of Dental Surgeons Primary Examination or other approved selective projects.

## DENT 6056EX

## Advanced Dental Studies

- 3 units - semester 1 or 2
- Eligibility: Graduate Diploma in Clinical Dentistry students only
- Prerequisite: DENT 6056HO Dental Studies
- Assessment: satisfactory completion of research report or chosen project

To satisfactorily compete this course, candidates will be required to undertake either a small research project under supervision, or complete an alternative assignment(s) approved by the Graduate School Advisory Board.

## DENT 6058HO

## Advanced Dental Selective

- 3 units - semester 2
- Eligibility: Graduate Diploma in Clinical Dentistry students only
- Prerequisite: DENT 6055HO Dental Selective
- Assessment: satisfactory completion of chosen project

This course offers candidates the opportunity to undertake advanced dental studies in a number of areas. It can include completion of an essay, development of a website, preparation for the Royal Australasian College of Dental Surgeons Primary Examination or other approved selective projects.

## DENT 6059HO

## Advanced Dental Studies

- 3 units - semester 2
- Eligibility: Graduate Diploma in Clinical Dentistry students only
- Prerequisite: DENT 6056HO Dental Studies
- Assessment: satisfactory completion of research report or chosen project

To satisfactorily compete this course, candidates will be required to undertake either a small research project under supervision, or complete an alternative assignment(s) approved by the Graduate School Advisory Board.

## DENT 6061EX

## DENT 6061HO

## Maxillo-Facial Prosthetics C

- 2 units - semester 1 or 2
- Assessment: may include written assignments, MCQs, technical exercises \& case report

This course is primarily aimed at practitioners with an interest in the area of maxillo-facial prosthetics. Topics will include head and
neck anatomy, principles of implantology and prosthetic for the maxillo-facial region. Relevant dental materials will also be covered. Some experience in the fabrication of prostheses will be provided. Students are supported by online reading material and resources and are required to attend a four-day laboratory/clinical course on-campus.

## DENT 6063EX

DENT 6063HO

## Pain Management C

- 2 units
- Assessment: may include written assignments, MCQs, technical exercises \& seminar presentation

This course is aimed at dental practitioners and auxiliaries with an interest in pain management in the dental surgery and the management of chronic pain in adults and children. Topics covered include physiology of pain, oral and dental pain pathways, local anaesthesia, relative analgesia, sedation and general anaesthesia, hypnosis, acupuncture, electrical anaesthesia, physical therapy, psychology, chronic pain and referral. Students will have some flexibility to focus on areas of interest. Students are supported by online reading material and resources and are required to attend a four-day clinical block on-campus.

## DENT 6064EX

## DENT 6064HO

## Oral Medicine C

- 2 units - semester 1 or 2
- Assessment: may include written assignments, MCOs, case report

This course reviews common and important topics in oral medicine and demonstrates their laboratory and clinical applications. The course is a combination of review presentations, interactive seminars and clinical demonstrations. Students will be required to read key references and explore resources on MyUni prior to the course. Students are required to attend a three-day clinical block on-campus. They are encouraged to bring along interesting cases for discussion.

## DENT 6065EX

## DENT 6065HO

## Paedodontics C

- 2 units
- Assessment: may include written assignments, MCOs, case report following attendance at pre-clinical course

The aim of this course is to equip practitioners with the information and skills to enjoy the rewards of treating children and those with special needs. Topics to be covered include: growth and
development, treatment planning for paediatric and special needs patients, updates in pulp therapy, dental trauma and dental materials for the paediatric population, oral pathology and minor oral surgery, pharmacological and non-pharmacological behaviour management and treatment planning and treatment in the operating theatre. Assessment tools in special needs dentistry as well as speech pathology for dental practitioners will also be included. Students are required to attend a four-day preclinical course on-campus. Time will be set aside for participants discuss their own cases and treatment planning options.

## DENT 6067EX

## DENT 6067HO

## Dental Selective

- 3 units - semester 1 or 2
- Eligibility: Graduate Diploma in Clinical Dentistry students only
- Assessment: satisfactory completion of chosen project

This course offers candidates the opportunity to undertake advanced dental studies in a number of areas. It can include completion of an essay, development of a website, preparation for the Royal Australasian College of Dental Surgeons Primary Examination or other approved selective projects.

## DENT 6068EX

## DENT 6068HO

## Dental Studies

- 3 units - semester 1 or 2
- Eligibility: Graduate Diploma in Clinical Dentistry students only
- Assessment: satisfactory completion of research report or chosen project

To satisfactorily compete this course, candidates will be required to undertake either a small research project under supervision, or complete an alternative assignment/s approved by the Graduate School Advisory Board.

## DENT 6069EX

## DENT 6069HO

## Clinical Studies

- 4 units - semester 1 or 2
- Eligibility: Graduate Diploma in Clinical Dentistry students only
- Assessment: ongoing - patient presentations \& viva voca exams

This course provides hands on experience in a number of clinical areas under the supervision of experienced clinicians in these areas. Seminar participation is required.

## DENT 6070EX

## DENT 6070HO

## Advanced Clinical Studies

- 4 units - semester 1 or 2
- Eligibility: Graduate Diploma in Clinical Dentistry students only
- Prerequisite: DENT 6057HO Clinical Studies
- Assessment: ongoing assessment, patient presentations \& viva voca exams

This course provides hands on experience in a number of clinical areas under the supervision of experienced clinicians in these areas. Seminar participation is required.

## DENT 6071EX

## DENT 6071HO

## Contemporary Dental Practice B

- 3 units - semester 1 or 2
- 5 hours per week minimum
- Eligibility: Graduate Certificate in Dentistry students only
- Available for Non-Award Study
- Assessment: multiple choice questions, treatment plans, essays, scientific reports

This course is a continuation of Contemporary Dental Practice A. All candidates complete study in the areas of dynamics of the oral environment and non-surgical minimum intervention. Then candidates select four additional topics within their field of practice.

## DENT 7101HO

## MDS Research A

- 4 units - semester 1 or 2
- Assessment: demonstration of progress within research project, submission of research proposal

Students will undertake a research project in their chosen area.

## DENT 7102HO

## MDS Research B

- 4 units - semester 1 or 2
- Assessment: demonstration of progress within research project, completion of literature review

Students will continue with a research project in their chosen area.

## DENT 7103HO

## MDS Research C

- 4 units - semester 1 or 2
- Assessment: demonstration of progress within research project, completion of experimental work

Students will continue with a research project in their chosen area.

## DENT 7105HO

## MDS Research D

- 4 units - semester 1 or 2
- Assessment: successful completion \& submission of thesis

Students will continue with a research project in their chosen area.

## DENT 7119AHO/BHO

## General Dental Practice VI

- 12 units - full year
- Assessment: may involve patient presentations, seminars, written \& oral exams

This course involves advanced clinical experience of the comprehensive management of patients, based upon the coordination of skills from individual disciplines. Seminars and clinical tutorials explore a wide range of topics relating to general practice. Emphasis is placed on treatment planning, review of completed treatment and prognosis.

## DENT 7120AHO/BHO

## General Dental Practice VII

- 16 units - full year
- Assessment: may involve patient presentations, seminars, written \& oral exams

This course is a continuation of DENT 7120 HO and involves advanced clinical experience of the comprehensive management of patients, based upon the coordination of skills from individual disciplines. Seminars and clinical tutorials explore a wide range of topics relating to general practice. Emphasis is placed on treatment planning, review of completed treatment and prognosis.

## DENT 7150HO

Dental Public Health

- 3 units - semester 1
- Eligibility: Grad.Cert, Grad.Dip, Master of Public Health students
- Assessment: to be advised

This course is designed to suit students requiring specific understanding of dental public health. The course will focus on (a)
the assessment of various oral disease levels and related problems, identification of prevention and control measures, selection and implementation of appropriate measures and evaluation of the results; (b) the structure of existing dental care programs, the coverage of the community and integration and organisation of all types of dental resources including the supply, distribution and utilisation of dental personnel, facilities and funds.

## DENT 8001AHO/BHO

## Research Methods, Experimental Design \& Ethics

- 4 units - full year
- 1 hour per week
- Eligibility: Doctor of Clinical Dentistry students only
- Assessment: short test in biostatistics, evaluation of short written critique of given scientific paper

The course of seminars provides an appreciation of the scientific method, and of ethics approval procedures, as well as practical aspects of biostatistics, experimental design, research methodology, laboratory safety and infection control, use of computers, internet, and bibliographic databases, preparation of Research Proposal, evaluation of clinical and research papers, scientific writing, and presentation of research findings. Where possible, the material presented will be selected to meet the specific requirements of the students enrolled, and the theory of evidence-based dentistry will be introduced.

## DENT 8002AHO/BHO

## Common Topics in Dental Clinical Science

- 4 units - full year
- 1 hour per week
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics
- Assessment: essay

The course of lectures and seminars aims to provide postgraduate students with a contemporary perspective of applied dental sciences, particularly topics in areas related to the candidate's field of study.

## DENT 8003AHO/BHO

## Interdisciplinary Seminars in Clinical Dentistry

- 0 units - full year
- 1 hour per week
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8002A/BHO Common topics in Dental Clinical Science
- Assessment: presentation of clinical case

The course of seminars and case presentations aims to provide postgraduate students with a broad appreciation of current knowledge in other specialty areas, using topics and cases requiring a specialised, interdisciplinary approach. Special emphasis will be given to analysis of cases using an evidence based approach (see DENT 8001AHO/BHO Research Methods, Experimental Design, \& Ethics).

## DENT 8004HO

## Doctor of Clinical Dentistry Research A

- 6 units - semester 1
- 10 hours per week
- Eligibility: Doctor of Clinical Dentistry students only
- Assessment: demonstration of progress within research project, submission of research proposal

Students will undertake a research project related to the discipline named on the degree.

## DENT 8005HO

## Doctor of Clinical Dentistry Research B

- 6 units - semester 2
- 10 hours per week
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8004HO D Clin Dent Research A
- Assessment: demonstration of progress within research project, completion of literature review

Students will continue a research project related to the discipline named on the degree.

## DENT 8006HO

## Doctor of Clinical Dentistry Research C

- 6 units - semester 1
- 10 hours per week
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8005HO D Clin Dent Research B
- Assessment: demonstration of progress within research project, completion of experimental work

Students will continue a research project related to the discipline named on the degree.

## DENT 8007HO

## Doctor of Clinical Dentistry Research D

- 6 units - semester 1 or 2
- 10 hours per week
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8006HO D Clin Dent Research C

Students will continue a research project related to the discipline named on the degree.

## DENT 8010AHO/BHO

## Special Clinical Dent-Maxillofacial Facial Radiology VI

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics

The range of knowledge required to pursue specialist training in Dento-Maxillo-Facial Radiology can be divided into four sections: Basic physics and equipment: the production of xrays, their properties and interactions which result in the formation of a radiographic image; Radiation protection: the protection of patients and dental staff from the harmful effects of xrays; Radiography: the techniques involved in producing the various radiographic images; Radiography: the interpretation of these radiographic images.

The course comprises advanced aspects of dental radiology, including biological sciences, radiological sciences, radiography and radiology with advanced work being undertaken in the related disciplines of oral pathology, oral diagnosis and oral medicine. Students will attend radiology clinics in the Adelaide Dental Hospital, Royal Adelaide Hospital, Flinders Medical Centre as well as private clinics.

## DENT 8011AHO/BHO

Special Clinical Dent-Maxillofacial Facial Radiology VII

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8010A/BHO Specialist Clinical Dento-MaxilloFacial Radiology VI

This course builds upon knowledge and clinical skills developed in DENT 8010AHO/BHO Specialist Clinical Dento-Maxillo Facial Radiology VI.

## DENT 8012AHO/BHO

## Special Clinical Dent-Maxillofacial Facial Radiology VIII

- 24 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8011 AHO/BHO Specialist Clinical Dento-Maxillo-Facial Radiology VII

This course builds upon knowledge and clinical skills developed in DENT 8011AHO/BHO Specialist Clinical Dento-Maxillo Facial Radiology VII.

## DENT 8020AHO/BHO

## Specialist Clinical Endodontics VI

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics

This course provides knowledge and experience in: patient assessment, differential diagnosis of pulp and periradicular pathology; radiography and radiographic diagnosis; local anaesthesia and sedation; endodontic isolation; biological aspects of endodontics; chemo-mechanical preparation of root canals including applied pharmacology and therapeutics; endodontic materials, instruments and equipment; root canal filling techniques; evaluation of previous endodontic treatment; vital pulp therapies, and conservative endodontic management of pulpless teeth with associated periapical pathology. History of the discipline and detailed dento-legal reporting will be emphasised, as will the relationship of endodontics to other clinical disciplines and relevant aspects of related specialist disciplines will be covered.. Candidates will also explore the psychology of illness behaviour and patients' responses to trauma and treatment. Together Specialist Clinical Endodontics VI, VII and VIII aim to fulfil the requirements for graduate education as laid down in guidelines published by the Australian Society of Endodontology

## DENT 8021AHO/BHO

## Specialist Clinical Endodontics VII

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8020AHO/BHO Specialist Clinical Endodontics VI
- Corequisite: DENT 8001AHO/BHO Research Methods, Experimental Design, \& Ethics

The course provides further knowledge and clinical experience in: patient assessment, diagnosis; chemo-mechanical preparation of root; endodontic materials; root canal filling techniques; evaluation of previous endodontic treatment and vital pulp therapies. Both conservative and surgical management of pulpless teeth with
associated periapical pathology will be included. Candidates will gain experience in management of endodontic emergencies including assessment, diagnosis, initial management and replantation of teeth and subsequent treatment. The management of replanted and transplanted teeth will be covered including the aetiology and treatment of apical, external and internal tooth resorptive defects. Candidates will also learn techniques for the management of root perforations, restoration of endodontically treated teeth and discoloured teeth. Compromise endodontic procedures and management of the medically compromised patient will be covered.

## DENT 8022AHO/BHO

## Specialist Clinical Endodontics VIII

- 24 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8021AHO/BHO Specialist Clinical Endodontics VIII
- Corequisite: DENT 8001AHO/BHO Research Methods, Experimental Design, \& Ethics

This course aims to consolidate and extend knowledge, understanding and clinical experience. Candidates will be involved in the assessment, diagnosis and treatment of complex endodontic cases. Candidates will gain further experience in conservative and surgical endodontic techniques; management of endodontic emergencies, replantation and transplantation of teeth and the management of resorptive defects, perforations, and discoloured teeth. Management of medically compromised patients will be extended as will interdisciplinary management of complex cases.

## DENT 8030AHO/BHO

## Specialist Clinical Forensic Odontology VI

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics

History of forensic odontology. International legal systems and the coronial system. Relationship of the police to the practice of forensic odontology. Methods of investigation of civil and criminal matters. Preservation and recovery of dental evidence including forensic dental photography. Dental autopsy techniques and principles and practices of forensic dental identification. Interpretation of dental records. Single and multiple victim identification emphasising management, international protocols and cultural aspects. Computerisation in dental identification. Alternate methods of dental identification, including video and computer imaging in cranio-facial video superimposition. General principles of forensic pathology with emphasis on time of death, time since death, autopsy techniques and injury assessment.

Interdisciplinary nature of forensic specialities. The scope and history of physical anthropology. Osteology and anatomy of the skull and face. Comparative anatomy and evolution. The importance of anthropology in disaster victim identification. General principles of oral pathology with particular emphasis on the structure of human skin, patterns of injury and healing. Analysis of biting patterns and forces of the masticatory system. Collection and preservation of bitemark evidence. Principles and techniques of bite mark investigations. Forensic report writing. Presentation of evidence in court. Occupational health and safety. Public speaking and community education in forensic odontology.

## DENT 8031AHO/BHO

## Specialist Clinical Forensic Odontology VII

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8030AHO/BHO Specialist Clinical Forensic Odontology VI
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics

History of forensic odontology. International legal systems and the coronial system. Relationship of the police to the practice of forensic odontology. Methods of investigation of civil and criminal matters. Preservation and recovery of dental evidence including forensic dental photography. Dental autopsy techniques and principles and practices of forensic dental identification. Interpretation of dental records. Single and multiple victim identification emphasising management, international protocols and cultural aspects. Computerisation in dental identification. Alternate methods of dental identification, including video and computer imaging in cranio-facial video superimposition. General principles of forensic pathology with emphasis on time of death, time since death, autopsy techniques and injury assessment. Interdisciplinary nature of forensic specialities. The scope and history of physical anthropology. Osteology and anatomy of the skull and face. Comparative anatomy and evolution. The importance of anthropology in disaster victim identification. General principles of oral pathology with particular emphasis on the structure of human skin, patterns of injury and healing. Analysis of biting patterns and forces of the masticatory system. Collection and preservation of bitemark evidence. Principles and techniques of bite mark investigations. Forensic report writing. Presentation of evidence in court. Occupational health and safety. Public speaking and community education in forensic odontology.

## DENT 8032AHO/BHO

## Specialist Clinical Forensic Odontology VIII P

- 24 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8030AHO/BHO Specialist Clinical Forensic Odontology VI
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics

History of forensic odontology. International legal systems and the coronial system. Relationship of the police to the practice of forensic odontology. Methods of investigation of civil and criminal matters. Preservation and recovery of dental evidence including forensic dental photography. Dental autopsy techniques and principles and practices of forensic dental identification. Interpretation of dental records. Single and multiple victim identification emphasising management, international protocols and cultural aspects. Computerisation in dental identification. Alternate methods of dental identification, including video and computer imaging in cranio-facial video superimposition. General principles of forensic pathology with emphasis on time of death, time since death, autopsy techniques and injury assessment. Interdisciplinary nature of forensic specialities. The scope and history of physical anthropology. Osteology and anatomy of the skull and face. Comparative anatomy and evolution. The importance of anthropology in disaster victim identification. General principles of oral pathology with particular emphasis on the structure of human skin, patterns of injury and healing. Analysis of biting patterns and forces of the masticatory system. Collection and preservation of bitemark evidence. Principles and techniques of bite mark investigations. Forensic report writing. Presentation of evidence in court. Occupational health and safety. Public speaking and community education in forensic odontology.

## DENT 8050AHO/BHO

## Specialist Oral and Maxillofacial Surgery VI

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: successful completion of Primary Examinations of the Royal Australian College of Dental Surgeons, appointment to a clinical training post, \& satisfactory progress with employment at the Royal Adelaide Hospital
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics

The course is designed to teach outpatient and inpatient clinical skills in oral and maxillofacial surgery to the basic surgical science levels. Students initially embark upon a course of study which bridges the teaching of anatomy between the undergraduate program for dentistry and medicine, in particular below clavical gross anatomy. Students are introduced to skills of medical
practice, the scientific study of the processes of disease states and the ethics of medicine. Emphasis will be placed on the acquisition of skills in clinical interviewing and communication as well as those required to elicit and record a clinical history and to perform a physical examination. Clinical data gathered at the bedside is to be interpreted in the context of a scientific understanding of the aetiology, pathophysiology and prognosis of common disease processes, aided where appropriate by information derived from laboratory and other diagnostic investigations. In the study of biomedical ethics, the student will be equipped with the conceptual tools to think clearly about ethical problems and reach sound ethical judgements in a clinical context. This course is usually taken over two years.

## DENT 8051AHO/BHO

## Specialist Oral and Maxillofacial Surgery VII

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8050A/BHO Specialist Oral \& Maxillofacial Surgery VI; MBBS AND BDS degrees.

The course covers all academic and clinical aspects of modern Oral and Maxillofacial Surgery. This includes dento alveolar surgery, maxillofacial injuries, preprosthetic surgery including implants, orthognathic surgery, temporomandibular joint surgery and aspects of cleft surgery and head and neck oncology.

## DENT 8052AHO/BHO

## Specialist Oral and Maxillofacial Surgery VIII

## - 24 units - full year

- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8051A/BHO Specialist Oral \& Maxillofacial Surgery VII
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics

This course builds upon knowledge and clinical skills developed in DENT 8051AHO/BHO Specialist Oral and Maxillofacial Surgery VII.

## DENT 8060AHO/BHO

## Specialist Oral Medicine VI

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics

Oral Medicine is that specialty in dentistry concerned with the diagnosis and non-surgical management of medically related disorders or conditions affecting the oral and maxillofacial region.

The main objective of this course is to provide students with sufficient knowledge of systemic and oral diseases to enable them to: become competent in recognising the various forms of oral diseases; modify the dental treatments of medically compromised patients; understand the relationships of systemic diseases to the oral cavity, and related tissues; effectively utilise the various diagnostic procedures available; become familiar with the principles of the scientific method as it applies to the practice of dentistry; be knowledgeable about public health hazards and their management in dental practice; understand the occlusal, neuromuscular; articular components of mandibular function; diagnose and non surgically manage orofacial pain and temporomandibular disorders; manage primary oral mucosal diseases and oral mucosal manifestations of systemic diseases.

Specifically, candidates will study the anatomy of the head and neck, the histology and physiology of oral tissues, and basic principles in pathology and immunology. Participation in basic oral histopathology tutorials will be required throughout the course. The clinical component in this first year will consist of introductory oral medicine clinical sessions and related activities.

## DENT 8061AHO/BHO

## Specialist Oral Medicine VII

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8060A/BHO Specialist Oral Medicine VI

Students will continue studies outlined in Specialist Oral Medicine VI , and also undertake instruction in diagnostic imaging, pain control, biopsy techniques, clinical oral medicine, and management of the medically compromised patient. Candidates will also be required to attend weekly Head and Neck cancer clinics, oral histopathology seminars, as well as seminars in specific oral pathology topics. Study of the pathology and management of disease in core body systems will be commenced.

## DENT 8062AHO/BHO

## Specialist Oral Medicine VIII

- 24 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8061A/BHO Specialist Oral Medicine VII

This component of the program builds on the skills and knowledge acquired in the Specialist Oral Medicine VII at a more advanced clinical level. Students will also be required to undertake Clinico Pathological case presentations; to study the management of temporomandibular joint disorders; and to undertake further rotations in haematology, immunology, clinical chemistry, and dermatology.

## DENT 8070AHO/BHO

## Specialist Oral Pathology VI

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics

This course deals with the systematic pathology and histopathology of the oral mucosa, the jawbones, the salivary glands, the temporomandibular joint, the maxillary sinus, the teeth, cancer of the oral region and odontogenic tumours. Candidates are involved in general pathology and all facets of diagnostic oral histopathology. Candidates will also have rotations and attend seminars at the Institute of Medical and Veterinary Sciences (IMVS). At the completion of the course the student will be a competent diagnostician with comprehensive knowledge of all aspects of diagnostic oral histpathology.

Specifically, candidates in their first year will study the histology and physiology of oral tissues, and the histology of major organs. Basic principles in pathology and immunology will be reinforced by attendance at lectures and submission of relevant essays. Students will also study basic systematic general histopathology using appropriate slide sets and other resources. In their first year, candidates will also commence instruction in basic oral histopathology diagnosis.

## DENT 8071AHO/BHO

## Specialist Oral Pathology VII

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8070A/BHO Specialist Oral Pathology VI

In addition to continuing attendance at diagnostic general and oral histopathology seminars described in Specialist Oral Pathology VI, candidates will also undertake additional IMVS rotations in immunohistochemistry, cytology, and general anatomic pathology. Students will commence writing formal diagnostic histopathology reports, and continue to review archival and current oral histopathological diagnostic cases. Reporting on general pathology cases will be introduced, and candidates will be expected to present seminars on specific oral pathology topics.

## DENT 8072AHO/BHO

## Specialist Oral Pathology VIII

- 24 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8071A/BHO Specialist Oral Pathology VII

This component of the program builds on the skills and knowledge acquired in the Specialist Oral Pathology VII course at a more
advanced level in terms of case load and diagnostic expertise. Furthermore, candidates will undertake a series of rotations including autopsy procedures and diagnostic electron microscopy, and study advanced topics in histopathology.

## DENT 8080AHO/BHO

## Specialist Orthodontics VI

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics

Normal growth changes of the body in general, and of the craniofacial complex in particular, with reference to growth of the jaws, eruption of the teeth and development of normal occlusion. Applied anatomy of the head and neck with special reference to the temporomandibular joint and to the muscles that attach directly and indirectly to the mandible. The physiology of the stomatognathic system, and in particular the physiology of sucking, mastication, deglutition, respiration and phonation, and the effect that soft tissues have on the developing occlusion. A study of growth and development, encompassing embryology, histology, genetics, anthropology and oral pathology. The principles of examination and orthodontic diagnosis on patients, which involves cephalometrics and radiology. A detailed study of the periodontium and its reaction to orthodontic tooth movement. The properties and uses of orthodontic materials. Cleft palate and other dentofacial deformities and their surgical management. Clinical orthodontic treatment with removable and fixed appliances, including Begg and Edgewise techniques, is a major component.

## DENT 8081AHO/BHO

## Specialist Orthodontics VII

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8080A/BHO Specialist Orthodontics VI
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics

This course builds upon knowledge and clinical skills developed in DENT 8080AHO/BHO Specialist Orthodontics VI.

## DENT 8082AHO/BHO

## Specialist Orthodontics VIII

- 24 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8081A/BHO Specialist Orthodontics VII
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics

This course builds upon knowledge and clinical skills developed in DENT 8081AHO/BHO Specialist Orthodontics VII.

## DENT 8090AHO/BHO

## Specialist Paediatric Dentistry VI

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics
- Assessment: assignments, case presentations, clinical performance \& written exam

This course involves a series of seminars, assigned readings and registrar-prepared assignments on the basic sciences which form the basis of the specialty and the clinical aspects of the speciality. Students are introduced to the clinical management of dental problems in children and adolescents including an introduction to the dental management of children with medically compromising conditions. At the conclusion of this subject students should have acquired the following generic skills: Have an advanced understanding of the changing knowledge base in paediatric dentistry; Be able to evaluate and synthesise the research and professional literature in the field of paediatric dentistry; Have the capacity to manage competing demands on time, including selfdirected project work, and the capacity to value and participate in projects, which require teamwork; Have the capacity to engage where appropriate with issues in contemporary society; Have welldeveloped problem-solving abilities in the area of paediatric dentistry that are characterised by a flexible approach; Welldeveloped problem-solving abilities in the area of paediatric dentistry that are characterised by a flexible approach; Advanced competencies in areas of professional expertise relevant to paediatric dentistry; A broad understanding of the international context and sensitivities involved in the area of paediatric dentistry.

## DENT 8091AHO/BHO

## Specialist Paediatric Dentistry VII

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8090A/BHO Specialist Paediatric Dentistry VI
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics
- Assessment: assignments, case presentations, clinical proficiency, written exams

This course involves a series of seminars, assigned readings, assignments and case presentations on clinical aspects of the specialty. Students will also be involved in the clinical management at an advanced level of children and adolescents with a wide variety of clinical dental problems including those complicated by
medical compromise. At the conclusion of this course students should have acquired the following generic skills: A superior capacity to articulate their knowledge and understanding in oral and written presentations; An understanding of the significance and value of their knowledge to the wider community (including business and industry); The capacity to engage where appropriate with issues in contemporary society; Professional knowledge and skills in child and adolescent welfare and management; Highlydeveloped problem-solving abilities in the area of paediatric dentistry that are characterised by a flexible approach; The ability to offer leadership in the area of paediatric dentistry; The capacity to value and participate in projects which require teamwork; An understanding of the significance and value of their knowledge to the wider community (including business and industry).

## DENT 8092AHO/BHO

## Specialist Paediatric Dentistry VIII

- 24 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8091A/BHO Specialist Paediatric Dentistry VII
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics
- Assessment: clinical performance, completion of patient log book, written \& oral exams

This course involves a series of seminars, assigned readings, assignments and case presentations on clinical aspects of the specialty. Students will be involved with the clinical management at a specialist level of children and adolescents with a wide variety of clinical dental problems. At the conclusion of this course, students should have acquired the following generic skills: Advanced skills and techniques applicable to the discipline of paediatric dentistry; The ability to provide leadership in paediatric dentistry; A superior capacity to articulate their knowledge and understanding in oral and written presentations; Advanced understanding of the international context and sensitivities of the specialist area.

## DENT 8100AHO/BHO

## Specialist Periodontics VI

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design, \& Ethics
- Assessment: written, clinical \& viva voce exams

This program leads to specialisation in Periodontics; it gives students a contemporary understanding of periodontal diseases and other conditions that are known causes of periodontal attachment loss. This is the major clinical subject taken over the first year of tuition. It involves an introduction to clinical procedures, advanced clinical training, case presentations, journal
reviews and seminars. The clinical procedures covered include: infection control procedures, clinical photography, patient examination, patient charting, treatment planning, patient management, maintenance therapy, advanced conservative therapies, introduction to surgical techniques and introduction to implant surgery. The seminar topics run for one hour each week and students are expected to actively participate in these sessions by way of presentation and discussion. Topics covered include: natural history of periodontitis, diagnosis, treatment planning, plaque formation, monitoring and control, chemotherapy, surgical anatomy, and implants. A number of didactic courses must be taken during participation in this course including biology of the periodontium and microbiology and immunology of the periodontal diseases.

## DENT 8101AHO/BHO

## Specialist Periodontics VII

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8100AHO/BHO Specialist Periodontics VI
- Assessment: continuous, and if required, either one or all of additional exams - written, clinical \& viva voce

This is the major clinical course taken over the second year of tuition. It involves a continuation of clinical procedures introduced and developed during the first year of the program. This course involves advanced clinical training in periodontics, case presentations, journal reviews and seminars. The clinical procedures covered include: advanced surgical techniques, regenerative periodontal surgery, 2nd stage implant surgery, interaction with other specialties, mucogingival surgery, regenerative periodontal surgery. The seminar topics which run for DENT 8100AHO/BHO are available for attendance should the student wish to review any of the fundamental topics covered. The journal reviews are designed to continue the processes developed in DENT 8100AHO/BHO. Students are expected to cover both the current periodontal literature as well as the 'classic papers' of periodontology. Active participation in these sessions is a requirement. Case review sessions are run weekly and students are required to present their cases for discussion of management and treatment planning principles. A number of didactic courses must be taken over the duration of this course including, clinical oral medicine and oral pathology, implantology for dental specialists and periodontal restorative interrelationships.

## DENT 8102AHO/BHO

## Specialist Periodontics VIII

- 24 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8101AHO/BHO Specialist Periodontics VI
- Assessment: written, clinical \& viva voce exams

This is the major clinical course taken over the third year of tuition. It involves a continuation of clinical procedures introduced and developed during the first two years of the program. This course involves advanced clinical training in periodontics, case presentations, journal reviews and seminars. Clinical procedures covered include: consolidation of topics covered in DENT 8100AHO/BHO and DENT 8101AHO/BHO and some exposure to general oral surgical procedures in hospital settings. The seminar topics which run for DENT 8100AHO/BHO and DENT 8101AHO/ BHO are available for attendance, should the candidate wish to review any of the fundamental topics previously covered. The Journal reviews are designed to continue the processes developed in DENT 8100AHO/BHO and DENT 8101AHO/BHO. Students are expected to cover both the current periodontal literature as well as the "classic papers" of Periodontology. Active participation in these sessions is a requirement. Case review sessions are run weekly and students are required to present their cases for discussion of management and treatment planning principles.

## DENT 8110AHO/BHO

## Specialist Prosthodontics VI

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Corequisite: DENT 8001 AHO/BHO Research Methods, Experimental Design, \& Ethics
- Eligibility: Doctor of Clinical Dentistry students only
- Corequisite: DENT 8001 AHO/BHO Research Methods, Experimental Design, \& Ethics

This component of the program includes seminars, associated coursework, supervised clinical practice and laboratory experience in the core aspects of prosthodontics. These include fixed and removable prosthodontics, implantology, the management of craniomandibular disorders and maxillo-facial prosthodontics.

By the completion of the course students will have an understanding of the theoretical basis of prosthodontic practice and will have developed their clinical and laboratory skills in each of the core discipline.

## DENT 8111AHO/BHO

## Specialist Prosthodontics VII

- 8 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8110 AHO/BHO Specialist Prosthodontics VI

This component of the program builds on the skills and knowledge acquired in DENT 8110AHO/BHO Specialist Prosthodontics VI course and introduces students to more advanced aspects of prosthodontics through seminars, coursework, clinical practice and laboratory experience. The program also gives students an
opportunity to extend their understanding of a range of associated topics in areas of dentistry, medicine and other allied health disciplines.

By the completion of the program students will have an in depth knowledge of the theoretical basis of prosthodontic practice and will have developed their clinical and laboratory skills to an advanced level through experience in all aspects of prosthodontics.

## DENT 8112AHO/BHO

## Specialist Prosthodontics VIII

- 24 units - full year
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8111AHO/BHO Specialist Prosthodontics VII

This component of the program allows students to consolidate their expertise in all of the aspects of prosthodontics through continuing seminars, coursework, clinical practice and laboratory experience. The course also gives selected students an opportunity to extend their experience through appropriate extra-mural practice under the guidance of selected mentors.

By completion of the course students will have the knowledge and skill required for independent specialist practice in prosthodontics.

## DENT 8113AHO/BHO

## Specialist Clinical Special Needs Dentistry VI

- 8 units - full year
- 20 hours per week
- Eligibility: Doctor of Clinical Dentistry students only
- Corequisite: DENT 8001A/BHO Research Methods, Experimental Design and Ethics
There are four major components to Special Needs Dentistry which commence in the first year and progressively develop during the second year and final year. The topic basic principles of general medicine has a focus on the oral manifestations of medical conditions and dental management of medically compromised patients. This runs concurrently with classes in oral medicine and oral pathology. While exploring the area of medically-challenged patients students acquire an appreciation of reasonable treatment goals, dental management, and ethical and legal issues in relation to medically-challenged, intellectually-disabled, psychiatricallydisabled and functionally-impaired aged patients. In the area of general clinical dentistry students will provide routine care modified to suit the individual needs of the patient with relevance to their medical or challenged condition while interacting with general and specialist areas of dentistry. Students will also work with patients requiring hospital management for underlying medical conditions such as head and neck cancer, infectious diseases, cardiac and other major systems.


## DENT 8114AHO/BHO

## Specialist Clinical Special Needs Dentistry VII

- 8 units - full year
- 20 hours per week
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8113 AHO/BHO Specialist Clinical Special Needs Dentistry VI

The middle year of the course will be spent in reinforcing the experiences of first year in the areas areas of general medicine, challenged patients, general dental treatment, medical management and extending it to more complex areas of dental management and medically compromised conditions.

## DENT 8115AHO/BHO

## Specialist Clinical Special Needs Dentistry VIII

- 24 units - full year
- 20 hours per week
- Eligibility: Doctor of Clinical Dentistry students only
- Prerequisite: DENT 8114AHO/BHO Specialist Clinical Special Needs Dentistry VII

The intent of the third year is to consolidate and improve knowledge and skills. Participation in regular seminars continues but the majority of the experience is gained from clinical service in the Special Needs dental clinic or attendance at appropriate specialist outpatient and inpatient clinics.

## ODONT 6006AHO/BHO

## Anatomy and Forensic Anthropology

- 4 units - full year
- Eligibility: Graduate Diploma in Forensic Odontology students only
- Assessment: essay, seminar participation

This course looks at the scope and history of physical anthropology generally and in South Australia. Areas covered include osteology of the skull, comparative anatomy and evolution of head form and the masticatory system as well as principles and methodology for study of human growth and development,craniofacial growth and development and normal age changes,human and dental genetics,craniofacial malformations and paleopathology, somatometry, craniometry and cephalometry with emphasis on new imaging techniques, osteology of race and disaster victim identification including cultural factors, management and international protocol.

## ODONT 6008AHO/BHO

## Casework in Forensic Odontology

- 6 units - full year
- supervision as required
- Eligibility: Graduate Diploma in Forensic Odontology students only
- Assessment: casework performance, case-book, seminar presentation, essay, viva

This course will require students to participation in routine casework undertaken by the Forensic Odontology Unit. Students will perform and report on casework, including Coronial oral autopsies, bitemark examinations and age estimations. Preparation of case records and reports will be required for all cases. Attendance at the city mortuary and Courts of Law is required.

## ODONT 6012HO

## Principles and Methods of Forensic Odontology

- 6 units - semester 1
- 2 hour seminar per week
- Eligibility: Graduate Diploma in Forensic Odontology students only
- Assessment: seminar participation, essay

This course covers areas such as: history and role of forensic odontology in community dentistry, legal systems and role and jurisdiction of Courts of Law, the coronial system and practice of the Coroner's Office, expert evidence, methods of investigation of civil and criminal matters, relationship of police to forensic odontology, preservation and recovery of dental evidence from scenes, principles and techniques of video and computer imaging in cranio-facial superimposition, age estimation techniques, procedures for investigation of bitemarks and the principles of disaster victim identification.

## ODONT 6014AHO/BHO

## Forensic Odontology Research

- 4 units - full year
- Eligibility: Graduate Diploma in Forensic Odontology students only
- Assessment: seminar presentation, research report

Students will undertake a small research project in an aspect of Forensic Odontology or related discipline.

## ODONT 6015HO

Integrated Forensic Science

- 6 units - semester 2
- Eligibility: Graduate Diploma in Forensic Odontology students only
- Assessment: seminar presentation, essay

Highlights the interdisciplinary nature of forensic science. This subject aims to introduce the students to the range of forensic disciplines used by police and legal services. The student will develop an understanding of the overall management of a crime investigation, and an awareness of the place of forensic odontology in an investigation. The importance of teamwork will be emphasised.

## DESIGN STUDIES

## DESST 6000

## Special Topic (Design) IVA

- 4 units
- Up to 4 hours lectures/seminars/ studios per week, field study trips
- Eligibility: Grad Cert./Grad.Dip. Des.St. and G.Cert/G.Dip.Des.St. (Land.) students only
- Assessment: assignments, projects
- Check availability with School

Course description will be provided by the School when specialist teaching is available.

## DESST 6006

## Special Topic (Design) IVB

- 4 units - semester 1
- Up to 4 hours lectures/seminars/ studios per week, field study trips
- Eligibility: Grad Cert./Grad.Dip. Des.St. students only
- Assessment: assignments, projects
- Check availability with School

Course description will be provided by the School when specialist teaching is available.

## DESST 6010

## Special Topic (Landscape) IVB

- 4 units - semester 2
- Up to 4 hours lectures/seminars/ studios per week, field study trips
- Eligibility: Grad Cert./Dip. Des.St.(Land.) and Grad.Cert./Dip.Des.St. students only
- Assessment: assignments, projects
- Check availability with School

Course description will be provided by the School when specialist teaching is available.

## DESST 6011

## Special Topic (Landscape) IVA

- 4 units - semester 1
- Up to 4 hours lectures/seminars/ studios per week, field study trips
- Eligibility: Grad Cert./Grad.Dip. Des.St.(Land.) students only
- Assessment: assignments, projects
- Check availability with School

Course description will be provided by the School when specialist teaching is available.

## DESST 6018

## Technology in Design IV

- 6 units - semester 1
- Up to 8 hours per week including lectures, studios, tutorials
- Eligibility: Grad.Dip.Des.St. students only
- Quota will apply
- Restriction: DESST 6016 Technology in the Built Environments IV
- Assessment: Design projects, assignments, quizzes

This course explores the environmental and technological aspects of design of the built environments. Key topics include climate; thermal performance; thermal comfort; natural light; noise control; building structures; construction materials, techniques and processes; and the interrelationships between plants, hard landscape and domestic scale building construction. The course also introduces students to related Standards, Codes and Regulations on design. The projects encourages innovative and investigative designs that integrate environmental, human and technical issues, with the use of different manual and digital techniques to express design as well as to apply the conventions of technical documentation.

## DESST 6019

## Culture, History and Designed Environments IV

- 6 units - semester 2
- Up to 8 hours per week including lectures, studios, tutorials
- Eligibility: Grad.Dip.Des.St. \& Grad.Dip.Des.St.(Land.) students only
- Quota will apply
- Restriction: Both of DESST 6015 Twentieth Century Architecture and Landscape IV and DESST 6009 Design and Environments IV
- Assessment: Design projects, assignments

This course is concerned with histories and theories of architecture, landscape architecture, and urban design, and related issues in design discourse since the 19th century. Formal and theoretical developments are placed in a coherent historical
framework through which further spatial and cultural dimensions may be better understood. While focussing on the global reception and resistance to Modern (European) ideas and forms, the course also addresses issues of cultural difference, including differences in design disciplines and their respective (sub)cultures, and different social backgrounds, needs, preferences, and how these are reflected and responded to in the development of designed environments and urban form. Coursework entails both written and design assignments. These may include critical explorations of specific design theories and relationships through short analytical texts and three-dimensional compositions, as well as practical translations of theory into built form through the design of small buildings and landscapes in urban context.

## DESST 6020

## Urban Design IV

- 6 units - semester 1
- Up to 6 hours lectures/seminar/studios/tutorials per week, field camp may be required.
- Eligibility: Grad.Dip.Des.St. \& Grad.Dip.Des.St.(Land.) students only
- Quota will apply
- Restriction: DESST 6013 Issues in Urban and Landscape Sustainability IV
- Assessment: Main project, assignments

This course centres upon 'place-making' in urban and rural settled environments. It focuses on the diversity of philosophical positions which inform current contemporary approaches to urban and landscape sustainability understood in its widest sense, including not only the 'environmental', but the resource, cultural, social, political, economic, institutional and professional realms, and position them within a design inquiry. Topics typically include introduction to strategic and statutory planning and legislative frameworks, various 'sustainable' environmental systems, economic feasibility study of a design proposal, various standards and codes, and international agreements and impact on local practices. In teamwork and individual work students will explore an existing development and develop a 'sustainable' design/redevelopment proposal, presented in selective and concise graphical presentation using manual and digital techniques, as well as in concise professional report writing.

## DESST 6021

## Natural and Landscape Systems IV

- 6 units - semester 1
- Up to 6 hours lectures/seminar/tutorials per week
- Eligibility: Grad.Dip.Des.St.(Land.) students only
- Quota will apply
- Restriction: DESST 6017 Natural Systems and Design IV
- Assessment: assignments, presentations, posters, folios, field reports

This course provides an introduction to: the concept of systems thinking, including 'natural' and human-made systems with an emphasis upon the built environment context; sciences of landscape, climate, biology, ecology, wetlands, arid landscapes, soil and water eco-units; particular characteristics of Australian and local 'natural' systems; relationship between 'natural' systems and design/construction as well as their impacts on each other; and the concept of sustainability of environmental systems. The course also provides an introduction to the notion of different stakeholders in natural and constructed environments, their needs and aspirations. The course develops effective communication skills especially through oral presentation with appropriate visual aids, and written communication following academic protocols.

## DESST 6022

## Architecture Design Studio IV

- 6 units - semester 2
- Up to 6 hours lectures/digital studio per week
- Eligibility: Grad.Dip.Des.St. students only
- Quota will apply
- Assumed Knowledge: DESST 6018 Technology in Design IV; DESST 6020 Urban Design IV
- Restriction: DESST 6002 Building Design Studio IV
- Assessment: assignments, final project

This course focuses on the exploration of contemporary architecture theories and their application to the design and development of medium scale building project(s). Emphasis will be placed on development of brief and program; developing design to respond to the local environments with the application 'passive' design principles, natural and artificial lighting, and building ergonomics; selecting building materials suitable for the construction; developing construction details; sizing of the structural elements; performing life-cycle cost analysis; and presenting design work with manual/hand and digital drawing and physical modelling using the conventions in architectural representation as well as using innovative digital techniques.

## DESST 6023

## Landscape Architecture Design Studio IV

- 6 units - semester 2
- Up to 6 hours lectures/studios/workshops per week. A field camp may be required.
- Eligibility: Grad.Dip.Des.St. (Land.) students only
- Quota will apply
- Assumed Knowledge: DESST 6021 Natural and Landscape Systems IV, DESST 6020 Urban Design IV
- Restriction: DESST 6012 Landscape Design Studio IV
- Assessment: Design projects, assignments, presentations

This course focuses on the exploration of contemporary landscape architecture theories and their application to the design and development of medium to large-scale landscape project(s). Emphasis will be placed on development of brief, process, and program; developing design to respond to the user needs assessed through community consultation and to local environments by taking into consideration topography, vegetation, soil/geology, hydrology and climatology; developing appropriate structure and construction details for the planting and hard scape design as well as irrigation systems; applying night lighting where appropriate; performing life-cycle cost analysis; and presenting design work with manual/hand and digital drawing and physical modelling using the conventions in architectural representation as well as using innovative digital techniques. The course also introduces the use of Geographic Information System (GIS) in landscape projects.

## Design Studies - Digital Media

## DESSTDM 7004

## Design with Digital Media Masters Project

- 12 units - semester 1 or 2
- Hours vary
- Eligibility: M.Design Studies (Digital Media) students only
- Prerequisite: all required courses in Grad.Dip.Design Studies (DM)
- Assessment: assignments/projects

This course comprises an individual or group culminating design, planning and/or research project that addresses an aspect of design, professional practice or design education in the context of digital media. Students will negotiate with the course coordinator a topic that reflects their own particular interests and the mode of digital and/or printed submission that is to be adopted.

## DESSTDM 7006

## Interactivity in Design with Digital Media

- 6 units - semester 1
- Contact hours vary - periods of intensive group contact \& periods of less frequent individual tutorials
- Eligibility: Design Studies (Digital Media) students only
- Corequisite: ARCHDM 7007 Rules and Contingency in Design with Digital Media
- Restriction: DESSTDM 7002 Design with Digital Media B
- Assessment: projects and digital journal

This course applies concepts of rules, grammar and contingency to the design of virtual places. It explores ways in which web sites, game engines, and virtual worlds allow different ways of exploring data and space with and without symbolic human presence as avatars. Typical projects include the design and production of web sites and interactive virtual worlds.

## DESSTDM 7007

## Representation in Design with Digital Media

- 6 units - semester 2
- Contact hours vary - periods of intensive group contact and periods of less frequent individual tutorials
- Eligibility: Design Studies (Digital Media) students only
- Corequisite: DESSTDM 7008 Narrative in Design with Digital Media
- Restriction: DESSTDM 7003 Design with Digital Media C
- Assessment: projects, digital journal

This course focuses on the interrelationship of abstraction, modification and realism in the making and representation of art and design with digital media. As with traditional media, effective representations of existing or proposed scenes and objects often seek to abstract the 'essentials' and emphasise them rather than mirror reality. Conversely, apparent effects of realism can be achieved by accentuating visual phenomena. Issues of accuracy, authenticity and authorship arise, most obviously in the digital manipulation of images. The course examines these issues while developing skills in surface representation, lighting simulation and effects, and the art and design concepts of making series and derivations. Typical projects include two-dimensional animation, collage and image processing for digital construction.

## DESSTDM 7008

## Narrative in Design with Digital Media

- 6 units - semester 2
- Contact hours vary - periods of intensive group contact \& periods of less frequent individual tutorials
- Eligibility: Design Studies (Digital Media) students only
- Corequisite: DESSTDM 7007 Representation in Design with Digital Media
- Restriction: DESSTDM 7003 Design with Digital Media C
- Assessment: projects, digital journal

This course focuses on the 'telling of stories' through the separate and combined use of still image sequences and animation. The course emphasises techniques of creative direction and control while developing skills in typical narrative and moving image software, including post production software and associated sound as well as visual editing. Typical projects are story boards, character development, multiple image 'slide shows' and short animations.

## ECONOMICS

## BUSINESS 7000

## Social Challenges to Global Business

- 3 units - semester 2
- Assessment: written responses to questions posed in specialised case studies, analytical essay centred on one of highlighted societal concerns

This course investigates modern societal challenges and concerns relating to international business and trade including: the environment, international labour standards, product health and safety considerations, intellectual property rights, corruption, and security in times of conflict. These issues raise problems of practical, ethical, tactical and strategic natures. The course would provide an understanding of the range of current global issues and look at strategies for successful business operations in the modern environment including approaches to the development and maintenance of a positive organisational reputation

## ECON 5000

## Environmental Economics E

- 3 units - semester 1
- 2 lectures, 1 tutorial per week
- Eligibility: Grad Cert in Engineering (Environmental Engineering) students only
- Assessment: Essays, exams, tutorials

Introduction to the principles of microeconomics. The basic economic paradigm: unlimited demands and scarce resources. The free market; market failure; externalities in production and consumption; public goods; monopolies. Economic and social decision-making. Distributional impacts of projects including intergenerational effects. The effects of pollution charges and regulation. Depletion and pricing of non-renewable resources. An economic perspective to global environmental issues. Steady state economics.

## ECON 7001

## Applied Econometrics IIID

- 3 units - semester 1
- 2 lectures, 1 tutorial a week
- Prerequisite: ECON 7051 Economic \& Financial Data Analysis IID or equivalent
- Assessment: final exam, tutorial participation, project

The course aims to develop an understanding of standard econometric methods, a capacity to formulate research problems so that they are amenable to quantification and a capacity to assess empirical research in economics critically. Tutorials will
include applications of econometric methods which use packaged programs.

## ECON 7005

## Resource \& Environmental Economics IIIA

- 4 units - semester 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID
- Assessment: essays, exams, tutorials

This course aims to introduce students to key themes and debates in the management of natural resources in the process of development. The course will analyse some of the complex causes and environmental consequences of unsustainable development in the developing world. Topics that may be covered include: market and institutional failures, the trade-development-environment nexus, the role of forests and biodiversity in development and more generally the role of natural resources in development.

## ECON 7007

## International Finance IIIA

-4 units - semester 1

- 2 lectures, 1 tutorial a week
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID, ECON 7071 Macroeconomic Theory \& Policy IID
- Assessment: tutorial work \& final exam

This course deals with the analysis of two important and related macroeconomics issues in open economies: the exchange rate and the capital flows. The objectives of the course are two-fold: 1) to introduce main concepts, principles and models in the theory and empirical works in those two key areas of International Finance; 2) to apply the analytical tools to understand the relevant policy issues in the global markets. Based on additional reading materials (mostly from The Economist (a weekly magazine)), discussions on relevant current events from various parts of the globe will be carried out.

## ECON 7009

## Mathematical Economics (H)

- 4 units - semester 1
- 2 hour lecture a week
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID
- Assessment: weekly assignments, mid-semester exam and final exam

This course deals with dynamic economic models. The main technical tool is optimal control. Some familiarity with multivariable calculus and some knowledge of integrals are desirable. A sound
knowledge of intermediate microeconomics is also expected. There are no other prerequisites but it is strongly recommended that all students intending to enrol in this course attend the Maths Review which is presented during the two weeks preceding the start of semester 1. The first part of the course will be spent on a slow introduction to optimal control with applications to resource economics. The second part will deal with the 'new' growth theory, or endogenous growth, and will thus attempt to explain several mechanisms at the origin of economic growth as well as studying policies which could enhance it.

## ECON 7011

## Consumers, Firms \& Markets IID

- 3 units - semester 1 or 2
- 2 lectures, 1 tutorial a week
- Assumed Knowledge: introductory microeconomics
- Assessment: assignments and exam

This course builds on the microeconomic principles studied in the Level I Economics courses and provides an analysis of the way in which the market system functions as a mechanism for coordinating the independent choices of individual economic agents. It develops a basis for evaluating the efficiency and equity implications of competition and other market structures, and a perspective on the appropriate role of government. Included are the study of consumer choice, production and cost, market structure, and market failure.

## ECON 7016

## Resource \& Environmental Economics IIID

- 3 units - semester 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID
- Assessment: essays, exams, tutorials

This course aims to introduce students to key themes and debates in the management of natural resources in the process of development. There will be a particular, but not exclusive, focus on resource and environmental problems in less industrialised countries. The course will analyse some of the complex causes and environmental consequences of unsustainable development in the developing world. Topics that may be covered include: market and institutional failures, the trade-development-environment nexus, the role of forests and biodiversity in development and more generally the role of natural resources in development.

## ECON 7022

## Econometrics IIID

- 3 units - semester 2
- 2 lectures, 1 tutorial per week
- Prerequisite: credit standard in ECON 7051 Economic \& Financial Data Analysis IID or equivalent
- Assessment: project, final exam

The objective of this course is to integrate economic models and econometric methods. Particular attention is paid to the relationship between economic and statistical models in selecting the appropriate econometric tools, and on the interpretation of the resulting statistics. Topics covered include single equation estimation under the statisticians ideal conditions, and econometric methods to deal with the violation of these conditions, and estimation of simultaneous equation models.

## ECON 7024

## Special Topics (H)

- 4 units - semester 1 or 2
- 2 lectures, 1 tutorial a week
- Assessment: determined in consultation with students

This course will cover selected topics which are not currently covered elsewhere in the Economics curriculum at level IV. The selection of topics will depend on the availability of staff, including visitors, and on their teaching and research interests.

## ECON 7025

## Microeconomics A(H)

- 4 units - semester 1
- 2 hour lecture, 1 hour workshop per week
- Prerequisite: ECON 7096 Economic Theory IIID or ECON 7095 Economic Theory IIIA
- Assessment: 2 assignments and final exam

This course gives an overview over basic microeconomic theory. Neoclassical consumer theory, producer theory, and equilibrium are covered in of the first half of the course. Monopoly and basic game theory (mainly with applications to industrial organisation) are covered in the second six weeks. The games included are static and dynamic games of complete information and static games of incomplete information. All topics are treated mathematically. A basic knowledge of multivariate calculus and optimisation is essential.

## ECON 7032

## Public Economics IIID

- 3 units - semester 1
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID
- Assessment: assignments and final exam

This course investigates the role of the public sector in the economic arena. We will attempt to explain why government intervention is needed, how it influences the behaviour of the private sector, what the welfare effects of such influences are, and so on. We will also survey political economy, which regards actions of the public sector as determined by a political process. Topics covered will include welfare economics, market failures, tax and expenditure, and political economy.

## ECON 7036

## International Trade and Investment Policy IID

- 3 units - semester 2
- 2 lecturers, 1 tutorial per week
- Assumed Knowledge: introductory microeconomics
- Assessment: mid-term test, final exam, tutorial presentations

This course examines the interactions between economic, political, strategic, and legal aspects of international trade and investment policies at national, regional and global levels. This includes the ways in which WTO members affect and are affected by regional and multilateral trade and economic integration agreements. The effects of trade and investment policy on the efficiency of resource use, on income distribution, and on national and global trade and economic welfare are analysed using trade theories and models of international trade and investment.

## ECON 7038

## Econometrics IIIA

- 4 units - not offered in 2006
- 2 lectures, 1 tutorial a week
- Prerequisite: credit standard in ECON 7051 Economic \& Financial Data Analysis IID or equivalent
- Assessment: project, final exam

The objective of this course is to integrate economic models and econometric methods. Particular attention is paid to the relationship between economic and statistical models in selecting the appropriate econometric tools, and on the interpretation of the resulting statistics. Topics covered include single equation estimation under the statisticians ideal conditions, and econometric methods to deal with the violation of these conditions, and estimation of simultaneous equation models.

## ECON 7044

## International Finance IIID

- 3 units - semester 1
- 2 lectures, 1 tutorial a week
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID, ECON 7071 Macroeconomic Theory \& Policy IID
- Assessment: tutorial work \& final exam

This course deals with the analysis of two important and related macroeconomics issues in open economies: the exchange rate and the capital flows. The objectives of the course are two-fold: 1) to introduce main concepts, principles and models in the theory and empirical works in those two key areas of International Finance; 2) to apply the analytical tools to understand the relevant policy issues in the global markets. Based on additional reading materials, discussions on relevant current events from various parts of the globe will be carried out.

## ECON 7050

## International Economic History IIID

- 3 units - semester 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID, ECON 7071 Macroeconomic Theory \& Policy IID (one may be taken concurrently)
- Assessment: tutorial work, essay, exams

The course surveys the evolution of the international economy in the 20th century. Attention is given to the development of world trade and trade policies, the international monetary system, international capital movements, the interwar depression, the postwar boom and the first and second periods of 'globalisation'. An examination is made of selected topics from the historical experience of the major industrial economies, especially the United States, which are relevant to an understanding of their current economic problems.

## ECON 7051

## Economic and Financial Data Analysis IID

- 3 units - semester 1 or 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: introductory statistics
- Assessment: tutorial work, mid-term test, exam

This course provides an introduction to the techniques used to analyse economic data sets. It focuses on the ability to use and understand the methods involved without requiring rigorous mathematical foundations. Basic computing skills using Excel will also be developed. It provides the theoretical and practical tools
and understanding necessary to carry out single equation linear regression analysis, which is the most commonly used statistical technique in econometrics.

The first half of the course reviews and extends statistical theory necessary for this course and the simple linear regression model. The second half of the course discusses the various assumptions underpinning the classical linear regression model, the implications to estimation if these assumptions are not met, and how to overcome these problems.

## ECON 7053

## Long Run Growth (H)

- 4 units - semester 2
- 2 hour lecture a week
- Eligibility: students are advised to consult Lecture in Charge
- Assessment: mid-term essay, final exam

This course examines the evidence of, and leading explanations for, economic growth in the advanced countries over the long run. Both historians' and economists' contributions to the analysis of economic growth are considered, but emphasis is placed on the enhanced insight which may be derived from historical inquiry. Topics covered include a survey of economists' writings on growth and convergence; case studies of long run growth and decline (including Britain, the US south, Argentina); and wider perspectives on growth (including the role of natural resources, technology, institutions, interest groups, and cultural factors).

## ECON 7055

International Trade (H)

- 4 units - semester 1
- 2 hour lecture a week
- Prerequisite: ECON 7011 Consumers, Firms \& Markets IID, ECON 7071 Macroeconomic Theory \& Policy IID or ECON 7072 International Trade IIID or ECON 7069 International Trade IIIA
- Assessment: mid-semester exam and 3 hour final exam

This course seeks to provide the tools necessary to obtain a clear understanding of what determines the way international trade patterns evolve through time as economies grow. That requires drawing on and strengthening our knowledge of (a) trade and growth theories, (b) the economics and political economy of foreign trade and investment policies, and (c) quantitative modelling of global trade flows.

## ECON 7056

## International Finance (H)

- 4 units - semester 2
- 2 hour lecture a week
- Prerequisite: ECON 7011 Consumers, Firms \& Markets IID, ECON 7071 Macroeconomic Theory \& Policy IID or ECON 7044 International Finance IIID or ECON 7007 International Finance IIIA
- Assessment: mid-term test, final exam

This course deals with the analysis of two important and related issues in open economies: the exchange rate and the capital flows. The objectives of the course are two-fold: 1) to introduce main concepts, principles and models in the theory and empirical works in those two key areas of International Finance; 2) to apply the analytical tools to understand the relevant policy issues in the global markets. Based on additional reading materials (both from various economic journals and The Economist (a weekly magazine), discussions on relevant current events from various parts of the globe will be carried out.

## ECON 7058

## Development Economics IIID

- 3 units - semester 1
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID, ECON 7071 Macroeconomic Theory \& Policy IID
- Assessment: exam, work completed during course

The course is concerned with the economics of less-developed countries. Topics to be discussed include: the meaning and measurement of development, demographic change, trade, industrialisation, foreign aid and investment, poverty and income distribution, agricultural development and relevant growth theories.

## ECON 7059

## Macroeconomics $\mathbf{A}(\mathrm{H})$

-4 units - semester 1

- 2 hour lecture a week
- Prerequisite: ECON 7096 Economic Theory IIID or ECON 7095 Economic Theory IIIA
- Assessment: assignments, mid-term tests \& final exam

This course serves as an introduction to more advanced methods and theories. Techniques include a more formal treatment of comparative statics, dynamics and stability analysis and will involve matrix algebra as well as simple differential and difference equations. Topics include extensions to some familiar models such as IS-LM, AD-AS or Mundell-Fleming; a more formal application of the rational expectations hypothesis in a variety of contexts and an introduction to developments in growth theory.

## ECON 7062

## Strategic Thinking for Decision Making IIID

- 3 units - semester 2
- 2 hour lecture, 1 hour workshop per week
- Assumed Knowledge: ECON 7075 Mathematical Economics IID
- Assessment: assignments, final exam

The objective of this course is to introduce students to Game Theory, a branch of applied mathematics, which deals with interactive decision problems. The primary aim of the course is to show how concepts from game theory can be advisedly used to sharpen our understanding of economics, political science, or any other social science. Some applications to biology will also be covered. No prior knowledge of economics, political science, etc is assumed. Although there is no formal prerequisite, the main language for this course is mathematics; the more comfortable and familiar a student will be with formal reasoning, the easier the course. A first year of calculus and linear algebra, or an equivalent level, would be a plus. Much of the material covered will be useful to students considering Honours in Economics.

## ECON 7065

## Public Economics (H)

- 4 units - semester 2
- 2 hour lecture, 1 hour workshop per week
- Assumed Knowledge: ECON 7025 Microeconomics A(H).
- Assessment: assignments, final exam

This course deals with more recent advances in Public Economics. The course has two main parts: Regulation and Taxation under Incomplete Information and Political Economy. In the first part we explore how governments that are seeking to maximise social welfare should regulate and tax industries if firms have private information about some of their characteristics. Contract theoretical tools are developed in order to analyse this. In the second part we cover topics in modern Political Economy Theory. Covered topics may include: Lobbying, corruption, the role of constitutions, and public choice.

## ECON 7067

## Economic Development

- 3 units - semester 2
- 2 hour lecture a week
- Prerequisite: ECON 7096 Economic Theory IIID or ECON 7095 Economic Theory IIIA or ECON 7089 Development Economics IIID or ECON 7058 Development Economics IIIA
- Assessment: take-home assignment, final exam

This course will focus on theories of economic growth, with particular emphasis on the new growth theories of the last dozen years and their application to East Asian economic development.

## ECON 7069

## International Trade IIIA

- 4 units - semester 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ECON 7071 Macroeconomic Theory \& Policy IID
- Assessment: mid-term test and final exam

This course deals with the theory and practice of international trade and of trade-related policies. It focuses on analysing the gains from trade, the changing patterns of trade, the income distributional consequences of liberalising foreign trade, the relationship between trade, investment, and economic growth, and the reasons for and consequences of trade policies.

## ECON 7070

## Labour Economics IIID

- 3 units - semester 1
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID
- Assessment: combination of midterm, final exam and project

This course is designed to introduce students to economic models of the labour market, both theoretical and empirical. Illustrations from current policy debates are used. After completing this course, students will be able to describe key features of the labour market, analyse models of the labour market in order to make predictions concerning the impact of public policy recommendations, and evaluate existing data relating to these predictions. Topics include the supply of labour and accumulation of human capital; the demand for labour in competitive and non-competitive markets; the determination of equilibrium wages; wage discrimination; labour unions; and policies such as minimum wage laws, welfare reform, and trade.

## ECON 7071

## Macroeconomic Theory \& Policy IID

- 3 units - semester 1 or 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: introductory macroeconomics
- Assessment: tutorial performance, mid-term exam, final exam

The first year macroeconomics course provided a broad overview of the subject area. The aim is to delve a little deeper into the subject. Macroeconomics is concerned with the behaviour of the
economy as a whole. In particular it addresses the big issues which affect us on a day to day basis. As macroeconomists we want to know why some countries grow more quickly than others, why some experience high inflation while others have stable prices and why all countries experience recessions and booms. Furthermore, we want to know if government policy can have an impact on these factors. The aim of Macroeconomics IID is to provide these tools and give a deeper understanding of these issues. It is intended that this course leads on from the first year macroeconomics course and provides a smooth transition for those intending to pursue macroeconomics in later years.

## ECON 7072

## International Trade IIID

- 3 units - semester 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ECON 7071 Macroeconomic Theory \& Policy IID
- Assessment: mid-term test and final exam

This course deals with the theory and practice of international trade and of trade-related policies. It focuses on analysing the gains from trade, the changing patterns of trade, the income distributional consequences of liberalising foreign trade, the relationship between trade, investment, and economic growth, and the reasons for and consequences of trade policies.

## ECON 7074

## Business Data Analysis ID

- 3 units - semester 1 or 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: basic algebra \& calculus
- Assessment: tutorials, assignments, mid semester test, final exam

This introductory course covers the collection and organisation of data and the drawing of conclusions and commenting intelligently on the statistical results obtained. Topics include descriptive statistics, correlation and simple regression, index numbers, time series analysis and an introduction to the use of probability in formal statistical inference. Students are taught how to access a statistical database, and how to use EXCEL to do the statistical calculations.

## ECON 7075

## Mathematical Economics IID

- 3 units - semester 1
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: principles of microeconomics \& macroeconomics
- Assessment: exam, test

This course concentrates on the basic mathematical methods that are required to understand current economics and to investigate economic models. Topics may include optimisation with and without constraints; linear models; matrix algebra and introductory game theory.

## ECON 7076

## Australian Economic History IID

- 3 units - semester 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: principles of microeconomics \& macroeconomics
- Assessment: tutorial work, essay, exams

The course covers the development of the Australian economy viewed in a comparative perspective. Emphasis is given to topics which provide relevant background to Australia's recent economic performance and current policy issues. These include structural changes, economic growth and fluctuations, governments and markets, international economic influences and economic wellbeing.

## ECON 7077

## Economic Development (H)

- 4 units - semester 2
- 2 hour lecture a week
- Prerequisite: ECON 7096 Economic Theory IIID or ECON 7095 Economic Theory IIIA or ECON 7089 Development Economics IIID or ECON 7058 Development Economics IIIA
- Assessment: take-home assignment , final exam

This course will focus on theories of economic growth, with particular emphasis on the new growth theories of the last dozen years and their application to East Asian economic development.

## ECON 7082

## Applied Econometrics IIIA

- 4 units - semester 1
- 2 lectures, 1 tutorial per week
- Prerequisite: ECON 7051 Economic \& Financial Data Analysis IID or equivalent
- Assessment: final exam, tutorial participation, project

The course aims to develop an understanding of standard econometric methods, a capacity to formulate research problems so that they are amenable to quantification and a capacity to assess empirical research in economics critically. Tutorials will involve applications of econometric methods which use packaged programs.

## ECON 7084

## Master of Applied Economics Dissertation

- 12 units - semester 1 or 2
- Eligibility: Master of Applied Economics students only; students are advised to consult the Academic Program Coordinator
- Assessment: dissertation

Each student is to undertake an individual research project that exhibits original investigation, analysis and interpretation. Length of dissertation will be determined in conjunction with the candidate's Supervisor and the Head of School.

## ECON 7086

## Advanced Macroeconomics

- 3 units - semester 1
- 4 hour lecture
- Prerequisite: ECON 7059 Macroeconomics A(H) or ECON 7122 Macroeconomics IV
- Assessment: assignments, final exam

This course presents an in depth analysis of modern macroeconomic theory. The course provides an advanced overview of the field as well as a rigorous analysis of the field's foundations. Students who do not necessarily intend to specialise in macroeconomics are thereby exposed to the most up to date theories, while those students who plan to pursue higher research in macroeconomics are well equipped with the latest techniques and know how. Topics to be discussed include: Why are some countries so rich while others are so poor? Why and how do countries grow? What are the sources of business cycles? What are the sources of inflation and unemployment? And what is the role of government policy in all of this?

## ECON 7087

## Advanced Microeconomics

- 3 units - semester 2
- 4 hour lecture
- Prerequisite: ECON 7025 Microeconomics A(H) or ECON 7121 Microeconomics IV
- Assessment: assignments, final exam

This course deals with more recent advances in microeconomic theory with emphasis on non-cooperative game theory and its applications, transactions in which asymmetric information plays a role and the theory of market failure. Topics to be covered may include some or all of the following: static and dynamic models of oligopoly, adverse selection, signaling games, principal agent problems and general equilibrium theory.

## ECON 7088

## Strategic Thinking for Decision Making IIIA

- 4 units - semester 2
- 2 hour lecture, 1 hour workshop per week
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID
- Assessment: assignments, final exam

This course covers topics in rational decision-making. Basic decision theory is used to analyse optimal behaviour in environments of perfect information, and under risk and uncertainty. In order to analyse optimal behaviour in situations where economic agents interact, basic concepts of game theory are introduced. The main focus of the course is the application of the theory to business and management situations. Topics may include investment, pricing, bargaining, strategic capacity choice, and coordination.

## ECON 7089

## Development Economics IIIA

- 4 units - semester 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID, ECON 7071 Macroeconomic Theory \& Policy
- Assessment: exam, work completed during course

The course is concerned with the economics of less-developed countries. Topics to be discussed include: the meaning and measurement of development, demographic change, trade, industrialisation, foreign aid and investment, poverty and income distribution, agricultural development and relevant growth theories.

## ECON 7095

## Economic Theory IIIA

- 4 units - semester 2
- 2 lectures, 1 tutorial per week
- Prerequisite: ECON 7011 Consumers, Firms \& Markets IID, ECON 7071 Macroeconomic Theory \& Policy IID
- Assessment: test, exam

This course deals with additions to, and extensions of aspects of economic theory covered in ECON 2011 Macroeconomics II and ECON 2009 Microeconomics II. Topics covered include general equilibrium and welfare economies, extensions of consumption and production theory, open economy models, the role of wealth, expectations, government budget and quantity constraints, game theory.

## ECON 7096

## Economic Theory IIID

- 3 units - semester 2
- 2 lectures, 1 tutorial per week
- Prerequisite: ECON 7011 Consumers, Firms \& Markets IID, ECON 7071 Macroeconomic Theory \& Policy IID
- Assessment: test, exam

This subject presents in introduction to the advanced treatment of economic theory covered in ECON 2011 Macroeconomic Theory and Policy II/ECON 2009 Consumers, Firms and Markets II. The focus will be advanced analytical techniques. Topics covered may include general equilibrium,open economy models, advanced analysis of the role of wealth, expectations, monetary and fiscal policy, game theory, and choice under uncertainty, insurance markets and risky assets.

## ECON 7099

## International Economic History IIIA

- 4 units - semester 1
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID, ECON 7071 Macroeconomic Theory \& Policy IID
- Assessment: tutorial work, essay, exams

The course surveys the evolution of the international economy in the 20th century. Attention is given to the development of world trade and trade policies, the international monetary system, international capital movements, the interwar depression, the postwar boom and the first and second periods of 'globalisation'. An examination is made of selected topics from the historical experience of the major industrial economies, especially the United States, which are relevant to an understanding of their current economic problems.

## ECON 7100

## International Finance IV

- 3 units - semester 2
- 2 hour lecture a week
- Prerequisite: ECON 7011 Consumers, Firms \& Markets IID, ECON 7071 Macroeconomic Theory \& Policy IID or ECON 7044 International Finance IIID or ECON 7007 International Finance IIIA
- Assessment: mid-term test and final exam

This course deals with the analysis of two important and related issues in open economies: the exchange rate and the capital flows. The objectives of the course are two-fold: 1) to introduce main concepts, principles and models in the theory and empirical studies in those two key areas of International Finance; 2) to apply
the analytical tools to understand the relevant policy issues in the global markets. Based on additional reading materials (both from various economic journals and The Economist (a weekly magazine)), discussions on relevant current events from various parts of the globe will be carried out.

## ECON 7102

## International Trade

- 3 units - semester 1
- 2 hour lecture a week
- Prerequisite: ECON 7011 Consumers, Firms \& Markets IID, ECON 7071 Macroeconomic Theory \& Policy IID or ECON 7072 International Trade IIID or ECON 7069 International Trade IIIA
- Assessment: mid-semester exam and final exam

This course seeks to provide the tools necessary to obtain a clear understanding of what determines the way international trade patterns evolve through time as economies grow. That requires drawing on and strengthening our knowledge of (a) trade and growth theories, (b) the economics and political economy of foreign trade and investment policies, and (c) quantitative modelling of global trade flows.

## ECON 7103

## Labour Economics

- 3 units - semester 2
- Assumed Knowledge: ECON 7096 Economic Theory IIID or ECON 7095 Economic Theory IIIA, and either ECON 7001 Applied Econometrics IIID or ECON 7082 Applied Econometrics IIIA
- Assessment: two mid-terms, research proposal

This seminar-style course is designed to engage students in the advanced study of labour markets. After completing the course, students will be able to critically evaluate the current literature and propose research designs of their own. The course will focus on recent empirical applications and tests of theoretical predictions. Sessions will be organised in a round-table format. Topics will include: the supply of labour and its interaction with health status; the accumulation of general and job-specific human capital; the demand for labour in competitive and non-competitive markets; the determination of equilibrium wages including search models and provision of fringe benefits; identification of wage discrimination; minimum wage laws; and labour mobility/migration.

## ECON 7104

Labour Economics (H)

- 4 units - semester 2
- Assumed Knowledge: ECON 7096 Economic Theory IIID or ECON 7095 Economic Theory IIIA, and either ECON 7001 Applied Econometrics IIID or ECON 7082 Applied Econometrics IIIA
- Assessment: combination of project and final exam

This seminar-style course is designed to engage students in the advanced study of labour markets. After completing the course, students will be able to critically evaluate the current literature and propose research designs of their own. The course will focus on recent empirical applications and tests of theoretical predictions. Sessions will be organised in a round-table format. Topics will include: the supply of labour and its interaction with health status; the accumulation of general and job -specific human capital; the demand for labour in competitive and non-competitive markets; the determination of equilibrium wages including search models and provision of fringe benefits; identification of wage discrimination; minimum wage laws; and labour mobility/migration.

## ECON 7105

## Labour Economics IIIA

-4 units - semester 1

- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ECON 7011 Consumers, Firms and Markets IID
- Assessment: two mid-terms, final exam

This course is designed to introduce students to economic models of the labour market, both theoretical and empirical. Illustrations from current policy debates are used. After completing this course, students will be able to describe key features of the labour market, analyse models of the labour market in order to make predictions concerning the impact of public policy recommendations, and evaluate existing data relating to these predictions. Topics include the supply of labour and accumulation of human capital; the demand for labour in competitive and non-competitive markets; the determination of equilibrium wages; wage discrimination; labour unions; and policies such as minimum wage laws, welfare reform, and trade.

## ECON 7106

## Long Run Growth

- 3 units - semester 2
- 2 hour lecture a week
- Eligibility: students are advised to consult Lecture in Charge
- Assessment: mid-term essay, final exam

This course examines the evidence of, and leading explanations for, economic growth in the advanced countries over the long run. Both historians' and economists' contributions to the analysis of economic growth are considered, but emphasis is placed on the enhanced insight which may be derived from historical inquiry. Topics covered include a survey of economists' writings on growth and convergence; case studies of long run growth and decline (including Britain, the US south, Argentina); and wider perspectives on growth (including the role of natural resources, technology, institutions, interest groups, and cultural factors).

## ECON 7108

## Master of Economics Research Project A

- 6 units - semester 1 or 2
- Eligibility: Master of Economics (Coursework) students only
- Assessment: project - approx. 10000 words

Each student is to undertake an individual research project that exhibits original investigation analysis and interpretation.

## ECON 7109

## Master of Economics Research Project B

- 3 units - semester 1 or 2
- Eligibility: Master of Economics (Coursework) students only
- Assessment: project - approx. 5000 words

Each student is to undertake an individual research project that exhibits original investigation analysis and interpretation.

## ECON 7110

## Mathematical Economics

- 3 units - semester 1
- 2 hour lecture a week
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID
- Assessment: weekly assignments, mid-semester exam and final exam

This course deals with dynamic economic models. The main technical tool is optimal control. Some familiarity with multivariable calculus and some knowledge of integrals are desirable. A sound knowledge of intermediate microeconomics is also expected. There are no other prerequisites but it is strongly recommended that all students intending to enrol in this class attend the Maths Review which is presented during the two weeks preceding the start of semester one. The first part of the course will be spent on a slow introduction to optimal control with applications to resource economics. The second part will deal with the 'new' growth theory, or endogenous growth, and will thus attempt to explain several mechanisms at the origin of economic growth as well as studying policies which could enhance it.

## ECON 7113

## Money, Banking and Financial Markets IIIA

- 4 units - semester 1
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID
- Assessment: mid-term tests, final exam, assignments

This course links the fields of macroeconomics and finance. It provides coverage of economic principles that underlie the operation of banks and other financial institutions. The role of money in the economy and the impact of monetary policy on the macroeconomy are emphasised, as is understanding the foreign exchange market and some basics of international finance. More broadly, this course will develop simple economic tools which will allow students to systematically analyse some of the important monetary and financial problems and developments in the world economy (such as crises in emerging economies).

## ECON 7114

## Money, Banking and Financial Markets IIID

- 3 units - semester 1
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID
- Assessment: mid-term tests, final exam, assignments

This course links the fields of macroeconomics and finance. It provides coverage of economic principles that underlie the operation of banks and other financial institutions. The role of money in the economy and the impact of monetary policy on the macroeconomy are emphasised, as is understanding the foreign exchange market and international finance. More broadly, this course will develop simple economic tools which will allow students to systematically analyse some of the important monetary and financial problems and developments in the world economy (such as crises in emerging economies).

## ECON 7115

## Public Economics

- 3 units - semester 2
- 2 hour lecture, 1 hour workshop per week
- Assumed Knowledge: ECON 7025 Microeconomics A (H).
- Assessment: assignments, final exam

This course deals with more recent advances in Public Economics. The course has two main parts: Regulation and Taxation under Incomplete Information and Political Economy. In the first part we explore how governments that are seeking to maximise social welfare should regulate and tax industries if firms have private information about some of their characteristics. Contract
theoretical tools are developed in order to analyse this. In the second part we cover topics in modern Political Economy Theory. Covered topics may include: Lobbying, corruption, the role of constitutions, and public choice.

## ECON 7116

## Public Economics IIIA

- 4 units - semester 1
- Assumed Knowledge: ECON 7011 Consumers, Firms \& Markets IID
- Assessment: exam, other assessments

This course investigates the role of the public sector in the economic arena. We will attempt to explain why government intervention is needed, how it influences the behaviour of the private sector, what the welfare effects of such influences are, and so on. We will also survey political economy, which regards actions of the public sector as determined by a political process. Topics covered will include welfare economics, market failures, tax and expenditure, and political economy.

## ECON 7117

## Reading Topics A

- 3 units - semester 1 or 2
- Eligibility: Master of Economics (Coursework) students only This course will cover selected topics in Economics. The topics offered each year will depend on the availability of staff, including visitors, and their research interests.


## ECON 7118

## Reading Topics B

- 3 units - semester 1 or 2
- Eligibility: Master of Economics (Coursework) students only This course will cover selected topics in Economics. The topics offered each year will depend on the availability of staff, including visitors, and their research interests.


## ECON 7123

## Special Topics in Economics

3 units - semester 1 or 2
Eligibility: Master of Economics (Coursework) students only
This course will cover selected topics in Economics. The topics offered each year will depend on the availability of staff, including visitors, and their research interests.

## ECON 7126

## Master of Applied Economics International Dissertation

- 12 units - semester 1 or 2
- Eligibility: Master of Economics (International) students only; students are advised to consult the Academic Program Coordinator
- Assessment: dissertation

Each student is to undertake an individual research project that exhibits original investigation, analysis and interpretation. Length of dissertation will be determined in conjunction with the candidate's Supervisor and the Head of School.

## ECON 7141

## Challenges Facing Economic Policy Makers

- 4 units - semester 1 or 2
- Eligibility: Master of Applied Economics \& Master of Applied Economics (International) students only
- Assessment: tutorials, group projects and exam

The course deals with controversial aspects of economic policy faced by governments. The course will be issues focused and topics covered will depend on developments in the world economy with particular emphasis on the Australasian region. Topics will range across industry level issues to monetary, fiscal, exchange rate and trade policies.

## ECON 7200

## Economic Principles (M)

- 3 units - semester 1 or 2
- Restriction: not available to students enrolled in economics postgraduate coursework programs
- Assessment: exam, assignments, case study analyses, group or individual projects

The purpose of this module is to enable the student to understand economic events, analyse their impact on the financial markets and financial instruments, and propose appropriate courses of action. To do this, the student should understand the basic principles of macroeconomics and microeconomics and be conversant with the various economic indicators used. Also, the student should be able to utilise the tools of economic analysis to perform company and industry competitive analysis.

## ECON 7201

International Finance (M)

- 3 units - semester 2
- 2 hour lecture, 1 hour tutorial
- Eligibility: Master of Commerce students who have completed foundation courses
- Restriction: Not available to students who have already completed ECON 3021 or ECON 7044

The course analyses major issues in international finance such as the balance of payments and exchange rate determination, international financial markets and international banking, international investments and portfolio allocation, measuring and managing foreign exchange exposure, international capital budgeting and country risk analysis. The course will also provide context through analysis of the operation of the international monetary system, with particular emphasis on current debates related to Australia or to East Asia such as the prospects for currency crises, for currency cooperation and for dealing with regional imbalances.

## ECON 7202

## Advanced Econometrics

- 3 units - semester 2
- $1 \times 2$ hour lecture
- Prerequisite: Credit standard in ECON 3023 Econometrics III and Econometrics IV or equivalents.
- Assessment: Tutorial work, midterm and final exams.

In this course we develop the general understanding of the advanced concepts in probability theory and statistics. The requirements for this course are calculus and a familiarity with the elementary concepts in probability and statistics. Probability theory, random variables, distribution, special distributions, expectation, statistical inference, estimation, hypothesis testing, and asymptotic theory are discussed.

## ECON 7203

## Econometrics (H)

- 4 units - semester 1
- $1 \times 2$ hour Lecture
- Prerequisite: Credit standard in ECON 3023 Econometrics III or ECON 7022 Econometrics IIID or equivalent.

Assessment: Tutorial work, midterm and final exams.
The objective of this course is to study more advanced topics on econometrics. Students are expected to have knowledge in statistics and multiple regression models at the level of Econometrics $I I I / I I I D$ or equivalent. Topics include specification and data problems,
regression analysis with time series data, panel data, instrument variables estimation, simultaneous equation models, and limited dependent variable models. The emphasis is on understanding and interpreting the assumptions in light of actual empirical applications. Through the course, we will apply the econometrics models to real-world data and interpret the resultant statistics in many respects.

## ECON 7204

## Econometrics IV

- 3 units - semester 1
- $1 \times 2$ hour Lecture
- Prerequisite: credit standard in ECON 3023 Econometrics III or ECON 7022 Econometrics IIID or equivalent.

The objective of this course is to study more advanced topics on econometrics. Students are expected to have knowledge in statistics and multiple regression models at the level of Econometrics III/IIID or equivalent. Topics include specification and data problems, regression analysis with time series data, panel data, instrument variables estimation, simultaneous equation models, and limited dependent variable models. The emphasis is on understanding and interpreting the assumptions in light of actual empirical applications. Through the course, we will apply the econometrics models to real-world data and interpret the resultant statistics in many respects.

## TRADE 5000

## International Trade: Negotiations \& Agreements

- 3 units - semester 1
- $3 \times 1.5$ day intensive modules
- Assessment: 1500 word project at end of each module International Trade: Negotiations and Agreements consists of three modules: (a) Trade in the Modern World Economy: an introduction to the global economy and international trade; gains from trade; global and regional agreements and institutions; social issues and international trade. (b) Trade Agreements and Instruments of Trade Policy: main agreements in the WTO trading system; under standing schedules of concessions in goods, services \& agriculture; conduct of trade negotiations. (c) The Negotiation of Trade Agreements: regional and bilateral free trade agreements; dispute settlement in WTO and Australia's FTAs; organisation of the Australian government on trade issues; main issues in WTO and FTA negotiations.


## TRADE 5001

## International Trade: Strategies \& Opportunities

- 3 units - semester 2
- $3 \times 1.5$ day intensive modules
- Assessment: 1500 word project at end of each module

International Trade: Strategies and Opportunities consists of three modules: (a) Opportunities in International Trade: politics of trade negotiations; dealing with unfair competition; new opportunities China, Chinese Taipei and the WTO; understanding statistics and other trade information (b) Practical Aspects of International Trade: practical preparations for entering export markets; partnership possibilities in international trade; and assistance in exporting. (c) In-depth exploration of WTO's 'New Issues': services, intellectual property rights, competition policy and investment.

## TRADE 5002

## Project in International Trade

- 0 units - semester 1 or 2
- Assessment: 2,000 word project

In order to receive the Professional Certificate of International Trade candidates are required to complete TRADE 5000, 5001 \& 5002.

## EDUCATION

## EDUC 4001A/B

## Accounting Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass in six semesters of accounting course


## EDUC 4002A/B

## Adult Learner Curriculum and Methodology

- 2 units - full year
- Prerequisite: 6227 Student-Teacher Interaction in the Classroom
- Corequisite: 6227 Student-Teacher Interaction in the Classroom subject to staffing


## EDUC 4003A/B

## Biology Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass in a Level III biological science course
- Corequisite: EDUC 4024 Junior Science Curriculum and Methodology
- Assessment: essay, unit of work, online tasks, designing pracs \& investigations

The course aims to information on a range of methodologies and discuss a variety of skills that will better equip students to be better prepared for the start of their teaching career in middle school science and senior school biology.

## EDUC 4004A/B

Business Studies Curriculum \& Methodology

- 2 units - full year
- Prerequisite: pass in six semesters of business degree


## EDUC 4005A/B

Chemistry Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass in a Level III biological science course
- Corequisite: EDUC 4024 Junior Science Curriculum and Methodology
- Assessment: essay, unit of work, online tasks, designing pracs \& investigations

The course aims to present information on a range of methodologies and discuss a variety of skills that will better equip students to be better prepared for the start of their teaching career in middle school science and senior school chemistry.

## EDUC 4006A/B

Chinese Curriculum and Methodology

- 2 units - full year
- Prerequisite: Pass at Level III Chinese or equivalent
- Corequisite: EDUC 4025 Language Methodology or EDUC 4027 Modern Languages Curriculum and Methodology


## EDUC 4007A/B

## Classroom Music Curriculum and Methodology

- 3 units - full year
- Prerequisite: degree in Music or a pass in Level III music course


## EDUC 4009A/B

## Economics Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass in six semesters of economics degree


## EDUC 4010A/B

## English as a Second Language Curriculum \& Methodology

- 2 units - full year
- Prerequisite: Pass in Linguistics at level II or III, or equivalent.
- Corequisite: EDUC 4025 Language Methodology or EDUC 4027 Modern Languages Curriculum and Methodology


## EDUC 4011A/B

## Extended Specialist Curriculum

- 2 units - full year
- Restriction: only with the agreement of Head of School


## EDUC 4012A/B

## French Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass at Level III French or equivalent
- Corequisite: EDUC 4025 Language Methodology or EDUC 4027

Modern Languages Curriculum and Methodology

## EDUC 4013A/B

## General English Curriculum \& Methodology

- 2 units - full year
- Prerequisite: four semesters of English literature


## EDUC 4014A/B

Geography Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass in six semesters of geography course - in certain circumstances students with four semesters of geography courses may be accepted
- Corequisite: EDUC 4034 Studies of Society and Environment


## EDUC 4015A/B

## German Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass at Level III German or equivalent
- Corequisite: EDUC 4025 Language Methodology or EDUC 4027

Modern Languages Curriculum and Methodology

## EDUC 4016A/B

History Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass in Level III history course. -in certain circumstances students with Level II history courses may be accepted
- Corequisite: EDUC 4034 Studies of Society and Environment


## EDUC 4017A/B

## Indonesian Curriculum and Methodology

- 2 units - full year
- Prerequisite: Pass at Level III Indonesian or equivalent
- Corequisite: EDUC 4025 Language Methodology or EDUC 4027 Modern Languages Curriculum and Methodology


## EDUC 4018A/B

Information Technology Curriculum \& Methodology

- 2 units - full year
- Prerequisite: Prerequisite: pass at Level III Computer Studies
- Assessment: essay, unit of work, online tasks, designing pracs \& investigations

The course aims to present information on a range of methodologies and discuss a variety of skills that will better equip students to be better prepared for the start of their teaching career in middle school science and senior school information technology.

## EDUC 4019A/B

## Instrumental Music Curriculum \& Methodology

- 3 units - full year
- Prerequisite: degree in Music, or a pass in Level III music course, plus recognised instrumental qualifications
- Corequisite: EDUC 4007 Classroom Music Curriculum and Methodology


## EDUC 4021A/B

## Italian Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass at Level IIII Italian or equivalent
- Corequisite: EDUC 4025 Language Methodology or EDUC 4027 Modern Languages Curriculum and Methodology


## EDUC 4022A/B

## Japanese Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass at Level III Japanese or equivalent
- Corequisite: EDUC 4025 Language Methodology or EDUC 4027 Modern Languages Curriculum and Methodology


## EDUC 4023A/B

## Junior Mathematics Curriculum \& Methodology

- 2 units - full year
- Prerequisite: pass in Mathematics I or equivalent


## EDUC 4024A/B

## Junior Science Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass in two Level I physical and biological sciences courses
- Assessment: [any three] reflective journal, concept map, misconceptions, journal article, information brochure, innovative science plan (lesson)

This course is aligned with the SACSA Companion Document Series [http://www.sacsa.sa.edu.au/companion] and is an introduction to the classroom applications and a study of the relationship of teachers and schools to the methods of teaching junior science. The course seeks to develop the knowledge, skills, and professional standards required to effectively instruct science at the junior- and middle-schools. Participants will be provided with insights into selecting and using a variety of instructional methods, resources and assessment strategies for teaching science to all learners. Workshop modules cover hands-on, inquiry, process and project-based approach to the teaching of science with a focus on conceptual teaching and learning. Knowledge of junior science content is emphasised throughout the course. The course content strongly reflects the curricular emphasis of DECS, and the standards articulated by the Australian Science Teachers Association [www.asta.edu.au/membership/benefits/recognition/profstds].

## EDUC 4025A/B

## Language Methodology

- 2 units - full year
- Prerequisite: pass in a Level III language other than English course


## EDUC 4026A/B

## Legal Studies Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass in Level II or III law or legal studies courses
- Corequisite: EDUC 4034 Studies of Society and Environment


## Subject to staffing

## EDUC 4028A/B

Physics Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass in Level III physics course
- Corequisite: EDUC 4024 Junior Science Curriculum and Methodology
- Assessment: essay, unit of work, online tasks, designing pracs \& investigations

The course aims to present information on a range of methodologies and discuss a variety of skills that will better equip students to be better prepared for the start of their teaching career in middle school science and senior school physics.

## EDUC 4032A/B

## Senior English Curriculum and Methodology

- 2 units - full year
- Prerequisite: six semesters of English literature
- Corequisite: EDUC 4013A/B General English Curriculum and Methodology


## EDUC 4033A/B

## Senior Mathematics Curriculum \& Methodology

- 2 units - full year
- Prerequisite: pass in Level III mathematics course
- Corequisite: EDUC 4023 Junior Mathematics Curriculum and Methodology


## EDUC 4034A/B

## Studies of Society and Environment

- 2 units - full year
- Prerequisite: pass in six semesters Anthropology, Classical Studies, Economics, Geography, History, Law, Politics or other approved course - in certain circumstances four semesters may be accepted


## EDUC 4035

## Families, Schools and Students' Outcomes

- 2 units - semester 1
- 2 hours per week
- Assessment: 2000 word essay

This course will examine family and school learning environments, as well as issues of gender and religion, as they affect students' learning outcomes at school.

## EDUC 4036A/B

## Spanish Curriculum \& Methodology

- 2 units - full year
- Prerequisite: pass at Level III Spanish or equivalent
- Corequisite: EDUC 4025 Language Methodology or EDUC 4027 Modern Languages Curriculum and Methodology


## EDUC 4038A/B

## Other Language Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass in the appropriate language at Level III or equivalent
- Corequisite: EDUC 4025 Language Methodology or EDUC 4027

Modern Languages Curriculum and Methodology

## EDUC 4039

## Educational Psychology A

- 2 units - semester 1
- 3 hours per week
- Assessment: practical exercises \& written assignments

This course introduces various psychological approaches used in secondary education. Connection is made between these approaches and the practical strategies required for competence in the classroom environment.

## EDUC 4043A/B

## Vietnamese Curriculum and Methodology

- 2 units - full year
- Prerequisite: pass at Level III Vietnamese or equivalent
- Corequisite: EDUC 4027 Modern Languages Curriculum and Methodology


## EDUC 4050

## Teaching Practice Part I

- 3 units - semester 1 or 2
- Prerequisite: at least one Curriculum and Methodology course
- Corequisite: at least one Curriculum and Methodology course

Students will undertake one block of supervised teaching practice. Students who successfully complete the course are given a nongraded pass.

## EDUC 4051

## Teaching Practice Part II

- 3 units - semester 1 or 2
- Prerequisite: at least one Curriculum and Methodology course
- Corequisite: at least one Curriculum and Methodology course

Students will undertake one block of supervised teaching practice. Students who successfully complete the course are given a nongraded pass.

## EDUC 4082A/B

## Psychology Curriculum and Methodology

- 2 units - full year
- 2 hours per week
- Prerequisite: Major in Psychology or equivalent
- Assessment: practical assignments \& essays

This course will introduce students to the new year 11 and 12 SACE Curriculum in Psychology and discuss appropriate learning methodologies for teaching it.

## EDUC 4083

## Curriculum Frameworks

- 2 units - semester 1
- 4 hours per week
- Assessment: ICT based assignment

This course introduces students to the various curriculum frameworks currently used for teaching in secondary schools in South Australia, as well as recent developments in State and National curricula. There is a special focus on the role of ICT in the planning and delivery of curriculum in the classroom.

## EDUC 4084

## Curriculum Perspectives

- 2 units - semester 2
- 3-4 hours per week
- Assessment: 40-item MCQ/short answer test \& 1000 word essay or group presentation
This course aims to provide students with an overview of curricula models and frameworks. It examines the theories underlying the design and development of curriculum, the nexus between the understanding of the process involved in the assessment of student learning and to provide them with the knowledge and skills necessary to manage this process are discussed.

Policies and influences that guide assessment practices, the role of assessment in optimising learning outcomes, and the assessment planning process including the purpose of assessment, the role of the student, reliability and validity, and basic skills testing are highlighted. At the end of the topic students will have developed a range of strategies and skills for critically examining curricula issues, constructing meaningful assessment to gauge student learning as well as have an understanding of state and national developments relating to senior secondary assessment, national statements and profiles, and recent assessment materials from ACER and other sources.

## EDUC 4085

## Educational Psychology B

- 2 units - semester 2
- 3 hours per week
- Assessment: practical exercises \& written assignments

This course deepens psychological understanding for secondary education in the areas of learning theory, student characteristics and the positive classroom environment.

## EDUC 4086

## Culture, Education and Society

- 2 units - semester 2
- 2 hours per week
- Assessment: 2000 word essay

This course will introduce students to different models of society and the way they influence educational policy. In particular, a consideration of various models of culture will lead to issues of cultural and linguistic pluralism in education.

## EDUC 4087A/B

## Modern Greek Curriculum and Methodology

- 2 units - full year
- Prerequisite: Major in Modern Greek or equivalent
- Corequisite: EDUC 4025 Language Methodology
- Assessment: practical assignments, essays

In this course, students will be introduced to current curriculum frameworks and learning methodologies in the teaching of Modern Greek from years 8-12.

## EDUC 4401

University Teaching for Effective Student Learning

- 3 units - semester 1
- 24 hours contact $\&$ estimated 96 hours non-contact
- Eligibility: Grad. Cert.Higher Educ. students only
- Assessment: $2 \times 15$ minute oral presentations, project report; non-graded pass

Using your current experiences in learning and teaching in higher education, this course will provide you with the opportunity to develop your understanding of student learning and its relationship with good teaching.

The concept of the scholarship of teaching will be explored and practical aspects of such teaching will be presented. The current Teaching at University course is a good indicator of the course outline. Participants will undertake a limited project within their
area of interest in teaching. Capabilities in large and small group teaching, and in the use of Information and Communication Technology in teaching will be developed.

## EDUC 4402

## Curriculum Design, Assessment and Evaluation

- 3 units - semester 1
- 24 hours contact $\&$ estimated 96 hours non-contact
- Eligibility: Grad. Cert.Higher Educ. students only
- Prerequisite: Pass in EDUC 4401
- Assessment: Literature review and presentation, ICT based assignment, curriculum design assignment

This course will provide opportunities for participants to further develop their skills in curriculum design, including the use of aims and objectives in conjunction with appropriate student learning activities to improve assessment outcomes. The course also assists participants to develop a deeper understanding of the impact assessment has on student learning, how information and communication technologies can be used to improve student learning and how to effectively use peer and student evaluations to analyse the learning and teaching environment. The course will provide opportunities for group interactions that assist participants translate theoretical principles into practical outcomes.

## EDUC 4403

## Reflective Practice in Learning and Teaching

- 3 units - semester 2
- 24 hours contact \& estimated 96 hours non-contact
- Eligibility: Grad. Cert.Higher Educ. students only
- Prerequisite: Pass in EDUC 4401
- Assessment: $2 \times 20$ minute oral presentations, 2000 word assignment, reflective critique of 2 teaching sessions;
This course allows participants to develop a deeper insight into their own teaching practice from a student learning perspective. It develops strategies that they may use to initiate quality improvement in their teaching and in student learning. Group based interactions with other participants will be an important component of the course, as will the ability to use peer feedback to initiate change. Participants will develop skills in undertaking peer reviews themselves and providing critical feedback to others on their teaching.


## EDUC 4404

## Research Based Learning and Teaching

- 3 units - semester 1 or 2
- 12 hours contact \& estimated 108 hours non-contact
- Eligibility: Grad. Cert.Higher Educ. students only
- Prerequisite: Pass in EDUC 4401, EDUC 4402 and EDUC 4403
- Assessment: $2 \times 20$ minute oral presentations, project report; non-graded pass

This course will develop the concept of learning and teaching in a research-based university. The research basis for reflective practice in learning and teaching will be discussed, and the concepts associated with the research basis for the scholarship of teaching will be extended from the earlier University Teaching for Effective Student Learning course. An extensive project within the participants' area of interest in teaching will be undertaken.

## EDUC 4405

## ICT Literacy in Higher Education

- 3 units - semester 1
- 120 hours online delivery
- Eligibility: Graduate Certificate in Online Learning (Higher Education) students only
- Assessment: Reflective journal, discussion board participation and a 2000 word assignment

This course explores the technological implications of online learning within an educational context. It focuses on learning management systems ( 1 ms ) and other educational technologies which support both asynchronous and synchronous interactions among teachers, students and content within higher education. The participant will gain an understanding of how various online educational technologies enhance a constructivist and studentcentred approach to higher order learning

## EDUC 4406

## Online Learning Design, Assessment \& Evaluation

- 3 units - semester 2
- 120 hours online delivery
- Eligibility: Graduate Certificate in Online Learning (Higher Education) students only
- Assessment: Reflective journal, discussion board participation and the development of a learning management system curriculum and evaluation report

This course incorporates online instructional design considerations which take into account learning styles and a constructivist, student-centred approach to higher order learning, as well as current research and development in scenario-based learning, online roleplay simulations and virtual classrooms. It also includes strategies on making assessment part of the learning process and promotion of learning through effective online assessment including collaboration, groupwork, discussion boards, exemplars and rubrics. Evaluating the impact of the online course design and assessment on student learning is a third and critical component of this course. Cultural implications will also be covered

## EDUC 4407

## Online Learning Communities

- 3 units - semester 1
- 120 hours flexible delivery
- Eligibility: Graduate Certificate in Online Learning (Higher Education) students only
- Restriction: This course will not be offered until 2007
- Assessment: Reflective journal, discussion board participation and a project report of 2000 words

This course takes the view that whilst the aim is to develop learners to be independent thinkers, at the same time they also need to be interdependent, collaborative learners. A community of learners is a critical component of higher order learning and the technologies of online learning allow for both private reflection as well as public discourse. This course will expand on how online learning communication technologies are changing cognitive and pedagogical approaches to teaching and learning. It also examines a community of inquiry framework which can be considered when planning and delivering online learning. Effective online facilitation techniques will be incorporated. Cultural implications will also be covered.

## EDUC 4408

The Changing Nature of Educational Research

- 3 units - semester 2
- 120 hours flexible delivery
- Eligibility: Graduate Certificate in Online Learning (Higher Education) students only
- Restriction: This course will not be offered until 2007
- Assessment: Reflective journal, discussion board participation and a project report of 2000 words.

This course overviews various research methodologies used in higher education and explores how online technologies are impacting on these research methods. It also identifies emerging technology-enabled research methods including collaborative, interactive and open access research.

## EDUC 5002

## Education Directed Study (2 unit)

- 2 units - semester 1
- Contact Department for further details.


## EDUC 5005

Education Directed Study (3 unit)

- 3 units - semester 1

Contact Department for further details.

## EDUC 5006

## Education Directed Study

- 4 units - semester 2
- 2 hours per week
- Restriction: with permission of Head of Department
- Assessment: essay/s to a total of 6000 words

This course will allow candidates to pursue an independent project or area of investigation developed in collaboration with a supervisor.

## EDUC 5007

## Education in Multilingual Settings

- 4 units - semester 1
- 2 hours a week
- Assessment: $2 \times 3000$ word essays; seminar paper

The course will consider basic concepts from the sociology of language in the work of scholars such as Haugen and Fishman. Attention will be focused on recent studies of bilingualism and biliteracy within their regional contexts, with special reference to the 'lesser used' languages of Europe, Asia, North America. Scholars whose research will be considered include Lambert, Giles, Clyne, Cummins, Skutnabb-Kangas, Paulston and Andersson. Emphasis will be placed on the role of the school in helping to maintain and/or acquire bilingualism and early biliteracy, especially through Australian educational systems.

## EDUC 5011

## Families, Schools and Students' Outcomes

- 4 units - not offered in 2006
- 2 hours seminars a week
- Assessment: seminar participation, $2 \times 3000$ or 6000 word essay

If our understanding of variations in students' outcomes is to be enhanced then it is important that we increase our understanding of the intricate nature of the relations between learning environments and students' outcomes. It is the purpose of this course to examine theoretical orientations and empirical studies that have investigated the complexities of the associations among families, schools and outcomes for students in differing social contexts.

## EDUC 5012

## Gender, Education and Social Change

- 4 units - not offered in 2006
- 2 hours of seminars a week
- Restriction: 3487 Class, Gender and Schooling in Australia
- Assessment: seminar participation; $2 \times 3000$ word essays

This course analyses the ways in which formal education has contributed to the definition and transmission, or transformation, of gender roles and gender identities in Australia since the eighteenth century. It aims to provide a crucial historical perspective to current issues in our education system concerning the nature of femininity and masculinity and the relations between the sexes. Recent historical research and theoretical scholarship have reassessed the changes in women's education since the nineteenth century and the related changes in their social roles. Very recently, the implications of our understanding of masculinity have begun to be investigated. The varying religious ideals of womanhood and manhood pursued in church schools will be pursued as well as the changing gender assumptions embodied in the policies and organisation of the state education system.

## EDUC 5013A/B

## Honours Mathematics (Education)

- 8 units - full year
- Prerequisite: qualification in Mathematics acceptable to Dept of Education \& relevant departments in Mathematical Sciences prospective students should consult with Education Mathematics program coordinator before enrolling
- Restriction: not presented unless EDUC 5017 Mathematics Education is also presented
- Assessment: see relevant Mathematics unit

Three courses not already passed, from those offered in Honours in Applied Mathematics, Computer Science, Pure Mathematics, Statistics or Mathematical Physics.

## EDUC 5017

## Mathematics Education

-4 units - semester 1

- 2 hours seminars a week
- Prerequisite: pass in Level III Mathematics course or other qualification accepted by Education Department
- Assessment: essays and assignments

A study of current research and theory in mathematics education.

## EDUC 5018

## Multicultural Society and Educational Policy

- 4 units - semester 2
- 2 hours per week
- Assessment: $2 \times 3000$ word essays, seminar paper

The theoretical framework of this course is provided by humanistic sociology. This is extended to social systems and developed in relation to ethnically plural societies. The key concepts are those of
core values of different cultures, and personal cultural systems that individuals construct from the group values that are provided for them in society. Alternative orientations to cultural and structural pluralism are examined with special reference to curriculum and school organisations. Future cultural outcomes are then related to educational policy.

## EDUC 5019

## Qualitative Approaches to Educational Research

- 4 units - semester 2
- 2 hour seminar a week
- Assessment: seminar participation, practical data collection, development of research proposal or essay - total 6000 words

This course is designed to provide students with an overview of qualitative research approaches. In addition to considering various theoretical frameworks and methodological approaches, there will be a focus on practical aspects of setting up research projects through the stages of formulating a proposal, preparing a budget, collecting and analysing data, writing up results and formally presenting the thesis.

## EDUC 5020

## Quantitative Educational Research

- 4 units - semester 1
- 2 hours of seminars a week
- Assessment: analysis of data, presentation in form of research article

The course examines the use of quantitative methods in educational research. In particular, regression techniques such as multiple regression and path analyses are discussed. The course will be taught in the computer laboratory where students will work through a set of exercises using the SPSS program.

## EDUC 5021

## Religion, Education and Social Change

- 4 units - not offered in 2006
- 2 hours of seminars a week
- Assessment: seminar participation, $2 \times 3000$ word essays

This course analyses the ways in which religion and education have and do intersect in Australian society. It aims to provide a critical historical perspective to the current issues in our education system, particularly focusing on government funding to nongovernment schools and the Federal government's latest policy. Other areas of study will be the emergence of denominational schools in the 19th century and the controversies surrounding the education acts; the varying responses of religious groups; the reasons for the emergence of large numbers of low fee paying
schools in the 20th century; and the diverse religious gender roles both past and present. Student response to their religious school environment particularly in terms of curriculum and teachers will be canvassed. Personal research into archival materials will be encouraged, and various theoretical perspectives on these issues presented.

## EDUC 5022

Classroom Voices, Contexts and Cultures

- 4 units - semester 1
- 2 hours of seminars a week
- Assessment: 6000 word essay or $2 \times 3000$ word essays

Moving away from policy studies and school rhetoric, this research-based course will canvass aspects linked to learners in their learning environment. Initially the history of the classroom will be outlined. Other issues which will be developed are class, gender, race and religion in past and current classrooms. There will be an opportunity to investigate student and teacher voice from classrooms, the community as a classroom, and the influence of architecture on classroom learning and teaching. In addition, classroom cultures and cliques, and their psychological and sociological ramifications will be examined. The course will focus on the emergence of new research methodologies and the possibility of using an interdisciplinary approach in the examination of these issues.

## EDUC 5028

## Neuroscience and Education

- 4 units - semester 2
- 2 hours seminars a week
- Assessment: 6000 word essay

Learning is central to education. Research in neuroscience is having an increasing impact on our understanding of learning. By looking at the brain, scientists are studying the very complex processes that underpin our speech and language, thinking and reasoning, reading and mathematics. This course explores the meaningful links such research offers between the complex brain processes and the actions of our mind. We are particularly concerned with how these links may improve the daily practices of educators.

## EDUC 5500

## Education Minor Project

- 4 units - semester 1 or 2
- 2 hours per week
- Restriction: with permission of Head of Department
- Assessment: essay/s to a total of 6000 words

This course will allow candidates to pursue an independent project or area of investigation developed in collaboration with a supervisor.

## EDUC 5501

## Education Research Project F/T

8 units - semester 1 or 2
This may take the form of an essay which provides evidence of the writer's ability to group, synthesise and critically assess the major issues involved in the area treated or of a minor research project which makes an original contribution to knowledge in a particular limited area. The total length should be around 12000 words.

## EDUC 5502A/B

## Education Research Project P/T

- 8 units - full year

This may take the form of an essay which provides evidence of the writer's ability to group, synthesise and critically assess the major issues involved in the area treated or of a minor research project which makes an original contribution to knowledge in a particular limited area. The total length should be around 12000 words.

## EDUC 5505

## Education Directed Study (6)

- 6 units

1 hour lecture, 1.5 hour tutorial per week
Assessment: 1500 word critique of selected curricula/syllabus 3000 word essay

The topic is concerned with the development of curricula and the design of instruction and the provision of learning experiences, particularly in the fields of science, mathematics and technology. It first examines the historical perspectives and evolution of science, mathematics and technology curricula. Recent development in the fields of cognitive neuroscience, neuropsychology and the specification of learning objectives are examined and their implications for multimedia approaches to learning, teaching and assessment are discussed. Consideration is also given to the teaching of values, as well as the integration of science, mathematics, technology and philosophy in the school curriculum as well as design, development and evaluation of curricula and the implementation of innovatory curricula. Curricula innovations are also discussed.

## EDUC 5506

## Curriculum Design \& Evaluation in Science, Mathematics \& Technology

- 4 units - semester 2
- 1 hour lecture, 1.5 hour tutorial per week
- Assessment: 1500 word critique of selected curricula/syllabus, 3000 word essay

The topic is concerned with the development of curricula and the design of instruction and the provision of learning experiences, particularly in the fields of science, mathematics and technology. It first examines the historical perspectives and evolution of science, mathematics and technology curricula. Recent development in the fields of cognitive neuroscience, neuropsychology and the specification of learning objectives are examined and their implications for multimedia approaches to learning, teaching and assessment are discussed. Consideration is also given to the teaching of values, as well as the integration of science, mathematics, technology and philosophy in the school curriculum as well as design, development and evaluation of curricula and the implementation of innovatory curricula. Curricula innovations are also discussed.

## EDUC 5507A

Innovations in Teaching, Learning and Assessment

- 4 units - semester 1
- 1 hour lecture, 1.5 hours tutorial per week
- Assessment: 3000 word electronic portfolio of reading/activities, 2500 word Innovations \& implementation for teaching/learning assessment

The aim of the topic is to familiarise students with emerging technologies, and the theoretical, pedagogical and research-based evidence for decision making on optimising learning and enhancing teaching. The topic seeks to highlight the pertinent nexus between teaching, learning, assessment and research. This topic consists of a negotiated, inter-/trans-disciplinary and school-based project that results in creation of a Reflections Portfolio and the design and implementation of a practical (trial and evaluated) unit of work. Interoperability, portability and standards issues will be examined and discussed.

## EDUC 5508A

## Issues in Science, Mathematics \& Technology Education

- 4 units - semester 1
- 1 hour lecture, 1.5 hours tutorial per week
- Assessment: 2000 word review $\&$ synthesis of research literature, 2500 word Innovations and implementation for teaching/learning assessment
The aim of the topic is to familiarise students with the major issues and complementary research in science, mathematics and technology education. This would include reviews and critical examination of research undertaken in science, mathematics and technology education. It introduces to students the application of research for reflection and improvement of practices in science, mathematics and technology education. Students will then translate theory into practice in one or more issues that they can
utilise in their own teaching. A number of emerging innovations, namely cognitive neuroscience, reflective practice, inquiry and problem-based learning, will be examined.


## EDUC 5509

## Measurement \& Evaluation Assessment

-4 units - semester 2

- 3 hours per week
- Eligibility: MEd students and above only
- Assessment: Weekly Act/Ass (50\%) MEA project (50\%)

This course assumes a knowledge of introductory statistics and educational measurement and is concerned with the major developments that have occurred during the past 40 years to improve the measurement of human behaviour, learning and development in the fields of education, and the social and behavioural sciences. There are many models that are derived from Item Response Theory and this course focuses on those models developed by Rasch and scholars working within the framework that he proposed for the use of logistic and other functions to transform data so that it would possess sound measurement properties. The principle of measurement seeks to advance both student assessment and use of procedures if multivariate and multilevel analysis, particularly for the investigation of stability and change in human characteristics associated with learning and development.

## EDUC 5510

## Information \& Analysis of Frequency \& Count Data

- 4 units - semester 2
- 3 hours per week
- Eligibility: MEd Studies and above
- Assessment: Weekly Activity/Assign (50\%) F\&CD Project (50\%)

This course is designed to develop skills in the use of computerbased procedures for the storage and systematic examination of information obtained from published sources, extended interviews on the use of detailed observation schedules, particularly of learning and teaching in classroom situations. In some studies this leads to the discipline interpretation of the information, while in other studies this leads to the development of explanatory models that can be tested with frequency and count data. The first stage of the topic involves an introduction to storage and extraction procedures, and the sorting and shifting of the extracted information, while the second stage involves the analyses of contingency tables, configural frequency analyses, correspondence analyses, log-linear modelling, mobility tables and Markov chains. The emphasis in this course is on the unity of educational research across different disciplines and different methods of inquiry.

## EDUC 5511

## Educational Inquiry

- 4 units - semester 1 or 2
- 1 seminar, 1 tutorial per week
- Eligibility: available to MEd Studies students and above
- Check with School for Non-Award Study
- Assessment: readings/discussion portfolio, research review presentation, research proposal

This course provides an introduction to educational inquiry and research, and to issues involved in interpreting the findings of inquiry to enable students to become critical consumers of educational research for enhancing professional practice. It also introduces traditions and conceptions of educational research with an emphasis on careful reading and critique of research as well as the significance of the role of educators as researchers.

The role of literature in research is examined, and techniques and strategies for critiquing literature are developed. Discussion of the research design process, including ethical issues and differing approaches to inquiry leads into an overview of the frequently used methods of data collection and analysis. The modules in the course provide a grounding in key concepts, to develop understanding and skills in particular methods of data collection and analysis.

The modules of study include epistemology in the social sciences, the philosophical foundations of modern research strategies, the general classes of research investigations in education, and will help students to develop their skills to better support them in reading and understanding research projects. This course is an initial preparation for writing project work, thesis and dissertation in education.

## ENGINEERING

## Engineering - Chemical

## CHEM ENG 7000

Minerals Processing

- 3 units - semester 1
- Available for Non-Award Study
- Assessment: assignments, exam, project

The application of chemical engineering principles to minerals processing operations, including flotation, size reduction, gravity separation and hydrometallurgy

## CHEM ENG 7004

## Biochemical Engineering

- 3 units - semester 1
- Available for Non-Award Study
- Assessment: assignments, exam, project

A review of fundamentals of microbiology; the growth curve; kinetics of substrate utilisation, product formation, bio-mass production in cell cultures and inactivation (death) of cells; design and analysis of biological reactors, bio-reactors, sterilisation reactors, applications; product recovery operations; bio-process economics.

## CHEM ENG 7008

## Combustion Processes

- 3 units - semester 1
- Available for Non-Award Study
- Assessment: assignments, exam, project

Basic principles which form the background to combustion phenomena. Topics include explosions in closed vessels, flames and combustion waves, detonation waves in gases, combustion of hydrocarbons, combustion in mixed and condensed phases, high explosives, heating applications, combustion and the environment

## CHEM ENG 7010WT

Winery Engineering III

- 3 units - semester 1
- 2 lectures, 1 tutorial, 3 hours practical/project exercises per week
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assumed Knowledge: AGRONOMY 2012RW Engineering Science or CHEM ENG 1001 Engineering Physics, or equiv.
- Assessment: final exam, tutorials, project work

Application of engineering principles and practices to winemaking. Process calculations (mass and energy balances), process utilities (refrigeration, process heating and cooling), steam systems, electrical power systems, heat transfer and heat exchangers, must, juice and wine transfer methods, centrifugation and filtration, process control and instrumentation.

## CHEM ENG 7012

## Environmental Engineering

- 3 units - semester 1
- Available for Non-Award Study
- Assessment: assignments, exam, project

The study of air and water pollution; pollutant dispersion; control equipment; primary, secondary and tertiary waste water treatment; landfill and hazardous wastes.

## CHEM ENG 7021

## Special Studies in Chemical Engineering

- 3 units - semester 1 or 2
- Eligibility: Subject to approval by Head of School
- Assessment: assignments, exam, project

Courses and/or a scholarly, research or industrial project work.

## CHEM ENG 7022

## Chemical Engineering Management and Optimisation

- 3 units - semester 2
- Available for Non-Award Study
- Assessment: assignments, exam, project

The life cycle of a chemical processing system from the research and development behind the initial concept through process design construction and operations management. Topics covered include patents, capital investment evaluation, construction planning and control, cost planning and control, process optimisation, basic management principles and a general treatment of the structure and environment of industry.

## CHEM ENG 7023

## Chemical Process Simulation

- 3 units - semester 2
- Available for Non-Award Study
- Assessment: assignments, exam, project

Principles of computer-aided design and simulation of processes. A design problem is solved using industrial process computer simulation software.

## CHEM ENG 7024

## Process Synthesis and Integration

- 3 units - semester 1 or 2
- Available for Non-Award Study
- Assessment: assignments, project

Design and synthesis of HEN (heat exchanger networks) including evolutionary and algorithmic methods. Integration of power, work, separation waste and/or energy systems. Application to an industrial process: Flexibility and operability studies; retrofit situations.

## CHEM ENG 7026

## Process Design Project

- 6 units - semester 2
- Eligibility: Subject to approval by Head of School
- Available for Non-Award Study
- Assessment: assignments, exam, project

Topics comprise sources and estimation of data, costing and economic analysis of alternative proposals, the application of Process Engineering and Operations Research techniques to the selection, sizing, design and optimisation of equipment and processes (including utilities), project scheduling and control, and plant operation and safety considerations. Project: the project involves the economic comparison of alternative processes for the manufacture of a nominated chemical product, the study of a selected process, calculation of material and energy balances, preparation of flow sheets, design of selected plant items, an assessment of factors affecting plant safety, estimation of plant cost and process economics, preparation of a design report and drawing of plant lay-out.

## CHEM ENG 7027

## Transport Processes in the Environment

- 3 units - semester 1
- Available for Non-Award Study
- Assessment: exam 80\%, assignments, project

Introduction and basic concepts. Environmental chemicals and properties. Thermodynamics and phase equilibria. Loss Mechanisms. Inter-media transport. Simple exchange models. Air pollution problems. Nuclear chemistry. Environmental modelling.
Plume dispersion. Simple kinetic models.

## CHEM ENG 7030

## Process Modelling \& Control

- 3 units - semester 1
- Available for Non-Award Study
- Assumed Knowledge: process control at undergraduate level
- Assessment: exam, project

The principles of process modeling particularly dynamic modeling; stability analysis and the design of control loops; state variable models and their use; typical control structures for a variety of commonly encountered processes specification of advanced
controllers (e.g. dead time compensation, feed-forward, IMC, modelbased control, model-based controllers); discrete-system models; specification of multi-variable control structures and de-couplers.

## CHEM ENG 7031

## Communication and Management

- 3 units - semester 1 or 2
- 45 hours of lectures, tutorials and project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

This course focuses on developing the skills and techniques managers need to navigate organisational transformations of work to effectively guide project teams and to communicate effectively with CEOs and Boards of Directors. Team dynamics, effective communication, facilitation, leadership style, negotiation skills, conflict resolution, and coaching skills will be examined from a variety of perspectives. Course goals will include efforts to have each person understand the implications behind his/her personal thinking style, emotional intelligence, and managerial behaviour.

## CHEM ENG 7032

Principles of Sustainability and Decision Making

- 3 units - semester 1 or 2
- 45 hours lectures, tutorials, project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

Engineering for sustainable development provides for human needs without compromising future generation's ability to meet their needs. Industry's impact on sustainability can be summarised in the "triple bottom line", covering the three components environmental responsibility, economic return (wealth creation), and social development. For industry to guide its activities towards greater sustainability, engineers need to have the tools to assess the operations with which they are concerned. This course introduces a set of indicators that can be used to measure the sustainability of an operating unit. These metrics will address the issue of sustainable development and enable companies to set targets and develop standards for internal benchmarking, and to monitor annual progress.

## CHEM ENG 7033

## Chemometrics

- 3 units - semester 1 or 2
- 45 hours lectures, tutorials, project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

Mathematical, statistical, graphical or symbolic methods to improve the understanding of chemical information. Methods will consider multiple variables simultaneously - projections and mapping, experimental design, optimisation of experimental parameters, techniques of collecting good data and information extraction principal component analysis, singular value decomposition, linear discriminant analysis, resolution and signal processing.

## CHEM ENG 7034

## Environmental Modelling

- 3 units - semester 1 or 2
- 45 hours lectures, tutorials, project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

Introduction to a variety of models to determine the fate of organic contaminants released into the natural environment. The course focus will be on organic contaminants in a multi-media world. The models represent the real world processes by using a series of compartments which allow for the movement of chemicals between them. Models include wind and currents and allow for advection, differences in concentration, sedimentation and scavenging processes, etc.

## CHEM ENG 7035

## Waste Water Treatment

- 3 units - semester 1 or 2
- 45 hours lectures, tutorials, project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

Techniques for the characterisation of wastewaters; fundamental understanding of many of the existing unit operations and processes used for wastewater treatment, especially those processes used for the biological removal of nutrients; implementation of several newer technologies (e.g. UV disinfection, membrane filtration, and heat drying); concern for the long term health and environmental impacts of wastewater constituents; advanced wastewater treatment and risk assessment for water reuse applications; introduction to water waste minimisation and associated methods.

## CHEM ENG 7036

## Air Pollution

- 3 units - semester 1 or 2
- 45 hours lectures, tutorials, project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

Effects and sources of air pollutants; meteorological effects on air pollution; dispersion of pollutants in the atmosphere; particulate emission control; control of gases and vapours; adsorption; adsorption principles; atmospheric photochemical reactions.

## CHEM ENG 7037

## Combustion and Energy Engineering

- 3 units - semester 1 or 2
- 45 hours lectures, tutorials, project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

Chemistry and physics of combustion: kinectically controlled combustion of solid fuels: flames in premixed gases: heat transfer in furnaces.

## CHEM ENG 7038

## Process Plant Safety and Risk Assessment

- 3 units - semester 1 or 2
- 45 hours lectures, tutorials, project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

This course fully examines the diverse regulatory, design and operational issues related to process plant safety and will develop the arsenal of proven tools and techniques for implementing safety and risk management in various segments of the CPI.
'Risk' means different things to different people although there is common ground based on the notion of uncertainty. If we knew what would happen next then there would be no 'risk'. Demonstrating that risk has been properly managed has given rise to a number of risk management paradigms. These will be considered in a process engineering context.

## CHEM ENG 7039

## Pinch Analysis

- 3 units - semester 1 or 2
- 45 hours lectures, tutorials, project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

Heat exchanger network synthesis (HENS) is one of the most extensively studied problems in chemical process synthesis. It significance can be attributed to its role in controlling the costs of energy for a process. The two primary methods for HENS are sequential and simultaneous synthesis methods. Water pinch analysis can be used to guide water and effluent management decisions while at the same time improving the efficiency of
chemical processes. It can be used for the initial design of the process or as a tool to guide process modifications due to changing circumstances (financial, process or environmental). The procedure enables the minimum amount of water to be determined by considering the introduction of recycle loops and reuse cascades. The analysis highlights operations that should be investigated to improve the efficiency of water management.

## CHEM ENG 7040

## Thermal and Separation Processes

- 3 units - semester 1 or 2
- 45 hours lectures, tutorials, project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

Separation technology and processes are studied with application to current industrial design problems. Topics and design case studies may include: absorption, adsorption, biological separations, crystallisation, distillation, environmental separations, ion exchange, membrane separations, molecular distillation, pervaporation, solid separations, supercritical extraction, thermal stripping, and others. Thermal design of heat exchangers, condensers, furnace, etc will also be considered.

## CHEM ENG 7041

## Advanced Rheology and Polymer Processing

- 3 units - semester 1 or 2
- 45 hours lectures, tutorials, project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

Applications and properties of polymers and complex fluids; measurement, analysis and prediction of flow behaviour and rheological properties of complex fluids; analysis and modelling of polymer and polymer processing operations.

## CHEM ENG 7042

## Advanced Chemical Engineering Thermodynamics

- 3 units - semester 1 or 2
- 45 hours lectures, tutorials, project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

Laws of thermodynamics from phenomenological and statistical point of view; reactions and phase equilibria; properties of solutions; analysis of chemical engineering processes from the standpoint of thermodynamics; introduction to statistical and irreversible thermodynamics.

## CHEM ENG 7043

## Bioreaction and Bioseparation Engineering

- 3 units - semester 1 or 2
- 45 hours lectures, tutorials, project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

Applications of chemical kinetics and reaction engineering principles to bioreactors; biological reactors and fermentor design and scale-up; kinetics of microbial growth, product formation, enzyme catalysed reactions; separation processes in biological systems; enzyme/cell isolation, product enrichment by methods of ion-exchange, filtration, centrifugation, chromatography, reverse-osmosis, precipitation, salting-out, electrophoresis, membrane separations.

## CHEM ENG 7044

## Food Engineering

- 3 units - semester 1 or 2
- 45 hours lectures, tutorials, project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

The principal foci of this course are determination of the thermophysical and rheological properties of a range of food systems and food ingredients; examination of the fundamental and applied aspects of grain, vegetable and crop storage and drying; process control of food processing operations; and development of computer models of food processing unit operations and of quality changes during processing.

## CHEM ENG 7045

## Advanced Fluid Mechanics

- 3 units - semester 1 or 2
- 45 hours lectures, tutorials, project
- Available for Non-Award Study
- Assessment: exams, tutorials, project

This course is intended to give students a state-of-the-art understanding about single and multicomponent boiling and condensation heat transfer phenomena. Applications include the analysis of nuclear reactors, oil wells, and chemical process equipment. As well, the course will develop state-of-the-art understanding in multicomponent flow phenomena. Applications in the chemical process, petroleum recovery, and fossil/nuclear power industries will be given. Specific areas of coverage include two-phase; fluid mechanics, pressure drop, modelling and analysis, stability analysis, critical flow and dynamic waves, flow regime analysis, and phase separation and distribution phenomena. The application of computational fluid dynamics will also be considered.

## CHEM ENG 7046A/B

## Masters Chemical Engineering Project

- 12 units - full year
- 480 hours
- Available for Non-Award Study
- Assessment: completion of project

Industrial project topic as agreed by the Head of School.

## Engineering - Civil \& Environmental

## C\&ENVENG 5061

## Environmental Science and Policy

- 2 units - semester 1
- 38 hours lectures, tutorials, practical work
- Available for Non-Award Study
- Assessment: Part A - 30 min. written exam on lecture material $40 \%$, written reports of practical work $30 \%$, essay $30 \%$; Part B may include written assignments \& exam - details at beginning of course

Part A - This course introduces fundamental aspects of bacterial structure, physiology and ecology. Topics covered include: characteristics and anatomy of bacterial cells; nutrition and design of growth media; fermentations; factors affecting growth of populations; sterilisation and disinfection; study of the interaction of bacteria with surfaces, and water quality and microbiology.

Part B - Introduction to the principles of microeconomics.

## C\&ENVENG 5062

## Structural Design III (Concrete)

- 3 units - semester 2
- 48 contact hours comprising lectures, tutorials, project work
- Available for Non-Award Study
- Assumed Knowledge: undergraduate structural design principles
- Assessment: may include assignments and/or exam or quizzes details at beginning of semester

Detailed design and retrofitting and rehabilitation procedures for multi-storey reinforced concrete structures including beams, slab systems and columns. Students will undertake substantial design projects to apply lecture material.

## C\&ENVENG 5063

## Structural Design III (Steel)

- 3 units - semester 1
- 48 contact hours comprising lectures, tutorials, project work
- Available for Non-Award Study
- Assumed Knowledge: undergraduate structural design principles

Assessment: may include assignments and/or exam or quizzes details at beginning of semester

Detailed design procedures for multi-storey steel and composite structures including composite slabs, steel beams, composite beams and steel columns. Students will undertake substantial design projects to apply lecture material.

## C\&ENVENG 5064

## Environmental Engineering and Design III

- 3 units - semester 1
- 48 contact hours comprising lectures, tutorials, design
- Available for Non-Award Study
- Assumed Knowledge: C\&ENVENG 2033 Water Engineering II S1 and C\&ENVENG 2035 Water Engineering II S2
- Assessment: may include written assignments \& exam - details at beginning of semester

Water treatment processes; environmental geotechnics, groundwater contamination. In addition students will carry out an environmental design.

## C\&ENVENG 5078

## Introduction to Environmental Law

- 3 units - semester 2
- 24 hours comprising lectures and tutorials
- Available for Non-Award Study
- Assessment: may include assignments and/or exam - details will at beginning of semester

The course examines regulatory mechanisms that address environmental problems and focuses particularly upon regulation of development. Included are: a general introduction to the law and the legal system; the nature of environmental problems in Australia; constitutional responsibilities and powers with respect to environmental planning and protection; land-use planning and protection systems; environmental impact assessment; regulation of pollution and waste disposal; and environmental litigation.

## C\&ENVENG 6020A/B

## Advanced Structural Investigation

- 6 units - full year
- 120 hours research and directed study
- Available for Non-Award Study
- Assessment: research project

Research project in advanced structural concepts.

## C\&ENVENG 7027

## Wastewater Engineering and Design

- 3 units - semester 1
- 36 hours lectures, tutorials, project work
- Available for Non-Award Study
- Assessment: projects \& exam

Characteristics of wastewater; primary, secondary and tertiary treatment methods; sludge disposal; project: design of wastewater treatment plant; includes Masters level project.

## C\&ENVENG 7028

## Waste Management Analysis and Design

- 3 units - semester 2
- 36 hours lectures, tutorials, design, and directed study
- Available for Non-Award Study
- Assessment: projects \& exam

Generation, collection and disposal of solid waste; sanitary landfill; incineration; resource conservation and recovery; fuel recovery. Hazardous waste management; types of hazardous waste; treatment technologies; methods of disposal; design project; includes Masters level project.

## C\&ENVENG 7029

## Environmental Modelling, Management and Design

- 3 units - semester 1
- 36 hours lectures, tutorials, design; directed study
- Available for Non-Award Study
- Assessment: to be advised

The course addresses the major steps in the development of engineering models, and how they are used for decision-making, with a particular emphasis on water quality. Topics to be covered include one or more of the following: model specification (environmental processes, model complexity, model application), model calibration (gradient methods, genetic algorithms, ant colony optimisation) model validation and stochastic modelling (types of uncertainty, random variables, risk-based performance measures
and reliability analysis, including Monte Carlo simulation and the first-order reliability method); artificial neural network modelling, environmental decision-making. Includes Masters level project.

## C\&ENVENG 7032

## Composite Steel and Concrete Bridges and Buildings

- 3 units - not offered in 2006
- 36 hours lectures, tutorials, directed study
- Assessment: 2 design reports and/or quizzes - further details available at beginning of semester

The diagnosis, assessment and rehabilitation of existing composite steel and concrete bridges and buildings is a rapidly expanding growth area in structural engineering. This course covers the design of new composite bridges and buildings for both gravity and fatigue loads using fundamental principles that are applicable throughout the world. This is followed by the retrofitting and rehabilitation of composite structures in buildings, and then the fatigue design, assessment and retrofitting of composite bridge beams. Major contents consist of: insertion of service ducts in composite beams; strengthening composite beam; fatigue design of new bridge beams; fatigue assessment of the residual strength and residual endurance of existing composite bridge beams based on their asymptotic endurances.

## C\&ENVENG 7033

## Structural Dynamics due to Wind and Earthquakes

- 3 units - semester 1
- 36 hours lectures, tutorials, directed study
- Available for Non-Award Study
- Assessment: projects \& exam

Students will learn in this course how the basic stiffness method of structural analysis for static loading is extended to analyse the dynamic response of structures subject to dynamic loading such as that caused by blast, wind and earthquake. Emphasis will be placed on practical elastic and inelastic analysis techniques. Importantly, simplified methods for characterisation of dynamic loads as "equivalent" static forces and the treatment of structural damping will also be covered.

## C\&ENVENG 7034

Deep Foundation Engineering and Design

- 3 units - not offered in 2006
- 36 hours lectures, tutorials, project work
- Available for Non-Award Study
- Assessment: projects and exam

Advanced topics in the design of shallow and deep foundations, including numerical methods: effect of stiffness of strip and raft foundations on settlement control; design of pile foundations for vertical and/or lateral loading; dewatering of excavations; includes Masters level project.

## C\&ENVENG 7035

## Expansive Soils and Footing Design

- 3 units - semester 1
- 36 hours lectures, tutorials, project work
- Available for Non-Award Study
- Assessment: coursework

The nature, behaviour and distribution of expansive soils in the urban environment. Soil suction and its measurement. The definition, measurement and accuracy of instability index and surface heave. Design of footings on expansive soils using the deemed-to-comply method, the Mitchell and Walsh computer models, and a probabilistic approach. The influence of trees and vegetation on expansive soil behaviour and footing design. Assessment of houses damaged as a result of expansive soil movement. Techniques to mitigate the influence of expansive soils. At the end of this course, students will be able to design residential footings to current practice. Includes a Masters level project.

## C\&ENVENG 7036

## Water Resources Optimisation and Modelling

- 3 units - not offered in 2006
- 36 hours lectures, tutorials, directed study
- Available for Non-Award Study
- Assessment: projects, assignments \& exam

Topics selection from: Optimisation and computer simulation techniques applied to the planning and operations of water resources systems; multiobjective planning; assessment of risk, uncertainty and reliability; design project. Includes Masters project.

## C\&ENVENG 7037

## Water Distribution Systems and Design

- 3 units - not offered in 2006
- 36 hours lectures, tutorials, directed study
- Available for Non-Award Study
- Assessment: projects \& exam

Water distribution systems analysis. Steady state analysis of pipe networks. Alternative formulations of equations for pipe networks. Computer solution techniques. Optimisation of pipe networks using genetic algorithms. Water hammer analysis. Pump transients.

Water hammer in hydro-electric plants. Water hammer control methods. Includes Masters level project.

## C\&ENVENG 7038

## Coastal Engineering \& Design

- 3 units - semester 2
- 36 hours lectures, tutorials, project work
- Available for Non-Award Study
- Assessment: exam 60\%, design 30\%, tutorials $10 \%$

The course is based on waves and wave theories, tides, sediment transport, nearshore coastal processes, wave generation, ocean outfalls, coastal management; includes Masters level project.

## C\&ENVENG 7039

Special Studies in Civil and Structural Engineering

- 3 units - semester 1 or 2
- Available for Non-Award Study

Advanced topics as approved by the Head of School.

## C\&ENVENG 7040

Special Studies in Civil \& Environmental Engineering

- 3 units - semester 1 or 2
- Available for Non-Award Study

Advanced topics as approved by the Head of School

## C\&ENVENG 7041

High-Rise and Long-Span Steel Structures

- 3 units - semester 2
- 36 hours lectures, tutorials; directed study
- Available for Non-Award Study
- Assessment: project work, tutorials - details at beginning of semester

This course consists of two parts. The first part is on tall building structures. Emphasis will be placed on horizontal load resistance systems, rigorous analytical methods and practical methods of design, and the structural behaviour of various tall building systems under lateral loading. The second part concerns space structures in which some of the latest engineering constructions in space structures will be explored and various types of space structures will be introduced in terms of their behaviour under load, materials used and analysis methods. In particular, the design, analysis and construction of double-layer grids - one of the most popular forms of space structures will be addressed.

## C\&ENVENG 7042

## Prestressed Concrete Structures

- 3 units - not offered in 2006
- 36 hours lectures, tutorials; directed study
- Available for Non-Award Study
- Assessment: design, tutorials and exam

This course is intended to provide students with a deeper fundamental understanding of the behaviour of concrete structures, particularly prestressed concrete. Emphasis is also placed on enhancing the student's ability to independently solve problems. Topics covered will be taken from the following: axially loaded and flexural members; shear behaviour of beams; deflections of prestressed concrete members; statically indeterminate structures; and design of disturbed regions using strut and tie modelling.

## C\&ENVENG 7043

## Introduction to Geostatistics

- 3 units - summer semester, semester 1or 2
- Assumed Knowledge: Basic geology; elementary statistics (mean, variance, histogram)

Basic introduction to geostatistics with the emphasis on concepts rather than mathematics. Regionalised (or spatial) variables. Quantifying the criteria for estimation sources of errors in estimation, fundamental basis of the geostatistical approach, mean and variance of the estimation error. The variogram calculation, interpretation, linking variogram behaviour with physical causes (geology, sampling). Variances, covariances, Krige's volumevariance relationship. Extension variances and estimation variances simple calculations in one and two dimensions. Global reserve/resource estimation. Optimal estimation introduction to kriging. Estimated values and true values reasons for differences and simple ways of accounting for them.

## C\&ENVENG 7044

## Introduction to Environmental Law

- 3 units - semester 2
- 24 hours lectures, tutorials
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Assessment: may include assignments and/or exam - further details available at beginning of semester

The course examines regulatory mechanisms that address environmental problems and focuses particularly upon regulation of development. Included are: a general introduction to the law and the legal system; the nature of environmental problems in Australia; constitutional responsibilities and powers with respect to
environmental planning and protection; land-use planning and protection systems; environmental impact assessment; regulation of pollution and waste disposal; and environmental litigation.

## C\&ENVENG 7045

## Special Studies in Water Engineering

- 3 units - semester 1 or 2
- Available for Non-Award Study
- Advanced Topics as approved by the Head of School.


## C\&ENVENG 7046

FRP Retrofitting of Concrete Structures

- 3 units - semester 2
- 36 hours lectures, tutorials, directed study
- Available for Non-Award Study
- Assessment: 2 design reports and/or quizzes - further details available at beginning of semester.

The maintenance, upgrade, strengthening and stiffening of existing reinforced concrete structures is a large growth area in civil engineering. A new retrofitting technique using externally bonded plates, in particular fibre reinforced polymer (FRP) plates, is being developed and applied in practice worldwide and has been found to be convenient, inexpensive and unobtrusive. The fundamental principles behind this new retrofitting technique, the development of new design rules and their application in practice are described. The course covers: the use of all types of plates such as FRP and steel plates; externally bonded, near surface mounted and bolted plates; all debonding mechanisms; strength, stiffness and ductility of plated beams; plating for strength and serviceability; increasing the flexural and shear strength by plating; and examples of retrofitting of plating in practice.

## C\&ENVENG 7047

Analysis of Rivers and Sediment Transport

- 3 units - semester 2
- Available for Non-Award Study
- 36 hours lectures, tutorials/design, practicals
- Assumed Knowledge: C\&ENVENG 2033 Water Engineering II S1 and C\&ENVENG 2035 Water Engineering II S2, C\&ENVENG 3013 Water Engineering \& Design IIIA and C\&ENVENG 3014 Water Engineering \& Design IIIB or equivalent
- Assessment: exam 50\%, tutorials/design 30\%, practicals 20\%

This course will examine advanced topics in open Channel Flow such as curvilinear flows, unsteady flow, super-critical transitions. These will be followed by an introduction to River Mechanics and modelling flow in 2D and 3D situations, such as meandering
channels and flow around piers and other structures. The course will then introduce concepts in sediment transport and examine techniques to predict the threshold of motion, sediment transport rates as well as local scour and morphology changes. The lectures will be used to introduce topics and the students will be expected to gain a greater understanding of the material through the design and tutorials and through their own self study.

## C\&ENVENG 7048

## Water Resources Sustainability and Design

- 3 units - not offered in 2006
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Assumed Knowledge: some Hydrology, Water Engineering
- Assessment: essay, short talk, Masters level design project, exam

Reliability and sustainability issues of water resources; drought assessment; multi objective evaluation of water resources projects; sustainability assessment and modelling; design project.

## C\&ENVENG 7049A/B

## Masters Civil \& Structural Engineering Project

- 12 units - full year
- 480 hours
- Available for Non-Award Study
- Assessment: evaluation of research including research thesis, conference paper preparation, literature review \& oral presentations

Students usually work in groups on a research thesis under the supervision of an academic staff member.

## C\&ENVENG 7050A/B

## Master Civil \& Environmental Engineering Project

- 12 units - full year
- 480 hours
- Available for Non-Award Study
- Assessment: evaluation of research including research thesis, conference paper preparation, literature review \& oral presentations

Students usually work in groups on a research thesis under the supervision of an academic staff member.

## C\&ENVENG 7051

## Geostatistics - Project and Thesis

- 12 units - Summer semester, semester 1or 2
- regular supervisory meetings with Project Supervisor
- Prerequisite: completion of all taught M.Geostatistics courses
- Assessment: examination of thesis

Students are required to undertake a major project and submit a dissertation/thesis describing their work. The project is based on a realistic, industrial data set and must involve: a rigorous statistical and geostatistical analysis of the data yielding variograms and, where appropriate, cross-variograms; fitting acceptable models to variograms and cross-variograms and making credible interpretations of the models, an innovative application of at least one advanced geostatistical technique, selected from those covered in the taught programme, to solve a clearly defined problem based on the data set, and an analytical description of the work presented as a thesis/dissertation

## C\&ENVENG 7052

## Geostatistical Simulation

- 3 units - semester 2
- 22 lectures, 5 tutorials, 5 practicals
- Available for Non-Award Study
- Prerequisite: C\&ENVENG 7056 Linear Geostatistics, STATS 7061 Statistical Analysis, C\&ENVENG 7053 Non-Linear Geostatistics, C\&ENVENG 7057 Non-Stationarity
- Corequisite: Multivariate Geostatistics
- Assessment: coursework 50\%, formal written exam 50\%

Concepts - differences between estimation and simulation. Monte Carlo simulation. Extension MC to spatially correlated simulation. Conditional and non-conditional simulation. The turning bands method of simulation. Simulating coregionalisations (multivariate spatial correlations)- extensive case study of multivariate simulation using turning bands method. The LU decomposition method of simulation. Sequential methods - sequential Gaussian, sequential indicator simulation. Simulating geological structures - indicator simulation, truncated Gaussian simulation, plurigaussian simulation

## C\&ENVENG 7053

## Non-Linear Geostatistics

- 3 units - semester 2
- 22 lectures, 5 tutorials, 5 practicals
- Available for Non-Award Study
- Prerequisite: C¢ENVENG 7056 Linear Geostatistics, STATS 7061 Statistical Analysis
- Assessment: coursework 50\%, formal written exam 50\%

Reasons for using non-linear methods of estimation-outliers, skewed distributions, "best" estimates. Simple ways of dealing with non-linearity: proportional effects, lognormality. Estimation by direct transformation to a Gaussian (normal) distribution lognormal kriging; multigaussian kriging. Indirect methods illustrated by heuristic methods in case studies. Hermite polynomial transforms. Disjunctive kriging. Non-parametric estimation - indicator kriging, multiple indicator co-kriging

## C\&ENVENG 7054

## Computing for Geostatistics

- 2 units - semester 1 or 2
- 10 lectures, 10 practicals
- Available for Non-Award Study
- Assumed Knowledge: basic computer skills
- Assessment: coursework

The purposes of this course are: (i) to teach the rudiments of a programming language so that students can implement their own simple programmed versions of geostatistical techniques. They may also require these skills for manipulating data in their project and coursework. Any simple language could be used, eg; Fortran 90. (ii) to train students in the use of the GeostatWin computer package.

For students who are already proficient in a programming language the emphasis is on applications using the GeostatWin package.

## C\&ENVENG 7055

## Selection \& Recoverability

- 2 units - semester 1 or 2
- 10 lectures, 5 tutorials, 5 practicals
- Available for Non-Award Study
- Prerequisite: C\&ENVENG 7043 Introduction to Geostatistics
- Corequisite: STATS 7061Statistical Analysis
- Assessment: coursework25\%, formal written exam 75\%

This course is essentially a study of scale effects. The applications are to mineral resources and environmental contamination (ground) but, depending on the chosen specialisations, can be expanded to all other applications. The emphasis is on conceptual approaches to simple applications leading to simple spatial statistical methods to predict the effects of changing scale - e.g. predicting the distributions of grade values of large blocks from the grade values of sample volumes. The information effect and the support effect concepts, quantification and practical consequences. Parametric formulation of the change of scale. The affine correction. Local and global corrections for scale effects. Simple examples.

## C\&ENVENG 7056

## Linear Geostatistics

- 3 units - semester 1 or 2
- 22 lectures, 5 tutorials, 5 practicals
- Available for Non-Award Study
- Prerequisite: C\&ENVENG 7043 Introduction to Geostatistics
- Corequisite: STATS 7061 Statistical Analysis
- Assessment: coursework 50\%, formal written exam 50\%

This course provides a more rigorous and in-depth treatment of the subjects covered in Introduction to Geostatistics.Variograms calculation, interpretation and modelling. Averaging effects regularisation and its effects. Using the variogram to predict statistical characteristics of variables measured on different scales. The stationarity assumptions - strict stationarity, second-order stationarity and intrinsic stationarity. Kriging and kriging variances the effects of changes in parameter values, screen effects, simple kriging, ordinary kriging. Applications of kriging to case studies and demonstration examples.

## C\&ENVENG 7057

## Non-Stationarity

- 2 units - semester 2
- 15 lectures, 3 tutorials, 2 practicals
- Available for Non-Award Study
- Prerequisite: C\&ENVENG 7056 Linear Geostatistics, STATS 7061 Statistical Analysis
- Assumed Knowledge: Geostatistics concepts and ability to apply them
- Assessment: coursework, 50\% formal, written exam 50\% Introduction to the concept of drift (trend) by way of geological examples. Definitions of the various forms of stationarity (in a statistical sense). Simple ways of dealing with non-stationary variables. Detailed case study to illustrate the assessment and quantification of non-stationarity. Universal kriging and universal kriging variances. Intrinsic Random Functions and generalised covariances. Statistical tests for constant mean of a spatial variable - the D-statistic and the global D-statistic


## Engineering - Electrical \& Electronic

## ELEC ENG 7015

## Adaptive Signal Processing

- 3 units - semester 1
- 30 hours lectures, tutorials
- Available for Non-Award Study
- Assumed Knowledge: Linear Systems (discrete and continuous), Linear Algebra (matrices), Probability Theory, Fourier and Z Transforms and MATLAB
- Assessment: exam 50\%, assignment 50\%

Introductory and Preliminary material - Introduction to the concepts, key issues and motivating examples for adaptive filters; Discrete time linear systems and filters; Random variables and random processes, covariance matrices; Z transforms of stationary random processes.Optimum Linear Systems - Error surfaces and minimum mean square error; Optimum discrete time Wiener filter; Principle of orthogonality and canonical forms; Constrained optimisation; Method of steepest descent - convergence issues; Stochastic gradient descent LMS - convergence in the mean and misadjustment Case study. Least squares and recursive least squares. Linear Prediction - Forward and backward linear prediction; Levinson Durbin; Lattice filters.

## ELEC ENG 7017

## Beamforming and Array Processing

- 3 units - semester 1
- 30 hours lectures, tutorials
- Available for Non-Award Study
- Assumed Knowledge: Linear Systems (discrete and continuous), Linear Algebra (matrices), Probability Theory, Fourier and Z Transforms, Random Processes and MATLAB
- Assessment: exam 50\%, assignment 50\%

Introductory material - Concepts, key issues and motivating array examples; Simple propagating field models. Deterministic Signals Conventional beamforming concepts: narrowband beamforming; Beam patterns: beamwidth, sidelobes and grating lobes, Array shading real weights, Array factor theorems; Multiple simultaneous beams; Time delay and sum beamforming. Random Signals Probability and random processes for arrays; Cross-spectral matrices. Frequency Domain Beamforming - Frequency domain Approach single and multiple beams; Array Gain; Frequency wavenumber; Array shading and null steering. Optimum Beamforming in Frequency Domain - Optimisation criteria constrained minimum mean square and Conventional and Optimum Comparisons; Constraints: mainbeam and nulls; Sample Matrix Inverse and statistical considerations. Adaptive Beamforming in Frequency Domain - Sample Matrix Inverse update; Gradient
descent and optimisation surfaces with constraints; Convergence requirements; Stochastic Descent Methods: Least Mean Square; Convergence in the mean and mean square convergence. Optimum and Adaptive Beamforming in Time Domain - Multichannel tapped delay line approach; Optimum solution; Adaptive solution with passband constraints. Subspace Methods - Beam space approaches; MUSIC and other eigen space approaches.

## ELEC ENG 7033

## Principles of RF Engineering

- 3 units - semester 1
- Available for Non-Award Study
- Assumed Knowledge: foundation course in electronics \& some familiarity with electromagnetic ideas
- Assessment: hardware design assignment, tests

RF System Basics: Radio waves, antennas, analogue modulation, noise, sensitivity, selectivity, non-linearity, digital modulation, spread spectrum and radar. Tuned Circuits: Resonance, Q, bandwidth, transformers and matching networks. Amplifiers: BJT amplifiers, Miller effect, differential amplifiers, feedback, FET amplifiers, amplifier noise. Scattering Parameters: Transmission lines, impedance transformation, Smith charts, $S$ parameters and $S$ parameter amplifier design. Multi-port networks. Power Amplifiers: Class A, B, C and E amplification. Broadband matching. Filters: Basic lumped component designs. Filter realisation in microstrip form. Oscillators: Basic oscillator design and negative resistance approach. Phase noise and stability issues. Mixers, Modulation and Demodulation: Diode, BJT and FET mixers. The generation and demodulation of AM, SSB, FM and PM signals. Introduction to Phase Locked Loops: Basic principles and some applications. Frequency synthesisers.

## ELEC ENG 7044

## Multimedia Communications

- 3 units - semester 2
- 30 hours lectures, tutorials
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 4046 Telecommunications IV or equivalent
- Assessment: exam, assignments

Third generation mobile systems: W-CDMA implementation and dimensioning. Core network evolution including 2.5 G solutions. Orthogonal Frequency Division Multiplexing: principles and implementation including 802.11a OFDM PHY. Ad-hoc networking: principles and implementation including 802.11 IBSS and Bluetooth. Consumer broadband distribution: principles and implementation including DSL and HFC.

Satellite communications: principles and applications including link models, system parameters and multiple access (FAMA/DAMA). INTELSAT, Iridium, Globalstar. Lossy compression for image, audio and video coding. Video coding for videoconferencing and low data rate applications (H.261, H.263, H.26L, MPEG4 VLBV). Audiovisual system standards (H.324, H.221, H.223, H.245). MPEG standards family (MPEG-1, MPEG-2, MPEG-4, MPEG-7, MPEG-21) and applications. Video and voice over IP.

## ELEC ENG 7045

## Photonics for Communications

- 3 units - semester 2
- 23 hours lectures, tutorials \& major assignment
- Available for Non-Award Study
- Assumed Knowledge: familiarity with the principles of transmission line propagation and electronics, communication systems and communication theory
- Assessment: formal exam, assignment

The fundamental principles with which students should be familiar are reviewed in the early lectures within this course. Review of optics and lightwave propagation. Introduction to communication systems. Optical waveguides. Integrated optic waveguide. Dispersion and distortion effects. Single-mode and multi-mode optical fibres. Attenuation characteristics. Practical configurations. Light sources. Light emitting diodes. Laser operation. Laser diodes. Coupling considerations. Optical amplifiers. Light detectors. Photoelectric effects. PIN photodiodes. Avalanche photodiodes. Receiver circuits. Modulation. Analogue modulation formats. Digital modulation formats. Subcarrier techniques and multiplexing. Harmonic distortion and intermodulation. Noise and detection. Thermal and shot noise effects. Signal-to-noise ratios for digital and analogue systems. Thermal-noise limited and Shot-noise limited systems. Receiver design. System design. Analogue and digital point-to-point link design. Fibre distribution networks. Optical storage concepts. Dense Wave Division Multiplexing (DWDM), Compact Disc, DVD and other optical storage.

## ELEC ENG 7046

## Power Quality and Fault Diagnostics

- 3 units - semester 1
- 36 hours lectures, laboratory studies
- Available for Non-Award Study
- Assumed Knowledge: ELEC ENG 2008 Electronics II or equivalent
- Assessment: 2 quizzes $25 \%$, research based assignment 50\%, final exam 25\%

This course will address power quality issues and condition monitoring techniques used in electrical and industrial systems. A brief overview of power systems and three-phase machines will be
given, and the course will cover various issues under two major sections. Power Quality: EMI in energy systems, types of power quality issues, regulations, standards, prevention techniques, measurements and analysis, case studies and real-time tests. Fault Diagnostics: Importance, history, types and features of faults, test methods, sensors and measurement techniques, traditional and advanced diagnostic methods, case studies and real-time tests.

## ELEC ENG 7047

Studies in Electrical and Electronic Engineering A

- 3 units - semester 1 or 2
- Available for Non-Award Study

Topics as approved by the Head of School

## ELEC ENG 7049

## Power Electronics Systems

- 3 units - semester 2
- 24 hours lectures, tutorials
- Available for Non-Award Study
- Assumed Knowledge: ELECENG 1006 Electrical Engineering I or ELECENG 1005 Electrical Systems AM, ELECENG 2008 Electronics II, APP MTH 2000 Differential Equations and Fourier Series, or equivalent
- Assessment: exam, assignments, quizzes

Efficiency and control concepts, methods of analysis. Feedback and Isolation Devices. Switching Devices. Switching characteristics of devices, power losses. Rectifiers. AC -AC Converters. DC-DC Converters. Inverters. Power supplies. Hard and soft-switching, resonant circuits. Advanced energy-efficient motor drives. Computer interfacing, network communication. EMI in Power Electronics Systems. Students will complete a major assignment allowing deeper exploration of one or more topics covered in lectures.

## ELEC ENG 7050

## Microelectronic Testing and Design for Test

- 3 units - semester 2
- 30 hours of lectures, tutorials during mid-semester break
- Available for Non-Award Study
- Assumed Knowledge: A prior course or courses covering CMOS VLSI technology and design procedures, and integrated electronic systems
- Assessment: exam, assignments

Basic test approaches. Economics and role of testing. Automatic Test Equipment. Defects in CMOS technology, fault models and fault simulation. Automatic Test Pattern Generation. Parametric testing, functional \& structural tests. Ad-hoc Design for Test rules.

Boundary-scan test for systems and boards. Scan Path Testing Techniques. Logic Built-In Self Test and data compaction techniques to reduce test time for digital circuits. Memory testing and basic algorithms, memory Built-In Self-Test. Mixed-signal system and board testing and the analog boundary-scan test approach. Modelling of the analog faults for the semiconductor manufacturing. Mixed-signal testing using automatic test equipment and techniques for reducing the test complexity. Testing $A / D$ and $D / A$ using $D S P$, waveform generators and digitisers. Embedded testing of cores and IPs, core test standard.

## ELEC ENG 7051

## Microelectronic Datapaths and Arithmetic

- 3 units - semester 1
- Available for Non-Award Study
- Assumed Knowledge: linear circuit analysis techniques, operation \& characteristic of field effect transistors, ability to design \& analyse combinational \& sequential logic circuits, binary number systems
- Assessment: exam 50\%, assignments, project work $50 \%$

Introduction and review: MOS transistors, CMOS logic, and combinatorial circuit design; CMOS fabrication and layout; VLSI design flow; CMOS leaf cell design; delay estimation and minimisation; Simulation, synthesis, place and route; interconnect engineering; review of sequential logic in CMOS; design margin, reliability and scaling; CMOS logic families; system level considerations - floor planning, power dissipation, micro-architecture, clock routing; technology trends and challenges - data and configuration management, testing and verification, technology trends, alternative logic families; fixed point arithmetic - adders, multipliers, dividers; floating point units - shifters, comparators, coders, counters, one-zero detectors; alternative arithmetic structures.

## ELEC ENG 7052

## Electromagnetic Theory \& RFID Applications

- 3 units - semester 2
- 30 hours lectures, 6 tutorials
- Available for Non-Award Study
- Assumed Knowledge: familiarity with principles of circuit theory, signals and systems, electromagnetic theory
- Assessment: end of semester exam, semester quizzes, assignments

Revision of basic electromagnetic theory. Lumped and distributed circuit theory. Practical circuit elements for HF and microwave communications. Reciprocity theory and its applications. Microwave networks and junctions. Terrestrial and space propagation. Signals and noise in receivers. Simple radar concepts. Modulation systems. High frequency communication signals and calculations. Fourier and Hilbert transforms. Construction of
signalling waveforms and interpretation of their spectra. High frequency measurements. Electromagnetic compatibility regulations and measurements. Radio frequency identification concepts, applications, hardware, protocols and possibilities.

## ELEC ENG 7053

## Analog Microelectronic Systems

- 3 units - semester 2
- 28 hours lectures, tutorials \& practical work
- Available for Non-Award Study
- Assumed Knowledge: familiarity with principles of circuit theory, characteristics of basic electronic devices such as diodes FETs and BJTs and CMOS fabrication processes
- Assessment: exam 50\%, tests 5\%, project 45\%

Review of fabrication processes, design rules and transistor models. Layout issues; ASIC design flow; simulators and performance estimation; current sources and references; operational and transconductance amplifiers; current mode circuits; data conversion systems; switched capacitor systems; phase locked loops. A major project involving the design of a mixed signal microelectronic circuit.

## ELEC ENG 7054

Detection and Estimation Theory

- 3 units - semester 1
- 30 lectures, 6 tutorials
- Available for Non-Award Study
- Assumed Knowledge: undergraduate level signal processing, random processes and statistics
- Assessment: end of semester exam 80\%, in-semester assignments 20\%

Random processes. Functions of random variables, expectations, inequalities. Parameter estimation, convergence and performance bounds. Hypothesis Testing (including Neyman-Pearson, Bayesian and Mini-Max testing and locally optimum detection). Composite tests, sequential detection theory. Robust detection and performance bounds. M-ary detection. Continuous time detection.

## ELEC ENG 7055

## Antennas and Propagation

- 3 units - not offered in 2006
- Available for Non-Award Study

Theory of radiation, wire antennas, antenna arrays, aperture antennas, broadband antennas, numerical analysis, communications and radar systems, propagation.

## ELEC ENG 7056

## RF Measurements and Testing

- 3 units - not offered in 2006
- Available for Non-Award Study

Network analysis, spectrum analysis, noise measurements, and active device characterisation.

## ELEC ENG 7057

## Engineering Communication and Critical Thinking

- 3 units - semester 1 or 2
- Eligibility: M.E/M.E.(Adv) Engineering students only.
- Available for Non-Award Study

Engineering Communication and Critical Thinking provides strategies and practice in developing skills to enable students with English as a second language to maximise their capacity to learn and to interact effectively in an English speaking academic and professional environment. This course explores communication in a cross cultural setting, and provides strategies for effective academic and professional writing and seminar presentations. Seminars provide information about and practice in locating, analysing and evaluating appropriate sources of information, and consider differences in style and format of documents written for different purposes. The course provides the opportunity to develop skills for professional speaking in a variety of settings.

## ELEC ENG 7058A/B

## Masters Project

- 12 units - full year
- 480 hours practicals, lectures
- Assumed Knowledge: ELEC ENG 7057 Engineering Communication \& Critical Thinking or equivalent experience in professional and academic communication and analytical thinking
- Assessment: performance during project work, assessment of written reports, seminar presentations

The two-semester masters project aims to give students experience in solving advanced engineering problems and the opportunity to apply the knowledge gained during the course. Through the project students will gain experience in project planning, in teamwork and in communication with management and support staff. The project will also develop skills in design, verification and research.

## ELEC ENG 7059

Radar Principles and Systems - An Introduction

- 3 units - not offered in 2006
- 24 lectures, 6 tutorials
- Prerequisite: appropriate degree or experience
- Assumed Knowledge: basic knowledge of linear systems, transform theory and signal processing
- Assessment: exam, assignments

Overview of radar including physical principles, system components, the processing chain and typical applications. Detection and the radar equation including statistical detection theory and CFAR. Propagation, scattering and clutter including attenuation, radar cross section, target fluctuations and ground clutter for airborne radar. FMCW radars including the Doppler effect, pulse compression, ambiguities and OTHR radar systems. Matched filters for radar including examples and relation to detection theory. Pulsed radars including spectrum, ambiguities and ghosting and pulse doppler radar. Radar waveforms and ambiguity functions and their role in system design. Antennas and phased arrays including beamforming, direction of arrival estimation, adaptive arrays and STAP. Imaging and classification including SAR, ISAR and high range resolution radar.

## ELEC ENG 7060

## Image Sensors and Processing

- 3 units - semester 2
- 24 lectures, 6 tutorials
- Prerequisite: appropriate degree or experience
- Assumed Knowledge: basic knowledge of linear systems, transform theory and signal processing
- Assessment: exam, assignments

Overview of imaging sensors and principles including various imaging devices. Measures of imaging quality through point spread function, resolution and spatial sampling. Storage requirements, including image representation, coding and compression techniques, lossy versus lossless. Techniques for reducing noise in images, feature enhancement and recognition. Image enhancement including contrast manipulation, histogram equalisation and derivative based operators. Segmentation and thresholding techniques. Applications of morphology to image processing including erosion and dilation operations for binary and grey scale images. Filtering and transform techniques for image processing including two dimensional Fourier transforms, wavelets and convolution. Extension topics may include image registration, super-resolution techniques for video processing and object classification using features extracted from images.

## ELEC ENG 7061

## Sensors and Data Fusion

- 3 units - semester 2
- 18 lectures, 6 tutorials
- Prerequisite: appropriate degree or experience
- Assumed Knowledge: basic knowledge of linear systems, transform theory and signal processing
- Assessment: assignments, exam

Sensor Performance - sensor management, processing techniques. Data registration and conversion - alignment and transformations. Uncertainty and reliability - reliable abstract sensors. Data structures - volume and surface representations, function representations. Sensor integration - competitive, complementary and cooperative techniques. Estimation - use of Kalman filters and hypothesis filters to integrate several sources of data. Data presentation - black-boarding systems for data fusion GUI's. Data merging - fuzzy-neural merging of data, fuzzy representation of sensor data fidelity. Applications: motion and identification fusion filter, hybrid guidance and target tracking.

## ELEC ENG 7062

## Studies in Electrical and Electronic Engineering B

- 3 units - semester 2
- 24 lectures, 6 tutorials
- Prerequisite: appropriate degree or experience
- Assumed Knowledge: prescribed by Head, Electrical \& Electronic Engineering
- Assessment: may include assignments, exam,

Special topics in Electrical and Electronic Engineering, as determined by the Head of the School. This course may be offered from time to time and will be taught by visiting academics.

## ELEC ENG 7063

## Studies in Electrical and Electronic Engineering C

- 3 units - semester 2
- 24 lectures, 6 tutorials
- Prerequisite: appropriate degree or experience
- Assumed Knowledge: prescribed by Head, Electrical \& Electronic Engineering
- Assessment: may include tests, exam, assignments

Special topics in Electrical and Electronic Engineering, as determined by the Head of the School. This course may be offered from time to time and will be taught by visiting academics.

## Engineering - Mechanical

## MECH ENG 7020

## Materials Selection and Failure Analysis

- 3 units - semester 2
- 36 hours lectures $\&$ tutorials
- Available for Non-Award Study
- Assessment: assignments 30\%, project $20 \%$, final exam $50 \%$

The course will consider factors in materials selection such as properties, processing, design, cost specifications and codes. The competition between materials and fabrication methods will be illustrated through detailed case studies. Failure analysis is considered in terms of investigative procedures, principal causes of failure
(fracture, fatigue, corrosion and wear) and the application of simple fracture mechanics. Several case studies are considered in detail.

## MECH ENG 7021

## Combustion Technology and Emissions Control

- 3 units - semester 1
- 36 hours lectures \& tutorials
- Available for Non-Award Study
- Assessment: assignments $30 \%$, project $20 \%$, final exam $50 \%$

Combustion presently provides about $80 \%$ of global energy and is expected to be a major energy source for many years. At the same time combustion, particularly of fossil fuels, leads to serious pollution problems and is the primary source of human-derived greenhouse gas emissions. An important aspect of a transition to a more sustainable future is therefore to reduce the emissions from combustion-based plants, and to utilise alternative fuels, including bio-fuels. The aim of the course is to equip candidates with the knowledge and skills necessary to understand ,analyse and design modern combustion systems for maximising output and minimising air pollution. Combustion involves both mixing of the fuel and oxidant and the subsequent chemical reactions. The course therefore involves consideration of both combustion aerodynamics and fuel properties. It covers fuel selection, alternative and waste fuels, the design principals involved in reducing pollutant emissions, modelling and safety.

## MECH ENG 7023

## Fracture Mechanics

- 3 units - semester 2
- 36 hours lectures \& tutorials
- Available for Non-Award Study
- Assessment: assignments 30\%, project 20\%, final exam 50\%

The aim of this course is to develop an understanding of the mechanics of fracture of engineering materials, and to develop a broad understanding of the problems related to mechanics of composite materials which is essential for safe design of engineering components. This understanding is necessary to guide a corresponding design, manufacture, or failure analysis. This course will discuss basic concepts in Mechanics of Fracture and a wide range of practical problems relating to the assessment of the nucleation, growth and catastrophic propagation of structural defects. It also will deepen the understanding of Finite Element Modelling techniques and ANSYS software package.

## MECH ENG 7024

Robotics M

- 3 units - semester 1
- 36 hours lectures \& tutorials
- Available for Non-Award Study
- Assumed Knowledge: MATLAB
- Assessment: assignments 30\%, project 20\%, final exam 50\% Classification of robotic systems; transformation of coordinates; kinematics and inverse kinematics; Jacobians and robot dynamics; trajectory generation; robotic modelling; control loops for robots; mobile robots; image processing; industrial robot programming and applications.


## MECH ENG 7025

## Topics in Welded Structures

- 3 units - semester 1
- 36 hours lectures \& tutorials
- Available for Non-Award Study
- Assessment: assignments 30\%, project 20\%, final exam 50\%

This course presents the concepts behind welding and joining technology. These include welding and joining techniques, equipment and consumables, weldability of engineering materials, economics, standards, health and safety, testing and repair. The concepts are then applied to the design and fabrication of engineering components, process plant and structures. The importance of selecting the correct welding process and parameters for a particular application will be demonstrated by investigating several case studies. Since a weld/joint can have a profound effect on the performance of a component depending on the in-service conditions it experiences, the influence of service environment will be investigated. At the end of the course students should have the concepts to assist in the selection of processes and parameters to make appropriately designed, sound joints, fit for service in the operating environment.

## MECH ENG 7026

## Advanced Topics in Fluid Mechanics

- 3 units - semester 2
- 36 hours lectures \&f tutorials
- Available for Non-Award Study
- Assessment: assignments 30\%, project 20\%, final exam 50\%

The course builds on the concepts learned in the core Mechanical Engineering courses and extends these to provide practical interpretive and predictive methods. The syllabus begins with a practical and theoretical overview of modern flow measurement techniques and the methods used to interpret velocity and flow data. These techniques and methods are then applied to fundamental flow cases such as boundary layers and free shear flows. Specific applications of these flow cases are then given through the study of internal flow systems and external flows around air, ground and sea-going vehicles. These include wind tunnels, race cars, high-performance yachts, aeroplanes and sports balls.

## MECH ENG 7027

## Engineering Acoustics

- 3 units - semester 1
- 36 hours lectures \&f tutorials
- Available for Non-Award Study
- Assessment: assignments 30\%, project 20\%, final exam 50\%

Fundamentals of sound wave description and propagation, the hearing mechanism, acoustic instrumentation, noise criteria, sound source types and radiated sound fields, outdoor sound propagation, sound power measurement techniques, sound in enclosed spaces, sound transmission loss, acoustic enclosures, reactive and dissipative mufflers.

## MECH ENG 7028

## Advanced Automatic Control

- 3 units - semester 1
- 36 hours lectures \& tutorials
- Available for Non-Award Study
- Assessment: assignments 30\%, project 20\%, final exam 50\% (written \& MATLab)

Advanced topics in automatic control system design. Emphasis will be placed on techniques used to accommodate uncertainty in practical systems.

## MECH ENG 7029

## Airconditioning

- 3 units - semester 2
- 36 hours lectures \& tutorials
- Available for Non-Award Study
- Assessment: assignments $30 \%$, project $10 \%$, practical $10 \%$, final exam 50\%

Vapour compression cycles; heat transfer in two-phase flow; types, selection and operation of refrigeration plant; psychrometrics; climatic data and its use; load estimation and analysis; constant and variable air volume systems; human comfort and health; cooling and dehumidifying coils; controls; fans and duct systems; system balancing and stimulation; energy efficiency in buildings.

## MECH ENG 7030

## Advanced Vibrations

- 3 units - semester 1
- 36 hours lectures \& tutorials, 6 hours laboratory experiments
- Available for Non-Award Study
- Assessment: assignments \& laboratory experiments, final exam \& individual project

Advanced multi-degree of freedom system analysis; modal analysis; statistical energy analysis; use of vibration and principles of design of vibration equipment; mobility; reciprocity; finite element analysis.

## MECH ENG 7031

## Aerospace Navigation and Guidance

- 3 units - semester 2
- 36 hours lectures \& tutorials
- Available for Non-Award Study
- Assessment: assignments 30\%, project $20 \%$, final exam $50 \%$

The course will comprise two components: Navigation: this will cover theory, and the principles of operation and performance modeling of navigation technologies with particular emphasis on technologies that are used to support aeronautical applications. This material will cover inertial navigation technologies, satellite navigation technologies such as GPS and terrestrially based navigation systems such as Loran-C. Technologies which support astronautic applications will also be considered. Guidance: this will cover the principles on which aircraft flight plans and space vehicle orbital manoeuvres are designed and to which a flight vehicle's motion is controlled. This section will cover both open loop flight path generation and closed loop autopilot aspects of the control of flight vehicles.

## MECH ENG 7034

## Advanced Digital Control

- 3 units - semester 2
- 36 hours lectures $\&$ tutorials
- Available for Non-Award Study
- Assessment: assignments $30 \%$, project $20 \%$, final exam $50 \%$

Project-based course, design and analysis of mechatronic systems; microcontroller and high end processors for mechatronic system control; artificial intelligence algorithms and their applications, digital state-space control design.

## MECH ENG 7035

## High-Speed Aerodynamics

- 3 units - semester 1
- 36 hours lectures \& tutorials
- Available for Non-Award Study
- Assessment: assignments $30 \%$, project $20 \%$, final exam $50 \%$

The aim of this course is to introduce students to the fundamentals and practical aspects of supersonic and hypersonic flows and the design and operation of high-speed vehicles. The course deals with the theory of compressible flow; flow in pipes, variable-area ducts and engine intakes; supersonic external flow around wings and bodies; hypersonic flows theory and the flow around hypersonic vehicles, including re-entry vehicles.

## MECH ENG 7036

## Environmental and Architectural Acoustics

- 3 units - semester 2
- 36 hours lectures $\&$ tutorials
- Available for Non-Award Study
- Assessment: assignments $30 \%$, project $20 \%$, final exam $50 \%$

Outdoor sound propagation models, Australian and International standards for outdoor noise, transport noise and the use of computer models for outdoor noise prediction. Room acoustics, parameters for architectural acoustics, ray tracing and software models.

## MECH ENG 7037

## Aerospace Propulsion I

- 3 units - semester 1
- 36 hours lectures \& tutorials
- Available for Non-Award Study
- Assessment: assignments $30 \%$, project $20 \%$, final exam $50 \%$

Basic principles of rocket propulsion and rocketry, propellant, nozzle theory and their influence on design of rockets, internal and external ballistics, combustion processes and instability.
Fundamentals of rocket motor components and design, solid rocket grain structural behaviour, and plume technology.

## MECH ENG 7038

## Aerospace Propulsion II

- 3 units - semester 2
- 36 hours lectures \& tutorials
- Available for Non-Award Study
- Assessment: assignments 30\%, project 20\%, final exam 50\%

Fundamentals of rocket and air-breathing (gass turbines, ramjets, turbojets, turboprop) jet propulsion systems. Prediction of thrust, combustion reactions, specific fuel consumption, and operating performance. Aero-thermodynamics of inlets, combustors, nozzles, compressors, turbines and component matching.

## MECH ENG 7039

## Automotive NVH and Aerodynamics

- 3 units - semester 1
- 36 hours lectures \& tutorials
- Available for Non-Award Study
- Assessment: assignments 30\%, project 20\%, final exam 50\%

This course will focus on the basic principles and theories for minimising vehicular noise and vibration sources (including aerodynamics), transmission paths and augmenting aspects at design. It will explore methods for modelling and predicting noise and vibration harshness and will assess various countermeasures for reducing existing noise and vibration. Guest speakers will provide examples of how this is implemented in the automotive industry.

## MECH ENG 7040

## Advanced Manufacturing and Quality Systems

- 3 units - semester 2
- 36 hours lectures \& tutorials
- Available for Non-Award Study
- Assessment: assignment, final exam

This course will explore various adopted methods, concepts, systems and tools for production, manufacture and quality management in the automotive industry with direct assistance from industry's experts. There will also be a focus on the process and critical aspects of advanced product quality planning (APOP) which will be covered in detail. Key aspects of this include: Design Failure and Mode Effect Analysis (DFMEA), Process Failure Mode Effect Analysis (PFMEA) and the Design Verification Plan and Report (DVPGR).

## MECH ENG 7041A/B

## Masters Mechanical Engineering Project

- 12 units - full year
- 480 hours
- Assessment: evaluation of research including research thesis, literature review, oral presentations

Students usually work in groups on a research thesis under the supervision of an academic staff member

## Engineering - Petroleum

## PETROENG 7001

## Petrophysics

- 2 units - semester 1
- Intensive short course of lectures, tutorials and seminars
- Available for Non-Award Study
- Assessment: assignments, group discussions, exam

Introduction to Petrophysics will give participants an overview of petrophysics: well logging concepts and basic rock properties, wellbore environment, petrophysical tools and interpretation concepts. Fundamentals of Openhole Log Interpretation gives a practical understanding of the interpretation of wireline tools and techniques, including the determination of lithology, porosity, fluid content and movement, and net pay. Both, qualitative (quick look) and quantitative analyses methods are covered. Practical aspects, such as logging operations, including MWD, and logging program design will also be addressed. Practical examples are used throughout and case histories are used to demonstrate specific aspects. Specialised Methods and Recent Advances gives an overview of dipmeter and borehole imaging, as well as NMR, and determination of permeability from logs.

## PETROENG 7002

## Reservoir Engineering

- 2 units - semester 1
- Intensive short course of lectures, tutorials and seminars
- Available for Non-Award Study
- Assessment: assignments, group discussions, exam

Formation, Rock and Fluid Properties gives an understanding of reservoir environments and formation properties, reservoir structural elements and rock properties. Fluid properties are covered for both, reservoir and surface conditions. Included are static pressure situations and surveys, and fundamentals of phase behaviour. Fundamentals of Fluid Flow in the Reservoir involves Darcy's law and the formulation of classical methods in fluid flow and pressure behaviour, for a variety of situations. Steady state
and transient situations are covered, including well inflow and aquifer performance formulations. Material Balance gives a detailed understanding of various reservoir situations and the use of material balance, from simple gas material balance to various drive mechanisms for oil reservoirs, including compaction drive. Aquifer models, for a range of situations, from steady-state to transient conditions, are handled in conjunction with the generalised material balance theory of Havlena-Odeh. Case histories will be used throughout to demonstrate concepts and real situations. Software will be used for demonstration and hands -on experience of participants.

Immiscible Fluid Displacement deals with recovery aspects related to immiscible fluid displacement. Commencing with fractional flow concepts, the extended theories of Buckley-Leverett (diffuse flow) and Dietz (segregated flow) are covered. These concepts are then extended to analytical coning and cusping models, covering their appropriate use and limitation. Case histories will be used throughout to demonstrate concepts and real situations.

## PETROENG 7003

## Production and Facilities Engineering

- 2 units - semester 1
- Intensive short course of lectures, tutorials and seminars
- Available for Non-Award Study
- Assessment: assignments, group discussions, exam

Overview of Production and Facilities Engineering gives an overview of production systems, describing various methods of production and their performance. The second part of this module covers the concept of well skin and reservoir mineralogy, and various production problems related to near-wellbore effects: fines migration, sanding, mechanical damage, asphalts, wax and scale. Fundamentals of Production and Facilities Engineering covers production systems and inflow and outflow performance. Production system aspects involve: natural flow and artificial lift, single and multiphase flow, wellhead and surface gathering systems, fluid separation, transportation and treating of fluids, metering and transfer, compression, and disposal and re-injection of fluids. Detailed nodal analysis covers all major and minor components in the reservoir, for wells and surface systems. Software will be used to demonstrate fundamental design calculations and in exercises.

## PETROENG 7006

## Economic Evaluation

- 2 units - semester 2
- Intensive short course of lectures, tutorials and seminars
- Available for Non-Award Study
- Assessment: assignments, group discussions, exam

Overview of Project Economics gives an overview of discounted cash flow and net present value calculations. Also covered are
performance indicators and their individual merit. Fundamentals of Economic Evaluation covers investment decision-making processes and evaluation methods relevant for the exploration and production industry, ranging from relatively simple reservoir management decisions, such as evaluating a single-track, to major field development decisions. Methods involve deterministic, sensitivity, decision tree and full probabilistic methodologies. Performance metrics and efficiency measures are discussed in detail. Uncertainty and risk quantification are also covered.

Specialised Economic Evaluation Topics deals with comparative fiscal terms and financial concepts more linked to company performance rather than individual projects.

## PETROENG 7009

## Decision Making Under Uncertainty

- 2 units - semester 2
- Intensive short course of lectures, tutorials
- Available for Non-Award Study
- Assessment: any of assignments, group discussions, exam

This course teaches the skills required for a key management role creating value by making decisions that yield optimal returns on the allocation of human and financial resources. There are many uncertainties inherent in the oil and gas business, both in assessing current 'states-of-the world/nature' and in predicting future events. This leads to considerable uncertainty in the value that can be realised from many resource-allocation decisions. Consequently, there will be a strong emphasis on evaluating the impacts of uncertainty, managing its resultant risks and planning to exploit its up-side potential. Topics to be addressed are decision making process, multi-objective decision making, decision -tree analysis, decision criteria and Monte Carlo simulation.

## PETROENG 7010

## Portfolio and Strategic Management

- 2 units - Not offered in 2006
- Intensive short course of lectures, tutorials and seminars
- Available for Non-Award Study
- Assessment: assignments, group discussions, exam

The prime function of managing an enterprise is to deliver value to the owners as they define it, whether the owners are private, public or government. The oil and gas industry is characterised by investments of large up-front capital expenditures, followed by uncertain returns on those investments over long periods of time. A key requirement is the development of strategies to meet valueoriented goals and the consequent selection of a portfolio of investments that is consistent with those strategies and goals. This course will equip participants with essential skills and knowledge required for roles in planning and strategy departments
and for the most senior decision-making roles in an enterprise. It will also be of great benefit to asset managers (production or exploration) in illuminating the context within which funding decisions are made about their assets and/or projects.

## PETROENG 7012

## Oil and Gas Resources and Reserves

- 2 units - Not offered in 2006
- Intensive short course of lectures, tutorials \& seminars
- Available for Non-Award Study
- Assessment: assignments, group discussions, exam

This course explains the strength and weaknesses of various reserves estimating methodologies, including the difference between resources and reserves. Exploration and development views will be covered, as are deterministic and probabilistic methods, with the aim of gaining a thorough understanding of various reserves levels and their equivalence in both systems, in terms of proved, proved plus probable, and proved plus probably plus possible. Methodologies of different countries will be covered. Statistical software will be used to demonstrate important concepts and to handle complex scenarios. The course will cover alternative estimation methods, such as volumetrics, material balance and decline curve analysis. An appreciation will be gained of data limitations and uncertainty and how this is reflected in final volumes and hence risk. The course also covers management and commercial issues and regulations.

## PETROENG 7014

## Project A

- 4 units - semester 1 or 2
- Case studies, field visits
- Available for Non-Award Study
- Assessment: project reports \& presentation

This course offers students the opportunity to carry out a miniresearch project or to undertake self-directed, detailed exploration a topic of interest. Students are strongly encouraged to develop their own proposals in line with current or expected professional interests. The final project title and outline must be approved by the Academic Director of the program. It shall be conducted under the supervision of one of the academic staff and may be undertaken outside the University (for example, with an industrial host or sponsor) so long as adequate contact is maintained with the academic supervisor. Evaluation of the project will be conducted jointly by the relevant academic staff and industry practitioners.

Students wishing to do an 8 unit project, if approved by the program academic director, should also enroll in PETROENG 7046 Project B. In this case, it will normally be expected that a single 8 unit project is carried out (as opposed to 2 separate 4 unit projects).

## PETROENG 7023

## Project Management

- 2 units - Not offered in 2006
- Intensive short course of lectures, tutorials and seminars
- Available for Non-Award Study
- Assessment: assignments, group discussions, exam

Project Management Concepts (1 day module) outlines the necessary management processes and control methods required for the successful management of resources, budgets and costs, and schedule. Project Management in Practice (3 day module) covers all major elements of project management, with emphasis on delivering a project in budget and on time. Technical project drivers are analysed with respect to critical factors, for example the critical path item in the overall project schedule.Methodologies related to cost and budget estimates are presented. Discussed are tendering and contracting methodologies and their strategies are exemplified through case histories. Control methods for cost and budgets are covered, as are commercial and regulatory constrains.

Technical Uncertainties and Risks in Project Management (1 day module) deals with aspects of uncertainties and risks, as they relate to reservoirs, wells and facilities. Management and mitigation of these risks are also discussed.

## PETROENG 7024

## People and Organisational Development

- 2 units - Not offered in 2006
- Intensive short course of lectures, tutorials and seminars
- Available for Non-Award Study
- Assessment: assignments, group discussions, exam

Managers and leaders who consistently produce outstanding results are those who recognise the need to continually work at their own development. They work at knowing and understanding themselves, knowing where they are going, understanding their people and knowing how to harness their talent and focus it towards achieving personal and organisational excellence. This course will develop sustainable approaches to support participants to: Understand themselves and to embrace their uniqueness; Establish, develop and sustain effective working relationships; Learn how to build high performance teams; Collaboratively build and nurture highly productive and harmonious organisations based on partnerships; Build and sustain productive relationships with involved stakeholders such as customers, joint venture partners, environmentalists, governments, indigenous communities etc.

This course will also enable you to make better quality decisions by helping you understand how your decisions are influenced by your psychological inclinations, by your knowledge, ability and capability, by your relationships and by key external influences.

## PETROENG 7031

## Reservoir Characterisation Modelling

- 3 units - semester 2
- Lectures and tutorials
- Available for Non-Award Study
- Assessment: assignments, exam

Lectures on producing field situations: reservoir processes and performance; well design options and performance; production policies and government regulation; field monitoring and surveillance; facilities constraints and impact of alternative facilities concepts; uncertainties and risk. Concepts of reservoir characterisation; integration of major elements: seismic framework, geological model, rock properties; attribute analysis; geostatistical methods: distributions, sampling, estimation, variograms:; upscaling; simulation and visualisation.

## PETROENG 7032

## Integrated Reservoir Management

- 3 units - semester 2
- Intensive short course of lectures, tutorials and seminars
- Available for Non-Award Study
- Assessment: assignments, group discussions, exam

Reservoir Management Overview gives an overview of the life cycle for developing and producing a field, from discovery to abandonment, and outlines the associated reservoir management problems and solutions. In particular highlighted are issues related to maximising recovery or project value, and minimising uncertainty and risk, and how to mitigate the latter. Fundamentals of Reservoir Management deals with all aspects of reservoir management, covering various project phases: field appraisal, project identification and definition, feasibility and detailed design, construction and commissioning, production and abandonment. Various methods and techniques for maximising recovery are explained, such as material balance decline curve analysis, and other performance and production analysis methods. Methods from various disciplines are covered, such as geological characterisation, seismic monitoring and well test analysis. Well and facility related aspects are presented, in as much as they may impact the management of reservoirs.

Regulation and Surveillance in Reservoir Management deals with regulatory aspects related to reservoir management, including reporting requirements. This module also covers reservoir surveillance techniques, in particular as required by regulatory bodies. The emphasis will be on Australian regulations (Petroleum Submerged Lands Act) but certain generalisations and some worldwide examples are also presented, including case histories.

## PETROENG 7035

## Reservoir Simulation

- 3 units - semester 2
- Intensive short course of lectures, tutorials \& seminars
- Available for Non-Award Study
- Assessment: assignments, group discussions, exam

The course gives the theoretical basis for numerical simulation of fluid flow in petroleum reservoirs. The partial differential equations required for single-phase and multi-phase fluid flow in porous media are developed, as well as numerical methods for solving the equations using finite difference methods. Input data requirements, including upscaling, and applications of simulation models for history matching and prediction of field performance will be discussed. Microsoft Excel will be used for many of the examples and exercises.

## PETROENG 7038

## Well Testing and Pressure Transient Analysis

- 3 units - semester 1
- Lectures, tutorials
- Available for Non-Award Study
- Assessment: assignments, exam

Well test objectives and concepts; fluid flow equation and fundamental solution; classical methods: drawdown and buildup analysis, bounded reservoirs; gas well testing; type curves and derivatives; complex systems: multi-layer, dual-porosity, hydraulic fractures; interference and pulse testing; test design.

## PETROENG 7040

## Enhanced Oil Recovery

- 3 units - semester 1
- Lectures, tutorials
- Available for Non-Award Study
- Assessment: assignments, exam

This course will cover theory and applications of various EOR processes. Also, students will be exposed to IOR techniques. Application aspects will be demonstrated through exercises and one large assignment that will require use of a commercial simulator.

## PETROENG 7041

## Gas Fields Optimisation

- 3 units - semester 1
- Intensive short course of lectures, tutorials \& seminars
- Available for Non-Award Study
- Assessment: assignments, tutorials, exam

This course will provide a sound understanding of Reservoir Engineering Principles pertaining to Gas Reservoirs and the ability to apply these to solve practical problems relating to Gas Reservoir Development, Surveillance and Management focusing on how these differ from corresponding processes for Oil Reservoirs.

The course will address individual well and total reservoir performance analysis. Various reserve calculation techniques will be discussed such that the participants will have a good understanding of the applicability of the different methods at different points in the life cycle of the reservoir.

## PETROENG 7042

Drilling Engineering and Well Completion

- 3 units - semester 2
- Intensive short course of lectures, tutorials and seminars
- Available for Non-Award Study
- Assessment: assignments, group discussions, exam

The course covers the fundamentals of drilling engineering and well completion. In the area of drilling; the following are covered: the drilling process; equipment and performance; well pressure control and buoyancy; fluid design; well casing design and cementing techniques; overview of drilling operations. Well Completions addresses: concepts and types of well completion design; overview of well performance; tubing string sizing and design; specialised components: wellheads, packers, expansion joints, subsurface safety valves etc; artificial lift design: beam pumping, gaslift, electric submersible pumps; introduction to well stimulation

## PETROENG 7043

## Integrated Field Development Planning \& Economic Project

- 3 units - semester 2
- Intensive short course of lectures, tutorials $\mathcal{E}$ seminars
- Available for Non-Award Study
- Assessment: assignments, group discussions, exam

Field Development Planning gives an overview of the process and methods for developing an optimum plan for developing a petroleum deposit. Key project drive indicators are discussed and it is shown how various disciplines interact in their quest for maximising the value of a project. It covers all aspects of field development planning, commencing with screening studies, after discovering hydrocarbons, to project sanction. In particular, it is shown that this development phase has the potential to add maximum value, when compared to all other phases of the life cycle, as such it is most critical. Critical aspects are presented in detail in terms of actual case histories. It is shown how a proper balance has to be struck among key elements: reservoirs, wells and facilities, not to mention the balance between minimising
costs and maximising recovery. Other key essentials, such as flexibility and risk management are also covered.

The project is based on an actual data set involving an offshore project. The aim is to study the exploration results and to develop a recommendation for the optimum field appraisal plan. The second part of the project involves the feasibility and derivation of the optimum development plan. Participants work in small teams and will submit written plans and give presentations in front of a panel.

## PETROENG 7044

## Reservoir Geology and Geophysics

- 2 units - semester 1
- Intensive short course of lectures, tutorials \& seminars
- Available for Non-Award Study
- Assessment: assignments, group discussions, exam

Development Geology provides a working knowledge of the main qualitative and quantitative techniques used by development geologists in evaluating subsurface reservoir properties. Commencing with the geological structure and depositional environments, the course covers such practicalities as mapping and well correlation. Geological control is discussed, and case histories review various methods of estimating hydrocarbon volumes. While concentrating on concepts, some state-of-the-art topics, such as seal evaluation, will also be discussed. Practical applications are incorporated in hands -on exercises.

The geophysics component provides a basic understanding of the principles of reflection seismic, such as wave propagation, convolution and seismic velocity and resolution. The acquisition segment covers hardware elements used to acquire data and survey design, including 2 D versus 3 D , and marine versus land surveying. Data processing includes de-convolution, velocity analysis, stacking and migration. The mechanics of interpretation outlines data display, synthetics, picking, and auto-tracking, velocity anomalies and depth conversion. Sequence stratigraphy is dealt with in conjunction with inversion and seismic attribute analysis. More recent advances are also outlined: reservoir fluids and their movement, e.g. DHIs and AVO, and time lapse seismic. Emphasis is on 3 D seismic, with numerous illustrations and case histories.

## PETROENG 7045

## Decision and Risk Analysis

- 3 units - semester 2
- Lecture \& tutorials
- Available for Non-Award Study
- Assessment: assignments, exam

Everyone makes decisions, but few people think about how they do it. Uncertainty, multiple objectives and complexity make many decisions difficult. To cope with these difficulties, decision-makers
must make effective use of various types of information that are available, for example historical data, forecasts regarding future events, decision alternatives now and in the future, attitudes towards risk, tradeoffs among objectives and predictions of competitor's actions.

This course teaches essential skills required for creating value by making decisions that yield optimal return on the allocation of human, technical and financial resources. Throughout the course, we will develop rules of thought that will transform complex decisions into simpler decisions situations where the course of action is clear. There will be a strong emphasis on evaluating the impacts of uncertainty and/or designing flexibility into plans to manage risks or exploit upside potential. The skills learnt will be applicable to a broad range of Engineering, technology and investment decision situations.

## PETROENG 7046

## Project B

- 4 units - semester 1 or 2
- Available for Non-Award Study
- Assessment: project report \& presentation

This course offers students further opportunity to carry out a miniresearch project or to undertake self-directed, detailed exploration a topic of interest. In combination with Project A, it enables a maximum of 8 units of project or research work, subject to approval by the director of the Academic Program. It will normally be expected that a single 8 unit project is carried out (as opposed to two separate 4 unit projects). As with Project A students are strongly encouraged to develop their own proposals in line with current or expected professional interests. The final project title and outline must be approved by the Academic Director of the program. It shall be conducted under the supervision of one of the academic staff and may be undertaken outside the University (for example, with an industrial host or sponsor) so long as adequate contact is maintained with the academic supervisor. Evaluation of the project will be conducted jointly by the relevant academic staff and industry practitioners.

Students wishing to do an 8 unit project, if approved by the program academic director, should also enroll in PETROENG 7014 Project A.

## PETROENG 7047

## Development Geology

- 2 units - semester 1
- Lectures \& tutorials
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: assignments, exam

This course will provide participants with a working knowledge of the main techniques (qualitative and quantitative), used by Development Geologists in evaluating subsurface reservoir properties. Geological controls on porosity, permeability, relative permeability, and capillarity are discussed. Case histories review conventional methods of determination of net pay in a reservoir and demonstrate some improved techniques using data from core, sidewall core, cuttings, conventional plug measurements (porosity and permeability) in conjunction with capillary pressure data. The course focus will be on conceptual understanding and practical applications using hands-on exercises.

## PETROENG 7048

## Petroleum Exploration and Management

- 3 units - semester 1
- Lectures \& tutorials
- Eligibility: students in specified programs only, please check Academic Rules of the program in which you are enrolling
- Available for Non-Award Study
- Assessment: assignments, exam

The course illustrates geoscience and management concepts and methods that are used in petroleum exploration. Petroleum systems are reviewed with emphasis on source rock organic geochemistry and hydrocarbon exploration and reserve estimation are also covered.

## Engineering - <br> Technology \& Telecommunications

## ENTRSHIP 5001

## Marketing Technological Innovation

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual \& group papers, contribution to discussion online \& during workshops.

Develops an understanding of the forces driving competition and demand in markets or technology-intensive products and services. Covers product management decisions (design, channels/logistics, pricing/promotions etc.) across stages of product life cycles affecting technology products. Enhances skills in analysing competitive trends, identifying threats and opportunities, designing new products, and/or marketing strategies. Students develop a marketing strategy and perform a market analysis to define potential markets for a technology.

## ENTRSHIP 5002

## Managing Product Design and Development

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual \& group papers, contribution to discussion online \& during workshops

Addresses the many and best practices organisations are using to accelerate the product development and production processes. Students develop case studies of methodologies for managing the technology and product development cycle.

## ENTRSHIP 5003

## Strategic Analysis:Technology Commercialisation

- 3 units - not offered in 2006
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual \& group papers, contribution to discussion online \& during workshops

In this course we study approaches to technology and commercialisation as part of business and corporate strategy. Two main frameworks used are Michael Porter's Five Forces and Clusters models, and the Resource Based View. We then develop them significantly by studying the economics of information rich products and relevant case study analyses.

## ENTRSHIP 5004

## Managing Risk

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: assignments, group \& individual

The course addresses decision and risk analysis, methods for structuring and modelling decision problems, and application of methods to a variety of problems that involve risk and uncertainty related to the commercialisation of new technologies and development of projects. Students apply risk analysis tools to a commercialisation assessment problem or a project development.

## ENTRSHIP 5005

## Financing Commercialisation

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual \& group papers, contribution to discussion online \& during workshops

Examines financial planning methods for determining capital requirements, and various ways of financing growth and making investment decisions. Among the forms of financing examined are angels and informal investors, venture capital, debt capital, and inside and outside equity. Students create plans for the financing of a technology venture.

## ENTRSHIP 5006

## Technology Management and Transfer

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual \& group papers, contribution to discussion online \& during workshops.

Addresses the evaluation, formulation and use of technology transfer models. Emphasis is placed on case studies of facilitating factors and barriers to collaborative relationships. Students develop and document a technology transfer model.

## ENTRSHIP 5007

Legal Issues of the Commercialisation Process

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual \& group papers, contribution to discussion online \& during workshops

Examines the numerous legal challenges organisations face as they commercialise technology in a global environment. In addition to studying the basic regulatory requirements for intellectual property and patent protection, students gain an understanding of the process of technology licensing and methods for valuation of intellectual property. Students develop strategies and plans by which to manage and protect the knowledge assets of a technology venture.

## ENTRSHIP 5008

## Leading and Managing

- 3 units - summer semester
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual \& group papers, contribution to discussion online \& during workshops

We expose you to a variety of issues, authors, ideas, that pertain to relationships within and without organisations, in different industries and across national boundaries. This course, designed around classroom lectures, academic articles and case studies, relies heavily on the contribution from participants' experience and exchange of ideas regarding the topics covered.Initially, we will focus on some broad matters such as what is meant by the terms 'leading' and 'managing'. While some consider them to be the same thing, they are really suggesting that we should all be both leading (providing vision, motivation and energy to the organisation) and managing (focusing on narrower administrative tasks), perhaps at different times. Closely connected is the question of leadership style and how entrepreneurs behave. All of this is interwoven with analysis of culture: company, professional, national.

## ENTRSHIP 5009

## Business and Contract Management

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual assignments

This course provides a background of general management for people who are studying project management. The course focuses on the strategies required to manage project producing organisations, including strategy and core competence, quality and internal processes and human resources. The course then provides students with an overview of contract law, an understanding of the key processes in managing internal agreements and formal contracts including procurement strategies and contract options, contract documentation, tendering, evaluating and selection, contract administration, claims management, negotiation and dispute resolution.

## ENTRSHIP 5010

## Technology Project Management

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study
- Assumed Knowledge: Applied Project Management 1
- Assessment: assignments, individual \& group

This course focuses primarily on the project management of software intensive projects and the ways project management of software projects differs from project management of other projects. The course includes developing scenarios and the use of systems engineering principles, identifying requirements, selection of a project approach, effort estimations, risk management, estimating cost and time, managing quality identification of a project delivery system and configuration management.

## ENTRSHIP 5011

## Internationalisation of Technology

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual \& group papers, contribution to discussion online \& during workshops.

Addresses a broad and special set of issues of commercialising technology on a global scale, including international country policies, supra-country trade policies (including GATT, NAFTA, etc.), import/export processes, financing issues, critical technologies and country profiles. Addresses importing or exporting a new technology or intellectual property to any foreign market through a variety of technology transfer strategies, which account for public policies and interrelated competitiveness issues. Students engage in role-playing exercises designed around an international commercialisation project.

## ENTRSHIP 5012

## Integrated Logistics Support

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study

This course introduces participants to the issues and basic principles of Integrated Logistics Support of complex equipment and field systems. ILS considerations impact key aspects of system development and are typically major life-cycle cost drivers. They need to be effectively considered and specified so that they can be "designed into" a system. This subject provides managers or participants involved in management or development and acquisition and support of systems with the understanding of the key issues required to effectively specify and manage acquisition and operational support.

## ENTRSHIP 5013

## Systems Engineering

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assumed Knowledge: Applied Project Management 1
- Assessment: 3 individual assignments

Systems Engineering is closely aligned with the main aspects of project management. It can be seen as a component and development of project management in an area of detail practiced primarily by defence, manufacturing and IT\&T. This course introduces participants to the concepts and techniques of Systems

Engineering. The course focuses on requirements engineering, systems design, verification and validation, systems analysis and system engineering management.

## ENTRSHIP 5014

## Project Management Techniques

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study
- Assumed Knowledge: Applied Project Management 1
- Assessment: assignments, individual \& group

This course is the intermediate core course between Applied Project Management 1 and Applied Project Management 2 in the Master of Project Management. It covers the management techniques required to achieve outcomes on projects in each of the areas of scope, time, cost, quality, procurement, human resources and communication. Further development of scenarios and the use of project management in various industries, including Information technology, defence, construction, roll-out of government services, social, finance, medical, research and commercialisation occurs.

## ENTRSHIP 5015

## Project Finance and Accounting

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual class exercises, major assignment

Engineers, scientists and technologists understand that a good grasp of accounting and financial management disciplines are crucial to success. This course is designed to take such professionals through the essential knowledge and skills development in areas such as: accounting concepts, understanding and analysing financial statements, book keeping, the accounting cycle, cash flow, company accounting, budgeting and planning, an introduction to management accounting. This course introduces financial modeling, analysis of project proposals and cost optimisation. Major topics include the time value of money and capital budgeting processes, depreciation, capitalisation and valuation, sensitivity analysis, value management, earned value, life cycle costing. It includes familiarisation with and use of computer software applications.

## ENTRSHIP 5016TB

## Entrepreneurship and Innovation

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: coursework, including class presentations

This course aims to provide students with an understanding of the nature of enterprise and entrepreneurship and furthers the understanding of the role of innovation and technology and their efficient management to build and maintain a competitive edge in an entrepreneurial business. The course provides entrepreneurs and managers with a set of concepts and tools to improve the competitiveness of their venture or organisation. The course is relevant to entrepreneurs and professionals from all backgrounds that wish to learn about and apply principles and strategies to achieve higher levels of innovation.

## ENTRSHIP 5017TB

## New Enterprise Financial Management

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study

This course aims to provide students with a sound grasp of the theory, principles and practice of financial management of smaller sized businesses that are owner-operated and controlled. Modern finance theory is introduced and the application of this theory to the specific circumstances of small enterprises is developed. Sound financial management is critical to the survival and success of these businesses and students will be introduced to the issues and basic principles of Integrated Logistics Support of complex equipment and field systems. ILS considerations impact key aspects of system development and are typically major life cycle cost drivers. They need to be effectively considered and specified so that they can be "designed into" a system. This subject provides managers or participants involved in management or development and acquisition and support of systems with the understanding of the key issues required to effectively specify and manage acquisition and operational support.

## ENTRSHIP 5018TB

Opportunity Assessment

- 3 units - summer semester
- Intensive - check ECIC website
- Available for Non-Award Study

This course is aimed at anyone who needs to assess possible business opportunities including possible project management opportunities that are mainly, but not exclusively, based on an
innovative technological concept. Rapid screening techniques are introduced, which will address the underlying business concept, the base technology, benefits to customers, potential markets, financial feasibility, risk and benefits to the organisation and the next steps to be taken. Opportunity screening protocols will be treated in depth and a comprehensive venture - screening guide will be developed during the course. The course will also provide an introduction to the business planning process for a new enterprise.

## ENTRSHIP 5019TB

## New Enterprise Marketing

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study

The purpose of this course is to provide students with an introduction to the core marketing functions of a new/small enterprise. The course will provide opportunities for students to develop skills in preparing and critically appraising marketing plans. The course also focuses on the knowledge and understanding required by a manager or business owner to direct the marketing of a small business or its product. Topics will include: marketing plans, market research, marketing strategies, product, price, promotion.

## ENTRSHIP 5020TB

## New Enterprise Operations

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study

This course provides students with an overview of the Operational Issues involved in operating a small to medium enterprise (SME) in the Australian economy: it includes the many aspects that must be considered to ensure the business operates smoothly and meets the needs of its customers. The course adds to the information gained in other courses such as Opportunity Assessment, Marketing and Financial Management and presents students with an opportunity to acquire the knowledge and skills needed to complete another aspect of a comprehensive business plan.

## ENTRSHIP 5021

## Applied Project Management 1

- 3 units - semester 1 or 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: assignments, individual \& group

Introduces the context, rationale, strategy and tactics of project management from the perspectives of key stakeholders. Project
phases are identified and examined. The importance of project planning and control is emphasised. Various models of project management are covered including the Project Management Body of Knowledge, PRINCE 2 and IPMA, as are the internationally recognised areas of knowledge, the iterative processes and the core skills required by successful project managers. Participants will be expected to relate the learning directly to projects from their experience and as a course assignment will be able to apply what they have learnt to an actual work place project.

## ENTRSHIP 5022A/B

## Project Management Project

- 9 units - full year
- Seminars
- Assessment: assignments

Identification of a project topic and developing the objectives of this. Understanding of business and project objectives and articulation of these into the project requirements. Structuring the project proposal and creating a work breakdown structure of the focuses required to achieve the objectives. Understanding of the research and project process for developing a business plan or achieving project goals. Development of the project structure and plan to demonstrate how scope, time, cost, quality, risk, human resources, communication and procurement, achieve project objectives. Documentation of these into a project process. Monitoring the achievement of the project plan and reporting on this in an appropriate report. The difference between this course and 3,6 and 12 unit Project is the scope and detail of the investigation.

Students can choose to research an individual issue, develop a plan for starting a business, developing an entrepreneurial idea or develop a project plan.

## ENTRSHIP 5023A/B

## Project Management Project (6 units)

- 6 units - full year
- Seminars
- Assessment: assignments

Identification of a project topic and developing the objectives of this. Understanding of business and project objectives and articulation of these into the project requirements. Structuring the project proposal and creating a work breakdown structure of the focuses required to achieve the objectives. Understanding of the research and project process for developing a business plan or achieving project goals. Development of the project structure and plan to demonstrate how scope, time, cost, quality, risk, human resources, communication and procurement, achieve project objectives. Documentation of these into a project process. Monitoring the achievement of the project plan and reporting on this in an
appropriate report. The difference between this course and 3,9 and 12 unit Project is the scope and detail of the investigation.

Students can choose to research an individual issue, develop a plan for starting a business, developing an entrepreneurial idea or develop a project plan.

## ENTRSHIP 5024

Project Management Project (3 units)

- 3 units - semester 1 or 2
- Seminars
- Assessment: assignments

Identification of a project topic and developing the objectives of this. Understanding of business and project objectives and articulation of these into the project requirements. Structuring the project proposal and creating a work breakdown structure of the focuses required to achieve the objectives. Understanding of the research and project process for developing a business plan or achieving project goals. Development of the project structure and plan to demonstrate how scope, time, cost, quality, risk, human resources, communication and procurement, achieve project objectives. Documentation of these into a project process. Monitoring the achievement of the project plan and reporting on this in an appropriate report. The difference between this course and 6,9 and 12 unit Project is the scope and details of the investigation.

Students can choose to research an individual issue, develop a plan for starting a business, developing an entrepreneurial idea or develop a project plan.

## ENTRSHIP 5025

## Commercialisation: Process and Strategy

- 3 units - not offered in 2006
- Intensive - check ECIC website
- Available for Non-Award Study

The course will provide students with an overview of the various issues associated with the commercialisation of knowledge and technology (represented in Intellectual Property). It intends to provide students with an introduction to the commercialisation process, access to tools and methodologies used in commercialisation and an appreciation of the strategic role that commercialisation can play within industry and the public sector.

## ENTRSHIP 5026

## Applied Project Management 2

- 3 units - semester 1 or 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Prerequisite: Applied Project Management 1
- Corequisite: Project Management Techniques
- Assessment: assignments, individual and group

This is the capstone course in the Master of Project Management and focuses on the use of project management by corporations to achieve corporate goals. Topics covered include identification of corporate strategy, managing by process, scenarios and systems engineering principles, enterprise architecture, process redesign, project directors skills, capability maturity, project, portfolio and program management and the role of values in a project producing organisation. A major assignment based on the application of these areas to an organisation, is used.

## ENTRSHIP 5027

## Business and Project Creation

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: assignments, individual and group

This course examines the innovation and entrepreneurial skills required to identify and develop business and project opportunities in a technology context. These include understanding the importance of innovation and entrepreneurship to economies, industry and competitive analysis, role of foresight, innovation and entrepreneurship processes, competitive analysis and business and project strategy, establishing feasibility and organising finance, legal and governance issues of establishing a business and finally developing the business. The objectives are to build understanding and skills in participants to equip them to achieve actual business and project creation.

## ENTRSHIP 5028ATB/BTB

Project in Entrepreneurship

- 9 units - full year
- Seminars
- Corequisite: 5016TB Entrepreneurship and Innovation, 5018TB Opportunity Assessment

The Masters Entrepreneurship. Project offers scope for candidates to pursue their own business related research interest in three broadly defined areas, namely; the new enterprise creation process, the strategic management of innovation relevant to established or growth oriented SMEs and other organisations, a more theoretical project to allow a candidate to pursue study into a specific topic or issue relevant to entrepreneurship and innovation. A candidate will present their proposed topic to the coordinator for approval prior to commencement of the work.

The project will therefore allow a candidate to pursue research into an area or topic related to entrepreneurship. Previous candidates have used the Project as a vehicle for undertaking business research that leads to a report documenting the means by which an established organisation may improve its performance should it implement strategies designed to raise the level of innovation through entrepreneurial management.

## ENTRSHIP 5029TB

## Project in Entrepreneurship (6 units)

- 6 units - semester 1 or 2
- Seminars
- Corequisite: 5016TB Entrepreneurship and Innovation, 5018TB Opportunity Assessment

The Masters Entrepreneurship. Project offers scope for candidates to pursue their own business related research interest in three broadly defined areas, namely; the new enterprise creation process, the strategic management of innovation relevant to established or growth oriented SMEs and other organisations, a more theoretical project to allow a candidate to pursue study into a specific topic or issue relevant to entrepreneurship and innovation. A candidate will present their proposed topic to the Cocoordinator for approval prior to commencement of the work.

The project will therefore allow a candidate to pursue research into an area or topic related to entrepreneurship. Previous candidates have used the Project as a vehicle for undertaking business research that leads to a report documenting the means by which an established organisation may improve its performance should it implement strategies designed to raise the level of innovation through entrepreneurial management.

## ENTRSHIP 5030TB

## Project in Entrepreneurship (3 units)

- 3 units - semester 1 or 2
- Seminars
- Corequisite: 5016TB Entrepreneurship and Innovation, 5018TB Opportunity Assessment

The Masters Entrepreneurship Project offers scope for candidates to pursue their own business related research interest in three broadly defined areas, namely; the new enterprise creation process, the strategic management of innovation relevant to established or growth oriented SMEs and other organisations, a more theoretical project to allow a candidate to pursue study into a specific topic or issue relevant to entrepreneurship and innovation. A candidate will present their proposed topic to the Coordinator for approval prior to commencement of the work.

The project will therefore allow a candidate to pursue research into an area or topic related to entrepreneurship. Previous candidates
have used the Project as a vehicle for undertaking business research that leads to a report documenting the means by which an established organisation may improve its performance should it implement strategies designed to raise the level of innovation through entrepreneurial management.

## ENTRSHIP 5031

## Project Management Project ( 6 units)

- 6 units - semester 1 or 2
- Seminars

Identification of a project topic and developing the objectives of this. Understanding of business and project objectives and articulation of these into the project requirements. Structuring the project proposal and creating a work breakdown structure of the focuses required to achieve the objectives. Understanding of the research and project process for developing a business plan or achieving project goals. Development of the project structure and plan to demonstrate how scope, time, cost, quality, risk, human resources, communication and procurement, achieve project objectives. Documentation of these into a project process. Monitoring the achievement of the project plan and reporting on this in an appropriate report. The difference between this course and 3, 9 and 12 unit Project is the scope and detail of the investigation.

## TECHCOMM 5001

## Marketing Technological Innovation

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual \& group papers, contribution to discussion online \& during workshops

Develops an understanding of the forces driving competition and demand in markets or technology-intensive products and services. Covers product management decisions (design, channels/logistics, pricing/promotions etc.) across stages of product life cycles affecting technology products. Enhances skills in analysing competitive trends, identifying threats and opportunities, designing new products, and/or marketing strategies. Students develop a marketing strategy and perform a market analysis to define potential markets for a technology.

## TECHCOMM 5002

Managing Product Design and Development

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual and group papers, contribution to discussion online \& during the workshops

Addresses the many and best practices organisations are using to accelerate the product development and production processes. Students develop case studies of methodologies for managing the technology and product development cycle.

## TECHCOMM 5003

## Strategic Analysis for Technology Commercialisation

- 3 units - not offered in 2006
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual and group papers, contribution to discussion online \& during the workshops

In this course we study approaches to technology and commercialisation as part of business and corporate strategy. Two main frameworks used are Michael Porter's Five Forces and Clusters models, and the Resource Based View. We then develop them significantly by studying the economics of information rich products and relevant case study analyses.

## TECHCOMM 5004

## Managing Risk

- 3 units - semester 1
- intensive - check ECIC website
- Available for Non-Award Study
- Assessment: assignments, group \& individual

The course addresses decision and risk analysis, methods for structuring and modelling decision problems, and application of methods to a variety of problems that involve risk and uncertainty related to the commercialisation of new technologies and development of projects. Students apply risk analysis tools to a commercialisation assessment problem or a project development.

## TECHCOMM 5005

## Financing Commercialisation

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual and group papers, contribution to discussion online \& during the workshops

Examines financial planning methods for determining capital requirements, and various ways of financing growth and making investment decisions. Among the forms of financing examined are angels and informal investors, venture capital, debt capital, and inside and outside equity. Students create plans for the financing of a technology venture.

## TECHCOMM 5006

## Technology Management and Transfer

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual and group papers, contribution to discussion online \& during the workshops

Addresses the evaluation, formulation and use of technology transfer models. Emphasis is placed on case studies of facilitating factors and barriers to collaborative relationships. Students develop and document a technology transfer model.

## TECHCOMM 5007

## Legal Issues of the Commercialisation Process

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual and group papers, contribution to discussion online \& during the workshops

Examines the numerous legal challenges organisations face as they commercialise technology in a global environment. In addition to studying the basic regulatory requirements for intellectual property and patent protection, students gain an understanding of the process of technology licensing and methods for valuation of intellectual property. Students develop strategies and plans by which to manage and protect the knowledge assets of a technology venture.

## TECHCOMM 5008

## Leading and Managing

- 3 units - summer semester
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual and group papers, contribution to discussion online \& during the workshops

We expose you to a variety of issues, authors, ideas, that pertain to relationships within and without organisations, in different industries and across national boundaries. This course, designed around classroom lectures, academic articles and case studies, relies heavily on the contribution from participants' experience and exchange of ideas regarding the topics covered.

Initially, we will focus on some broad matters such as what is meant by the terms 'leading' and 'managing'. While some consider them to be the same thing, they are really suggesting that we should all be both leading (providing vision, motivation and energy
to the organisation) and managing (focusing on narrower administrative tasks), perhaps at different times. Closely connected is the question of leadership style and how entrepreneurs behave. All of this is interwoven with analysis of culture: company, professional, national.

## TECHCOMM 5009

## Business and Contract Management

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual assignments

The course provides a background of general management for people who are studying project management. The course focuses on the strategies required to manage project producing organisations, including strategy and core competence quality, internal processes and human resources.

The course then provides students with an overview of contract Law, an understanding of the key processes in managing internal agreements and formal contracts including procurement strategies and contract options, contract documentation, tendering, evaluating and selection, contract administration, claims management, negotiation and dispute resolution.

## TECHCOMM 5010

## Technology Project Management

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study
- Assumed Knowledge: Applied Project Management 1
- Assessment: assignments, individual \& group

This course focuses primarily on the project management of software intensive projects and the ways project management of software projects differs from project management of other projects. The course includes developing scenarios and the use of systems engineering principles, identifying requirements, selection of a project approach, effort estimation, risk management, estimating cost and time, managing quality, identification of a project delivery system and configuration management.

## TECHCOMM 5011

## Internationalisation of Technology

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual and group papers, contribution to discussion online \& during the workshops

Addresses a broad and special set of issues of commercialising technology on a global scale, including international country policies, supra-country trade policies (including GATT, NAFTA, etc.), import/export processes, financing issues, critical technologies and country profiles. Addresses importing or exporting a new technology or intellectual property to any foreign market through a variety of technology transfer strategies, which account for public policies and interrelated competitiveness issues. Students engage in role-playing exercises designed around an international commercialisation project.

## TECHCOMM 5012

## Integrated Logistics Support

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study

This course introduces participants to the issues and basic principles of Integrated Logistics Support of complex equipment and field systems. ILS considerations impact key aspects of system development and are typically major life cycle cost drivers. They need to be effectively considered and specified so that they can be "designed into" a system. This subject provides managers or participants involved in management or development and acquisition and support of systems with the understanding of the key issues required to effectively specify and manage acquisition and operational support.

## TECHCOMM 5013

## Systems Engineering

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assumed Knowledge: Applied Project Management 1
- Assessment: 3 individual assignments

Systems Engineering is closely aligned with the main aspects of project management. It can be seen as a component and development of project management in an area of detail practiced primarily by defence, manufacturing and IT\&T. This course introduces participants to the concepts and techniques of Systems Engineering. The course focuses on requirements engineering, systems design, verification and validation, systems analysis and system engineering management.

## TECHCOMM 5014

## Project Management Techniques

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study
- Assumed Knowledge: Applied Project Management 1
- Assessment: assignments, individual \& group

This course is the intermediate core course between Applied Project Management 1 and Applied Project Management 2 in the Master of Project Management. It covers the management techniques required to achieve outcomes on projects in each of the areas of scope, time, cost, quality, procurement, human resources and communication. Further development of scenarios and the use of project management in various industries, including Information technology, defence, construction, roll-out of government services, social, finance, medical, research and commercialisation occurs.

## TECHCOMM 5015

## Project Finance and Accounting

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: individual class exercises, major assignment

Engineers, scientists and technologists understand that a good grasp of accounting and financial management disciplines are crucial to success. This course is designed to take such professionals through the essential knowledge and skills development in areas such as: accounting concepts, understanding and analysing financial statements, book keeping, the accounting cycle, cash flow, company accounting, budgeting and planning, an introduction to management accounting. This course introduces financial modeling, analysis of project proposals and cost optimisation. Major topics include the time value of money and capital budgeting processes, depreciation, capitalisation and valuation, sensitivity analysis, value management, earned value, life cycle costing. It includes familiarisation with and use of computer software applications.

## TECHCOMM 5016TB

## Entrepreneurship and Innovation

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: coursework, including class presentations

This course aims to provide students with an understanding of the nature of enterprise and entrepreneurship and furthers the understanding of the role of innovation and technology and their efficient management to build and maintain a competitive edge in an entrepreneurial business. The course provides entrepreneurs and managers with a set of concepts and tools to improve the competitiveness of their venture or organisation. The course is relevant to entrepreneurs and professionals from all backgrounds that wish to learn about and apply principles and strategies to achieve higher levels of innovation.

## TECHCOMM 5017TB

## New Enterprise Financial Management

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study

This course aims to provide students with a sound grasp of the theory, principles and practice of financial management of smaller sized businesses that are owner-operated and controlled. Modern finance theory is introduced and the application of this theory to the specific circumstances of small enterprises is developed. Sound financial management is critical to the survival and success of these businesses and students will be introduced to the issues and basic principles of Integrated Logistics Support of complex equipment and field systems. ILS considerations impact key aspects of system development and are typically major life cycle cost drivers. They need to be effectively considered and specified so that they can be "designed into" a system. This subject provides managers or participants involved in management or development and acquisition and support of systems with the understanding of the key issues required to effectively specify and manage acquisition and operational support.

## TECHCOMM 5018TB

## Opportunity Assessment

- 3 units - summer semester
- Intensive - check ECIC website
- Available for Non-Award Study

This course is aimed at anyone who needs to assess possible business opportunities including possible project management opportunities that are mainly, but not exclusively, based on an innovative technological concept.

Rapid screening techniques are introduced, which will address the underlying business concept, the base technology, benefits to customers, potential markets, financial feasibility, risk and benefits to the organisation and the next steps to be taken. Opportunity screening protocols will be treated in depth and a comprehensive venture - screening guide will be developed during the course. The
course will also provide an introduction to the business planning process for a new enterprise.

## TECHCOMM 5019TB

## New Enterprise Marketing

- 3 units - semester 1
- Intensive - check ECIC website
- Available for Non-Award Study

The purpose of this course is to provide students with an introduction to the core marketing functions of a new/small enterprise. The course will provide opportunities for students to develop skills in preparing and critically appraising marketing plans. The course also focuses on the knowledge and understanding required by a manager or business owner to direct the marketing of a small business or its product. Topics will include: marketing plans, market research, marketing strategies, product, price, promotion.

## TECHCOMM 5020TB

## New Enterprise Operations

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study

This unit provides students with an overview of the Operational Issues involved in operating a small to medium enterprise (SME) in the Australian economy: it includes the many aspects that must be considered to ensure the business operates smoothly and meets the needs of its customers. The course adds to the information gained in other courses such as Opportunity Assessment, Marketing and Financial Management and presents students with an opportunity to acquire the knowledge and skills needed to complete another aspect of a comprehensive business plan.

## TECHCOMM 5021

## Applied Project Management 1

- 3 units - semester 1 or 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: assignments, individual \& group

Introduces the context, rationale, strategy and tactics of project management from the perspectives of key stakeholders. Project phases are identified and examined. The importance of project planning and control is emphasised. Various models of project management are covered including the Project Management Body of Knowledge, PRINCE 2 and IPMA, as are the internationally recognised areas of knowledge, the iterative processes and the core skills required by successful project managers. Participants will be expected to relate the learning directly to projects from
their experience and as a course assignment will be able to apply what they have learnt to an actual work place project.

## TECHCOMM 5022A/B

Project Management Project

- 9 units - full year
- Seminars
- Assessment: assignments

Identification of a project topic and developing the objectives of this. Understanding of business and project objectives and articulation of these into the project requirements. Structuring the project proposal and creating a work breakdown structure of the focuses required to achieve the objectives. Understanding of the research and project process for developing a business plan or achieving project goals. Development of the project structure and plan to demonstrate how scope, time, cost, quality, risk, human resources, communication and procurement, achieves project objectives. Documentation of these into a project process. Monitoring the achievement of the project plan and reporting on this in an appropriate report. The difference between this course and the 3, 6 and 12 unit Project is the scope and detail of the investigation.

## TECHCOMM 5023A/B

## Project Management Project (6 units)

- 6 units - full year
- Seminars
- Assessment: assignment

Identification of a project topic and developing the objectives of this. Understanding of business and project objectives and articulation of these into the project requirements. Structuring the project proposal and creating a work breakdown structure of the focuses required to achieve the objectives. Understanding of the research and project process for developing a business plan or achieving project goals. Development of the project structure and plan to demonstrate how scope, time, cost, quality, risk, human resources, communication and procurement, achieves project objectives. Documentation of these into a project process. Monitoring the achievement of the project plan and reporting on this in an appropriate report. The difference between this course and the 3,9 and 12 unit Project is the scope and detail of the investigation. Students can choose to research an individual issue, develop a plan for starting a business, developing an entrepreneurial idea or develop a project plan.

## TECHCOMM 5024

## Project Management Project (3 units)

- 3 units - semester 1 or 2
- Seminars
- Assessment: assignments

Identification of a project topic and developing the objectives of this. Understanding of business and project objectives and articulation of these into the project requirements. Structuring the project proposal and creating a work breakdown structure of the focuses required to achieve the objectives. Understanding of the research and project process for developing a business plan or achieving project goals. Development of the project structure and plan to demonstrate how scope, time, cost, quality, risk, human resources, communication and procurement, achieves project objectives. Documentation of these into a project process. Monitoring the achievement of the project plan and reporting on this in an appropriate report. The difference between this course and 6, 9 and 12 unit Project is the scope and detail of the investigation.

Students can choose to research an individual issue, develop a plan for starting a business, developing an entrepreneurial idea or develop a project plan.

## TECHCOMM 5025

## Commercialisation: Process and Strategy

- 3 units - not offered in 2006
- Intensive - check ECIC website
- Available for Non-Award Study

The course will provide students with an overview of the various issues associated with the commercialisation of knowledge and technology (represented in Intellectual Property). It intends to provide students with an introduction to the commercialisation process, access to tools and methodologies used in commercialisation and an appreciation of the strategic role that commercialisation can play within Industry and the public sector

## TECHCOMM 5026

## Applied Project Management 2

- 3 units - semester 1 or 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Prerequisite: Applied Project Management 1
- Corequisite: Project Management Techniques
- Assessment: assignments, individual \& group

This is the capstone course in the Master of Project Management and focuses on the use of project management by corporations to achieve corporate goals. Topics covered include identification of
corporate strategy, managing by process, scenarios and systems engineering principles, engineering architecture, process redesign, project directors skills, capability maturity, project, portfolio and program management and the role of values in a project producing organisation. A major assignment based on the application of these areas to an organisation, is used.

## TECHCOMM 5027

## Business and Project Creation

- 3 units - semester 2
- Intensive - check ECIC website
- Available for Non-Award Study
- Assessment: assignments, individual \& group

This course examines the innovation and entrepreneurial skills required to identify and develop business and project opportunities in a technology context. These include understanding the importance of innovation and entrepreneurship to economies, industry and competitive analysis, role of foresight, innovation and entrepreneurship processes, competitive analysis and business and project strategy, establishing feasibility and organising finance, legal and governance issues of establishing a business and finally developing the business. The objectives are to build understanding and skills in participants to equip them to achieve actual business and project creation.

## TECHCOMM 5028ATB/BTB

## Project in Entrepreneurship

- 9 units - full year
- Seminars
- Corequisite: 5016TB Entrepreneurship and Innovation and 5018TB Opportunity Assessment
- Assessment: assignment

The Masters Entrepreneurship Project offers scope for candidates to pursue their own business related research interest in three broadly defined areas, namely; the new enterprise creation process, the strategic management of innovation relevant to established or growth oriented SMEs and other organisations, a more theoretical project to allow a candidate to pursue study into a specific topic or issue relevant to entrepreneurship and innovation. A candidate will present their proposed topic to the Cocoordinator for approval prior to commencement of the work.

The project will therefore allow a candidate to pursue research into an area or topic related to entrepreneurship. Previous candidates have used the Project as a vehicle for undertaking business research that leads to a report documenting the means by which an established organisation may improve its performance should it implement strategies designed to raise the level of innovation through entrepreneurial management.

## TECHCOMM 5029TB

## Project in Entrepreneurship (6 units)

- 6 units - semester 1 or 2
- Seminars
- Corequisite: 5016TB Entrepreneurship and Innovation and 5018TB Opportunity Assessment
- Assessment: assignment

The Masters Entrepreneurship Project offers scope for candidates to pursue their own business related research interest in three broadly defined areas, namely; the new enterprise creation process, the strategic management of innovation relevant to established or growth oriented SMEs and other organisations, a more theoretical project to allow a candidate to pursue study into a specific topic or issue relevant to entrepreneurship and innovation. A candidate will present their proposed topic to the Cocoordinator for approval prior to commencement of the work.

The project will therefore allow a candidate to pursue research into an area or topic related to entrepreneurship. Previous candidates have used the Project as a vehicle for undertaking business research that leads to a report documenting the means by which an established organisation may improve its performance should it implement strategies designed to raise the level of innovation through entrepreneurial management.

## TECHCOMM 5030TB

## Project in Entrepreneurship (3 units)

- 3 units - semester 1 or 2
- Seminars
- Corequisite: 5016TB Entrepreneurship and Innovation and 5018TB Opportunity Assessment
- Assessment: assignment

The Masters Entrepreneurship Project offers scope for candidates to pursue their own business related research interest in three broadly defined areas, namely; the new enterprise creation process, the strategic management of innovation relevant to established or growth oriented SMEs and other organisations, a more theoretical project to allow a candidate to pursue study into a specific topic or issue relevant to entrepreneurship and innovation. A candidate will present their proposed topic to the Cocoordinator for approval prior to commencement of the work.

The project will therefore allow a candidate to pursue research into an area or topic related to entrepreneurship. Previous candidates have used the Project as a vehicle for undertaking business research that leads to a report documenting the means by which an established organisation may improve its performance should it implement strategies designed to raise the level of innovation through entrepreneurial management.

## TECHCOMM 5031

## Project Management Project ( 6 units)

- 6 units - semester 1 or 2
- Seminars
- Assessment: assignment

Identification of a project topic and developing the objectives of this. Understanding of business and project objectives and articulation of these into the project requirements. Structuring the project proposal and creating a work breakdown structure of the focuses required to achieve the objectives. Understanding of the research and project process for developing a business plan or achieving project goals. Development of the project structure and plan to demonstrate how scope, time, cost, quality, risk, human resources, communication and procurement, achieve project objectives. Documentation of these into a project process. Monitoring the achievement of the project plan and reporting on this in an appropriate report. The difference between this course and 3, 9 and 12 unit Projects is the scope and detail of the investigation.

## TECHCOMM 7006A/B

## Masters Project (Australia)

- 12 units - full year
- Seminars
- Assessment: assignment

This project provides participants with the opportunity to gain the knowledge and innovation skills to cope with the formidable economic, social, and political changes associated with creating value from knowledge in an age of global information and digital knowledge. The focus is on the transfer of research, knowledge, and technology form the laboratory to the market.

The project commences with coverage of the commercialisation process, concentrating on getting ideas, innovations, or discoveries into the marketplace in the form of products or services, or into the value chain at any step, to increase the competitive advantage of the enterprise. This phase is designed to provide an overview of the technology commercialisation process, with special emphasis on the sub processes of technology assessment. Participants are engaged in technology assessment projects that link the activities of research and development, product and process design, technology transfer and marketing, new venture financing, technology entrepreneurship and intrapreneurship, protection of intellectual property, and management.

Upon completion of the in depth opportunity and feasibility analysis, the focus moves to recognising venture opportunities, developing ideas for ventures into venture plans, assessing venture ideas and models, improving venture plans, and communicating venture plans to stakeholders to obtain resources to proceed to the next stage of commercialisation of a technology. Special
emphasis is placed on the role of the entrepreneurial team as a major success factor in developing the new venture. The difference between this course and 3,6 and 9 unit Project is the scope and details of the investigation.

## TECHCOMM 7009

## Applied Project Management Project

- 12 units - semester 1 or 2
- Intensive - check ECIC website
- Assessment: assignments

The purpose of this course is to guide participants through a research and project management process, taking a multidisciplinary approach to do so.

The topics are aimed at providing participants with the structure, research methodology, and information about the knowledge and skills involved in designing managing and undertaking a project.

Identification of a project topic and developing the objectives of this. Understanding of business and project objectives and articulation of these into the project requirements. Structuring the project proposal and creating a work breakdown structure of the focuses required to achieve the objectives. Understanding of the research and project process for developing a business plan or achieving project goals. Development of the project structure and plan to demonstrate how scope, time, cost, quality, risk, human resources, communication and procurement, achieves project objectives. Documentation of these into a project process. Monitoring the achievement of the project plan and reporting on this in an appropriate report. . The difference between this course and 6, 9 and 12 unit Project is the scope and detail of the investigation.

Students can choose to research an individual issue, develop a plan for starting a business developing an entrepreneurial idea, or develop a project plan.

## TECHPJIL 7000A/B

## Masters Project (International)

- 12 units - full year

The ability to commercialise new knowledge rapidly is essential for competitive advantage in dynamically changing private and public sector environments. Commercialisation is key to the reinvention of organisations and the basis for the creation of new knowledge based enterprises. The 12 unit International Science and Technology specialised Masters of Commercialisation project provides participants with the opportunity to gain the knowledge and innovation skills to cope with the formidable economic, social, financial and political changes associated with creating value from knowledge in an age of global information and digital knowledge. The focus is on the transfer of research, knowledge, and technology from the laboratory to the market. This is undertaken by
successfully completing three UT courses: Converting Technology to Wealth, The Art and Science of Market Driven Entrepreneurship and Technology Enterprise Design and Implementation. The project includes an orientation session at the University of Texas in Austin. Additional work involves bringing together, in a commercialisation plan, the outcomes of the students' participation in a global, University of Texas-based classroom.

## ENGLISH

## ENGL 5001

## Work in Progress

- 8 units - semester 1
- Eligibility: postgraduate Creative Writing students

This course provides a forum for presentation and discussion of current student writing in various creative genres; notably novel, short fiction, poetry and drama. Seminars will focus on literary themes, theories and models. Participants will read and discuss each other's work and a wide selection of published writing.

## ENGL 5002

## Creative Writing Study A

- 4 units - semester 1
- Eligibility:postgraduate Creative Writing students

This course will focus on the reading and analysis of literary texts. Student writers will be able to explore the crossflow between critical and creative reading and writing.

## ENGL 5003

Creative Writing Study B

- 4 units - semester 2
- Eligibility: postgraduate Creative Writing students

This course advances the work begun in ENGL 5002 Creative Writing Study A

## ENGL 5004

## Advanced Work in Progress

- 8 units - semester 2
- Eligibility: postgraduate Creative Writing students
- Prerequisite: ENGL 5001 Work in Progress

This course advances the work begun in Work in Progress.

## ENGL 5500A/B

Creative Writing Dissertation

- 24 units - full year
- Eligibility: M.A. (Creative Writing) students
- Prerequisite: completion of coursework component
- Supervision arranged with program convenor

An extended writing project in a single literary genre.

## ENVIRONMENTAL STUDIES

## ENVT 5036

## Principles of Environmentalism

- 6 units - semester 1
- 3 contact hours per week
- Eligibility: postgraduate Environmental Studies students
- Assessment: $2 \times 4-5000$ word essays, seminar participation

At the commencement of the third millenium, environmental issues have moved from the periphery to the mainstream. Whereas in the 1960s and 1970s environmental discourse was focused on advocating environmental concerns, by the 1990s the discourse shifted to the search for a way of operationalising environmental ethics. In the third millenium, the search for an operationally feasible version of sustainability has been joined by new challenges, including profound shifts in structures and patterns of governance, to the more focused (but no less important) issue of global and national security. This course is concerned with sketching the contours of this new environmentalism, identifying key new approaches to the search for sustainability and with wrestling with the new socio-political realities we face.

## ENVT 5037

## Special Topic in Environmental Studies

- 6 units - semester 1
- 3 contact hours per week, field work in some courses
- Eligibility: postgraduate Environmental Studies students
- Assessment: written work totalling approx 9000 words, including seminar presentations/exercise, and/or essays/reports

Students can select from two special topics: 1) Urban Habitats: The Ecology of Cities; or 2) Comparative Environmental Movements. This selection must be discussed and approved by the Postgraduate Coursework Coordinator.

## ENVT 5500

## Dissertation in International Environmental Management F/T

- 12 units
- Eligibility: Master of International Environmental Management students
- Assessment: 15000-18000 word dissertation


## ENVT 5503

## Environmental Research Methodology \& Project F/T

- 12 units - semester 1 or 2
- 2 contact hours per week
- Eligibility: Master of Environmental Studies students
- Assessment: 15000-20000 word dissertation

This course will introduce students to the process of environmental research and assist them to acquire the skills necessary to successfully plan, undertake and present the results of an environmental research project. To successfully complete the course students must attend and participate in all the required methodology seminars, submit a satisfactory proposal for an environmental research project and a satisfactory research plan early in the course, provide a satisfactory account of progress made in the research project midway through the course, and submit a satisfactory dissertation on the methodology and results of the research project by the end of the course.

## ENVT 5504A/B

## Environmental Research Methodology \& Project P/T

- 12 units - full year
- 2 hour seminar
- Eligibility: Master of Environmental Studies students
- Assessment: 15000-20000 word dissertation

This course will introduce students to the process of environmental research and assist them to acquire the skills necessary to successfully plan, undertake and present the results of an environmental research project. To successfully complete the course students must attend and participate in all the required methodology seminars, submit a satisfactory proposal for an environmental research project and a satisfactory research plan early in the course, provide a satisfactory account of progress made in the research project midway through the course, and submit a satisfactory dissertation on the methodology and results of the research project by the end of the course.

## FRENCH STUDIES

## FREN 5103WT

## Technical French (Oenology)

- 3 units - semester 2
- 5 hours per week
- Eligibility: B.Science (Oenology) students only
- Assessment: Assignments, exams

This is an intensive French course for beginners, which has been specifically designed for students of oenology. The language component will be taught using a conventional language textbook, which will enable students to acquire basic skills in conversation and comprehension, and additional vocabulary lists will be supplied to assist students in acquiring elements of the language of wine culture in France. The reading component will focus on the language of wine production in France and Australia, looking at such topics as winegrowing areas, grape varieties and characteristics, soils and climates, and the wine industry. Students are welcome to suggest areas of interest and documents they wish to study.

Postgraduate students are required to undertake additional reading comprehension exercises based upon their research interests.

## GASTRONOMY

## GAST 5300

GAST 5300EX

## Principles of Gastronomy

- 6 units - semester 1
- 5 contact hours per week
- Eligibility: postgraduate Gastronomy students

This course will provide a comprehensive survey of the broad domain of gastronomy, emphasising its interdisciplinary character and sociocultural relevance. The following areas will be covered; definitions and interpretations of gastronomy, key figures in gastronomy, the historical development of gastronomy, food and medicine, source material for gastronomy, influences on/of gastronomy, gastronomy and restaurants, cultural interpretations of gastronomy, food and drink in ritual and religion, and gastronomy in contemporary society.

## GAST 5301

## GAST 5301EX

Food \& Drink in Contemporary Western Society

- 6 units - oncampus: semester 1; online: semester 2
- 5 contact hours per week
- Eligibility: postgraduate Gastronomy students
- Prerequisite: Principles of Gastronomy

This course will encourage students to apply gastronomic principles in a contemporary context. The following areas will be covered; the significance of gastronomy in the contemporary world, changes in diet and eating habits, the influences of dietary advice, food choice, the significance of developments in food production, processing and retailing, the evolution of cuisines and of restaurants, globalisation effects on production and consumption, regionalism, and gastronomic tourism.

## GAST 5302

GAST 5302EX

## Gastronomy and Communication

- 6 units - oncampus: semester 1; online: semester 2
- 5 contact hours per week for 6 weeks
- Eligibility: postgraduate Gastronomy students
- Prerequisite: Principles of Gastronomy, Food and Drink in Contemporary Western Society

This course will focus on the concept of food and drink as a means of communication, explore the use of food and drink in literature and visual media, and encourage students to express ideas opinions and evaluations relating to food and drink. The following areas will be covered: semiotics of food, meanings of food and drink in daily life, meanings of food and drink in ritual and tradition, menu writing, researching food and drink through written sources and via the internet, recipe writing and editing, writing about food and drink, the role of the restaurant reviewer, and critic, food in fiction, food and drink in film, and research for, and evaluation of, food and wine programs on television.

## GAST 5303

## GAST 5303EX

## Gastronomic Tourism

- 6 units - semester 2
- 5 contact hours per week for 6 weeks, or online
- Eligibility: postgraduate Gastronomy students
- Prerequisite: Principles of Gastronomy, Food and Drink in Contemporary Society

The course focuses on the role of food and drink in enhancing the experiences of travellers and tourists. It examines major themes in tourism literature and their relevance to the study of gastronomic tourism, and considers examples of best practice at destinations where food and wine enable tourists to explore aspects of culture. It also examines the direct and indirect advantages and disadvantages to local and regional communities associated with the development of tourism and with gastronomic tourism initiatives in particular. Additional input by tourism professionals and industry experts may be included.

## GAST 5304

GAST 5304EX

## Food \& Wine Technology

- 6 units - semester 2
- 5 contact hours per week for 6 weeks, and online
- Eligibility: postgraduate Gastronomy students
- Prerequisite: Principles of Gastronomy, Food and Drink in Contemporary Western Society.

This course will provide an overview of traditional and current food wine processing operations and techniques together with methodologies and analytical tools for evaluating and communicating them. It may include some visits to appropriate sites, placing these technologies in their contemporary context.

## GAST 5305

GAST 5305EX

## Asian Food History and Culture

- 6 units - semester 2
- 5 contact hours per week for 6 weeks, or online
- Eligibility: postgraduate Gastronomy students
- Prerequisite: Principles of Gastronomy and Food \& Drink in Contemporary Western Society

This course focuses on the history and culture of food, cooking and eating in the Asian region (including China, Japan, Korea, Philippines, Taiwan, Vietnam, Thailand, Indonesia, Malaysia, India, Sri Lanka and Pakistan). It addresses such topics as food and medicine; food beliefs and ideology; food and ritual/ceremony; culinary evolution; the incorporation of New World foods; culinary hybridisation in Asian countries; Asian food cultures and globalisation; table arts and eating implements; dining etiquette; and markets, street food and eating out.

## GAST 5530

## GAST 5530EX

## Dissertation in Gastronomy F/T

- 12 units - semester 1
- Eligibility: M.A.(Gastronomy) students
- Prerequisite: coursework component at credit (65\%) standard
- Assessment: dissertation of 15000-18000 words on topic to be developed in consultation with Program Manager

Enrolment in the dissertation will commence with a one-week intensive induction program (Dissertation Preparation course).

## GAST 5531A/B

## GAST 5531AEX/BEX

## Dissertation in Gastronomy P/T

- 12 units - full year
- Eligibility: M.A.(Gastronomy) students
- Prerequisite: coursework component at credit (65\%) standard
- Assessment: 15000-18000 word dissertation on topic to be developed in consultation with Program Manager

An enrolment in the dissertation will commence with a one week intensive induction program (Dissertation Preparation course); the same course will be delivered to online students over two weeks

## GAST 5532

## GAST 5532EX

## Research Project in Gastronomy A

- 6 units - semester 1 or 2
- Eligibility: M.A. (Gastronomy) students
- Prerequisite: coursework component at credit (65\%) standard
- Assessment: research project of 8000-10000 words (or equiv)

Project length will depend upon the nature of the project and will be in an area approved by the Program Manager. Research Project A should cover a different field from that completed for Research Project B. Enrolment will commence with a one-week intensive induction program (Dissertation preparation course).

## GAST 5533

## GAST 5533EX

## Research Project in Gastronomy B

- 6 units - semester 1 or 2
- Eligibility: M.A. (Gastronomy) students
- Prerequisite: coursework component at credit (65\%) standard
- Assessment: research project of 8000-10000 words (or equivalent)

Project length will depend upon the nature of the project and will be in an area approved by the Program Manager. Research Project B should cover a different field from that completed for Research Project A. Enrolment will commence with a one-week intensive induction program (Dissertation preparation course).

## GEOLOGY \& GEOPHYSICS

## PETROL 7000

## Petroleum Geology and Geophysics (B)

- 6 units - semester 1

Depending on the nature of their previous studies and experience, students may be granted exemptions from some topics, required or permitted to substitute alternative studies for some topics, or required to take additional studies. Students must take both PETROL 7000 and 7001.

These courses form an integrated five month program of short courses presented back-to-back, and provide a thorough grounding in the many facets of petroleum geoscience. They include fundamental topics such as basin analysis, sedimentology, diagenesis, sequence stratigraphy and structural geology. Most of these courses are revised during a field trip to Central Australia. Geophysical topics include seismic interpretation, seismic acquisition and processing. Other tools and techniques used in petroleum geoscience are covered in courses such as wireline logging, petrophysics and wellsite geology.

There is some scope for specialisation between geology and geophysics, but the majority of the topics form a core curriculum taken by all students. Geologists may do thermal maturation and basin modelling, core description and petroleum geochemistry while geophysicists concentrate on seismic acquisition, signal analysis and seismic processing. Topics encouraging the development of non-technical skills include economics, management and communication skills. Many of the topics covered above are drawn together in case studies from the petroleum industry.

Details of the program can be found at www.asp.adelaide.edu.au

## PETROL 7001

## Petroleum Geology and Geophysics (A)

- 6 units - semester 2
- These courses cannot be taken separately

Depending on the nature of their previous studies and experience, students may be granted exemptions from some topics, required or permitted to substitute alternative studies for some topics, or required to take additional studies.

These courses form an integrated five month program of short courses presented back-to-back, and provide a thorough grounding in the many facets of petroleum geoscience. They include fundamental topics such as basin analysis, sedimentology, diagenesis, sequence stratigraphy and structural geology. Most of these courses are revised during a field trip to Central Australia. Geophysical topics include seismic interpretation, seismic acquisition and processing. Other tools and techniques used in petroleum geoscience are covered in courses such as wireline logging, petrophysics and wellsite geology.

There is some scope for specialisation between geology and geophysics, but the majority of the topics form a core curriculum taken by all students. Geologists may do thermal maturation and basin modelling, core description and petroleum geochemistry while geophysicists concentrate on seismic acquisition, signal analysis and seismic processing. Topics encouraging the development of non-technical skills include economics, management and communication skills. Many of the topics covered above are drawn together in case studies from the petroleum industry.

Details of the program can be found at www.asp.adelaide.edu.au

## GRIEF \& PALLIATIVE CARE

## GEN PRAC 7101HO

## The Nature of Grief

- 2 units - semester 1 or 2
- Eligibility: Grief \& Palliative Care Counselling students, other students with approval of Program Adviser
- Assessment: to be advised

This course provides an experimental, theoretical and evidencebased framework for best practice care and intervention relevant to counsellors. The nature and effects of grief, processes of recovery from bereavement and the factors that may affect its course will be discussed. The effects of context, gender, age and culture on the grieving process will also be explored. There will be scope for self-reflective learning to examine personal experiences and attitudes to loss and how these may influence approaches to clients and patients. Emphasis will be placed on the clinical applications of the principles learned in the course.

## GEN PRAC 7102HO

## Loss and Grief

- 2 units - semester 1 or 2
- Eligibility: Grief \& Palliative Care Counselling students, other students with approval of Program Adviser
- Assessment: to be advised

This course presents an overview of the paradigm of loss and explores the benefits of expressing loss as narrative. A range of diverse circumstances in which loss and grief may be experienced, such as the breakdown of relationship, illness and disability, adoption, trauma and migration, will be presented, and students will examine relevant issues, supportive intervention and appropriate referral. Students will be encouraged to reflect on their own work experience and practice and will have the opportunity to explore a specific loss of their own choice.

## GEN PRAC 7103HO

## Issues in Death and Dying

- 2 units - semester 1 or 2
- Eligibility: Grief \& Palliative Care Counselling students, other students with approval of Program Adviser
- Assessment: to be advised

This course comprises three main topics: legal issues, ethical issues and exploring death and dying. Legal issues will cover the role of the Law in death and dying, with specific reference to the acts associated with death and the subsequent legal process. Ethics will address basic ethical theory and the application thereof. Practical ethical problems will be presented. Exploring death and dying will present multidisciplinary views on terminal illness and dying, including physiological and psychological aspects of death and dying, the philosophy and delivery of palliative care, and living with a terminal illness.

## GEN PRAC 7104HO

## Supervised Field Education

- 2 units - semester 1 or 2
- Eligibility: Grief \& Palliative Care Counselling students, other students with approval of Program Adviser
- Assessment: to be advised

This course provides an introduction to professional issues relating to counselling, and a short placement within an organisation. Students will have the opportunity to apply their knowledge and skills either in the context of the student's own workplace (if suitable) or of an agency, institution or service in which counselling of clients or patients takes place. Students will be invited to engage actively in a process of collaborative reflection on and analysis of counselling cases and issues, in order to consolidate their learning and to achieve personal insight and development within a professional perspective.

## GEN PRAC 7105HO

## Grief Counselling I

- 2 units - semester 1 or 2
- Eligibility: Grief \& Palliative Care Counselling students, other students with approval of Program Adviser
- Assessment: to be advised

This course provides an introduction to the practice of grief counselling. Evidence for effectiveness in therapeutic practice is explored and the importance of the self-aware counsellor in successful therapeutic interaction is stressed. The practical skills and theory necessary for creating and maintaining counselling relationships, and for the effective exploration of problems in the context of grief counselling, are presented. This includes an understanding of the counselling process, and the application of skills within the context of a counsellor/client relationship.

Students will be encouraged to integrate the principles and skills learned with their own personal and professional experience and to apply them to the requirements of their specific work practice.

## GEN PRAC 7106HO

## Grief Counselling II

- 2 units - semester 1 or 2
- Eligibility: Grief \& Palliative Care Counselling students, other students with approval of Program Adviser
- Assessment: to be advised

Theoretical aspects of grief models are translated into practical approaches, allowing students to explore appropriate responses to grieving clients and patients. Specific issues that arise in bereavement and palliative care situations are examined, and students will have the opportunity to consider the nature of grief, as well as appropriate responses and interventions for individuals and families where there is a terminal illness. Students will be encouraged to integrate the principles and skills learned with their own personal and professional experience and to apply them to the requirements of their specific work practice.

## GEN PRAC 7107HO

## Grief Counselling III

- 2 units - semester 1 or 2
- Eligibility: Grief \& Palliative Care Counselling students, other students with approval of Program Adviser
- Assessment: to be advised

Students will examine the role of the counsellor in counselling, and explore specific factors that influence the nature and functioning of the therapeutic alliance. Counselling orientations relevant to situations of grief, loss and crisis will be reviewed.

Students will be encouraged to integrate the principles and skills learned with their own personal and professional experience and to apply them to the requirements of their specific work practice.

## GEN PRAC 7201HO

## Grief and Spirituality

- 2 units - semester 1 or 2
- Eligibility: Grief \& Palliative Care Counselling students, other students with approval of Program Adviser
- Assessment: to be advised

This course recognises the importance of spiritual issues in counselling and therapeutic work with those experiencing grief. The distinction between religion and spirituality is drawn and the emergence of spiritual questions during challenging developmental or situational transition times is examined. The particular contributions of Christian and Buddhist and transpersonal frameworks to the task of caring for others are reviewed, and the importance of rituals and symbols in grief work is included.

Students are encouraged to reflect on their own experience of the connections between grief and spirituality and to consider their attitudes to spiritual issues in counselling. Emphasis will be placed on understanding and identification of appropriate incorporation of spiritual dimensions in clinical practice.

## GEN PRAC 7202HO

## Grief Studies

- 2 units - semester 1 or 2
- Eligibility: Grief \& Palliative Care Counselling students, other students with approval of Program Adviser
- Assessment: to be advised

This course provides an opportunity for the exploration of specialised areas of grief. Topics selected may include, for example, the facilitation of grief and palliative care support groups, men's issues in grief and counselling, cultural differences in grief. For information regarding the topic for 2005, please contact the Program Director, Department of General Practice.

## GEN PRAC 7205HO

## Advanced Grief Counselling IA

- 1 unit - semester 1 or 2
- Eligibility: Grief and Palliative Care Counselling students, other students with approval of Program Adviser
- Assessment: to be advised

This course provides an opportunity for students to receive supervision of their current and ongoing work with clients. Students are required to provide evidence of their ability to deal appropriately with the needs of clients or patients and to
demonstrate adequate insight and knowledge of the counselling process in reflections on their practice. Case histories will be presented and discussed.

## GEN PRAC 7206HO

## Advanced Grief Counselling II

- 3 units - semester 1 or 2
- Eligibility: Grief \& Palliative Care Counselling students, other students with approval of Program Adviser
- Assessment: to be advised

Students will be introduced to one practical therapeutic approach (for example cognitive behavioural therapy) with a specific focus on the philosophy, practice and techniques and its application to grief and loss. The course tailors these techniques specifically to a range of client and patient populations who are suffering or experiencing grief. Students will be given the opportunity to experience various techniques and exercises drawn from the teachings, practitioners and tradition. The Practicum provides an opportunity for students to apply and demonstrate the learned principles and techniques to clients and patients under the guidance of a supervisor.

Students are encouraged to formulate a personal and integrated counselling approach to grief-related work, and to reflect on the appropriate application and usage of different counseling models in their specific work contexts, professional skills and personal style.

## GEN PRAC 7207HO

## Advanced Grief Counselling III

- 3 units - semester 1 or 2
- Eligibility: Grief \& Palliative Care Counselling students, other students with approval of Program Adviser
- Assessment: to be advised

Students will be introduced to one practical therapeutic approach (eg, the transpersonal) with a specific focus on the philosophy, practice and techniques and its application to grief and loss. The course tailors these techniques specifically to a range of client and patient populations who are suffering or experiencing grief. Students will be given the opportunity to experience various techniques and exercises drawn from the teachings, practitioners and tradition.

The Practicum provides an opportunity for students to apply and demonstrate the learned principles and techniques to clients and patients under the guidance of a supervisor.

Students are encouraged to formulate a personal and integrated counselling approach to grief-related work, and to reflect on the appropriate application and usage of different counselling models in their specific work contexts, professional skills and personal style.

## GEN PRAC 7209HO

## Research Design and Methodology

- 2 units - semester 2
- Eligibility: Grief \& Palliative Care Counselling students, other students with approval of Program Adviser
- Assessment: to be advised

This course is designed to provide students with a broad introduction to research process and methods. The processes covered are selected with particular reference to issues pertaining to researching questions within the health care system. Content includes an introduction to health research, formulating a research question, searching the literature, ethical issues, research design, quantitative and qualitative methodology and the writing of a research proposal. At the conclusion of the course participants should be in the position of being able to choose, with justification, from a variety of contemporary methods and apply one method to a research question of their choice.

## GEN PRAC 7210HO

## Advanced Grief Counselling IB

- 1 unit - semester 1 or 2
- Eligibility: Grief \& Palliative Care Counselling students, other students with approval of Program Adviser
- Assessment: to be advised

This course provides an opportunity for students to receive supervision of their current and ongoing work with clients. Students are required to provide evidence of their ability to deal appropriately with the needs of clients or patients and to demonstrate adequate insight and knowledge of the counselling process in reflections on their practice. Case histories will be presented and discussed.

## GEN PRAC 7304HO

MGPCC Dissertation (full-time)

- 12 units - semester 1
- Eligibility: Grief \& Palliative Care Counselling students, other students with approval of Program Adviser
- Prerequisite: completion of MGPCC coursework
- Assessment: to be advised

The dissertation is the final requirement of the MGPCC and should therefore reflect what the student has learned from the core and elective course work on the Graduate Certificate and Diploma programs. Unless exempted by the Board of Studies*, the dissertation will take the form of a paper suitable for submission to an appropriate peer reviewed journal. The content of this paper must reflect the research topic. The successful completion of this paper fulfils the requirements for a dissertation.

## GEN PRAC 7404AHO/BHO <br> MGPCC Dissertation (Part-time)

- 12 units - full year
- Prerequisite: completion of MGPCC coursework
- Assessment: dissertation

The dissertation is the final requirement of the MGPCC and should therefore reflect what the student has learned from the core and elective course work on the Graduate Certificate and Diploma programs. Unless exempted by the Board of Studies*, the dissertation will take the form of a paper suitable for submission to an appropriate peer reviewed journal. The content of this paper must reflect the research topic. The successful completion of this paper fulfils the requirements for a dissertation. This course needs to be undertaken with MGPCC Dissertation (part-time) Part 1 to fulfil the requirements of the dissertation.

* Exemptions will be rare but may be necessary in some circumstances to avoid significant disadvantage to a particular student.


## HORTICULTURE

## HORTICUL 7000WT

## Production Horticulture

- 3 units - even years only
- Up to 6 hours per week (including lectures, tutorial and practicals) - practicals may be replaced by tour
- Assessment: exam 70\%; assignments 30\%

The course examines production of commercial fruit, vegetable and nut crops including limits to production and characteristics for cultivars, management and irrigation, harvesting and marketing. Crops considered include citrus, apple and pears, grape vines, soft vines (berries), stone fruits, almond, walnut, macadamia, pistachio, and the tropical fruit, pineapple, banana, mango, and avocado. Vegetables include tomato, potato, brassicas, cucurbits, lettuce and the onion group.

## HORTICUL 7001WT

## Horticulture Systems

- 3 units - semester 1
- Up to 6 hours per week (including lectures, tutorial and practicals), (practicals may be replaced by tour)
- Assessment: mid-semester exam, final exam, assignments

The importance of horticulture to the community, sustainability and economic value, horticultural production areas and environmental factors involved. Fruit crop growth and its control using cultural and chemical methods. Horticultural propagation methods. The basis of production systems which include horticulture, and systems which
combine different types of horticulture. Plant improvement and breeding. The significance of pollination to horticulture.

## HORTICUL 7052WT

## Olive Production and Marketing

- 3 units - semester 2 - mid year break
- Assessment: exams, practical \& tour reports, major assignments, group oral presentations

This course examines production aspects of olive oil and pickling fruit. Characteristic requirements regarding cultivar selection, climate, soils and location; growing practices plus management of irrigation, pest and diseases; development budget financial planning; harvesting and oil quality assessment; marketing of olives including market evaluation, market plan development in product, pricing, distribution and marketplace decisions. Students are required to participate in field visits to growing/marketing enterprises as arranged.

## INFORMATION SYSTEMS

## ECOMMRCE 7004

## Internet Commerce (M)

- 3 units - semester 1
- 3 hour seminar per week
- Assumed Knowledge: fundamentals of World Wide Web, information systems development and relational database management systems
- Assessment: assignments, exam as determined at first class

The course examines how businesses use the World Wide Web to interact with customers. Topics: alternative business models, current Australian practices, commercial benefits and costs, design construction and management of a website, integration with a database, HTML and JavaScript languages, server side scripting, project management, payment systems, security, international considerations, evaluation and maintenance of the website as part of a marketing plan.

## INTERNATIONAL STUDIES

## INST 5000

## Approaches and Issues in International Studies

- 6 units - semester 1
- Eligibility: postgraduate International Studies students
- Assessment: essay, seminar presentation to total of 8000 words

Globalisation has become associated not only with the spread of economic processes, social and cultural influences, but also of radicalisation of political outlook, political instability/violence and regime change. This course introduces student to advanced, multidisciplinary research skills necessary to explore this complex topography of human systems in the throes of transformation. In doing so, the course draws on dimensions of international relations, international political economy, ethics and international justice, strategic cultures and security studies, and the politics of popular culture.

## INST 5001

International Politics in the Post Cold War World

- 6 units - semester 2
- Eligibility: postgraduate International Studies students
- Assessment: essay, seminar presentation to total of 8000 words

The notions of leadership and power have been important sources of debate since the end of the Cold War, and most notably in the Asia-Pacific region. Questions of succession, the role of the state in generating economic growth and social stability and the possibility of divining an 'Asian model' that other states could emulate have all figured prominently in shaping stimulating perspectives on the conduct of politics and nation-building. This course examines the foundations of power and the nature of Asian leadership in the region, focussing on the ideologies, forms of political organisation and the rationales for rule.

## INST 5002

## International Studies Option

- 6 units - semester 1 or 2
- Eligibility: postgraduate International Studies students
- Assessment: essay, seminar presentation to total of 8000 words

A number of options will lead students to specialisation in the following areas: strategic and security studies, ethics and justice, power and culture, Asian studies, European studies, environmental studies. In addition to these, and on advice from the discipline convenor, students have access to a range of other courses offered by the Faculty which take an international studies perspective.

A selection of options will be available in each semester and students should consult the School of History and Politics website for further information.

## INST 5500

## Dissertation in International Studies F/T

- 12 units - semester 1 or 2
- Eligibility: M.A. (International Studies) students
- Assessment: 15000 word dissertation

Dissertation on an International Studies topic approved by the Convenor of International Studies.

## INST 5501A/B

## Dissertation in International Studies P/T

- 12 units - full year
- Eligibility: M.A. (International Studies) students
- Assessment: 15000 word dissertation

Dissertation on an International Studies topic approved by the Convenor of International Studies.

## LANDSCAPE ARCHITECTURE

## LARCH 7004A/B

## Landscape Architecture Masters Project

- 12 units - full year
- 16 -18 hours average lectures/ tutorials/ workshops/ field trips, hours vary from week to week
- Eligibility: available to M.L.Arch. students only
- Prerequisite: LARCH 7013 Landscape Architecture Studio II
- Corequisite: LARCH 7005A/B Landscape Architecture Masters Dissertation
- Assessment: masters project

This course entails the preparation of a design response to a student devised brief. The substance and scope of the design may embrace aspects of nature and/or culture in urban and/or rural settings but is specifically intended to display the students' mastery at landscape design and an attuned understanding of the factors, theories, and opportunities that may influence and underpin the design.

The project will be of moderate to high complexity. Tuition will entail both individual and group seminar and studio classes resulting in an individual exposition. Responses should demonstrate an advanced level of knowledge and ability in several areas of landscape architecture thought and practice, including evidence of the student's ability to collect and evaluate information, construct, test and defend arguments or hypotheses, and to critically self-examine landscape design proposals. The final presentation or exhibition of the project should display a thorough integration of all major aspects of the program and its mission statement and project objectives.

## LARCH 7005A/B

## Landscape Architecture Masters Dissertation

- 12 units - full year
- 2 hour tutorial/seminar per week
- Eligibility: available to M.L.Arch. students only
- Corequisite: LARCH 7004A/B Landscape Architecture Masters Project
- Restriction: enrolment subject to application to the Head of the School and contingent upon prior results
- Assessment: internal \& external: seminar paper and/or exhibition, final essay or report articulating \& supporting project

This course comprises an individual research inquiry into a topic or theme or theory within the discipline of landscape architecture. The dissertation research culmination needs to display an adept fluency in period and contemporary literature and debates about the topic, evidence of a logical argument and analysis of available information or test results, an appreciation and use of a research methodology including its assumptions and validity, and the presentation of this research in a robust discussion paper or through an exhibition with catalogue.

Students will be required to undertake supervised research into a particular topic, leading to the presentation of a seminar paper, and submission of a final report/essay of 6000-12000 words.

## LARCH 7016

## Landscape Architecture Elective Studio A (M)

- 6 units - semester 1
- Up to 9 hours lectures/tutorials/workshops including an average 6 hours studio; contact hours vary from week to week
- Eligibility: M.L.Arch, M.Arch. (Cswk) students only
- Restriction: LARCH 7009 Landscape Architecture Studio IA
- Assessment: assignments, projects

This course explores the theory and practice of ecological design in relation to water and wetlands. It examines examples of projects that successfully demonstrate the management of water and wetland ecologies, the survey and documentation of existing environments, and strategies for design and construction. The course will also examine related issues of plant design in wetlands.

## LARCH 7017

Landscape Architecture Studio (M)

- 6 units - semester 1
- Up to 9 hours lectures/tutorials/workshops including an average 6 hours studio; contact hours vary from week to week
- Eligibility: M.L.Arch. students only
- Restriction: LARCH 7010 Landscape Architecture Studio IB
- Assessment: assignments, projects

This course focuses on the design and construction of a medium scale urban landscape project. Students will develop a brief from a client's instructions, develop design options that respond to the brief, the site and urban ecology environmental objectives, predict and analyse the potential performance of the chosen design, and develop sample construction specifications and drawings. The analysis and documentation will be carried out using digital media.

## LARCH 7018

## Landscape Architecture Elective Studio B (M)

- 6 units - semester 2
- Up to 18 hours lectures/tutorials/workshops including an average 6 hours studio; contact hours vary from week to week
- Eligibility: M.L.Arch. and M.Arch. (Cswk) students only
- Restriction: LARCH 7011 Landscape Architecture Studio IC
- Assessment: assignments, projects

This course will explore connections between landscape architecture design and avant-garde trends, culture, aesthetics and/or aspects of landscape architecture theory. The course is intended to be an opportunity to expand creative design boundaries. It may include cross-disciplinary connections with architecture, art and urban design.

## LARCH 7019

## Landscape Architecture Processes (M)

- 6 units - semester 1
- Up to 18 hours lectures/tutorials/workshops including an average 6 hours studio; contact hours vary from week to week
- Eligibility: M.L.Arch. students only
- Prerequisite: 18 units of Level I M.L.Arch. courses, including at least 12 units of core courses
- Corequisite: ARCH 7020 Professional Practice (M), ARCH 7021 Design Seminar (M)
- Restriction: LARCH 7013 Landscape Architecture Studio II
- Assessment: assignments, projects

This course will mirror in an educational setting the processes by which medium to large scale landscape architecture projects are managed, initiated, developed and documented. Students will develop integrated proposals for a semi-arid/arid landscape project or projects raising significant environmental design issues, linking stages from project conception and landscape planning to construction and documentation. It will address the stakeholders, environment, and means of achieving design objectives.

## LARCH 7020A/B

## Landscape Architecture Project (M)

- 10 units - full year
- Up to 20 hours a week studio work with specialist lectures irregularly spaced
- Eligibility: M.L.Arch. students only
- Prerequisite: LARCH 7019 Landscape Architecture Processes (M)
- Corequisite: LARCH 7022 Landscape Architecture Seminar (M), LARCH 7021A/B Landscape Architecture Dissertation (M)
- Restriction: LARCH 7004A/B Landscape Architecture Masters Project
- Assessment: final project

This course comprises an individual culminating design, planning and/or research project that principally addresses either nature and/or culture in urban and/or rural settings and which permits the exposition of the major aspects of the program and a student's particular interests. The project will be of a moderate to high complexity, and often drawn from a limited selection or from an identified region. Responses should demonstrate competency in most phases of landscape architecture thought and practice, including a final presentation that should show a thorough integration of all major aspects of the academic program.

## LARCH 7021A/B

## Landscape Architecture Dissertation (M)

- 12 units - full year
- 2 hour tutorial/seminar weekly
- Eligibility: M.L.Arch. students only
- Prerequisite: LARCH 7019 Landscape Architecture Processes (M)
- Corequisite: LARCH 7020A/B Landscape Architecture Project (M), LARCH 7022 Landscape Architecture Seminar (M)
- Restriction: LARCH 7005A/B Landscape Architecture Masters Dissertation
- Assessment: seminar paper and/or exhibition, final essay or report articulating \& supporting the project

This course comprises an individual research inquiry into a topic or theme or theory within the discipline of landscape architecture.
The dissertation research culmination needs to display an adept fluency in period and contemporary literature and debates about the topic, evidence of a logical argument and analysis of available information or test results, an appreciation and use of a research methodology including its assumptions and validity, and the presentation of this research in a robust discussion paper or through an exhibition with catalogue.Students will be required to undertake supervised research into a particular topic, leading to the presentation of a seminar paper, and submission of a final report/essay of between 6000 to 12000 words.

## LARCH 7022

## Landscape Architecture Seminar (M)

- 2 units - semester 2
- 2-3 hours lectures/tutorials/workshops; contact hours vary week to week
- Eligibility: M.L.Arch. students only
- Prerequisite: LARCH 7019 Landscape Architecture Processes (M)
- Corequisite: LARCH 7020A Landscape Architecture Project (M); ARCH 7021A Landscape Architecture Dissertation (M)
- Assessment: assignments, seminar papers

This course examines contemporary issues, theories and philosophies in landscape architectural design. It will engage in the critical review of influential and cutting edge practice and practitioners. It supports the concurrent course Landscape Architecture Project $(\mathrm{M})$ in which the critical thinking developed in this course is expressed as creative work.

## LAW

## LAW 5009

## Alternative Dispute Resolution

- 4 units - semester 1
- 36 hours
- Subject to a minimum number of 8 enrolments to form a class
- Prerequisite: LAW 2002 Administrative Laws, LAW 3002 Civil and Criminal Procedure
- Corequisite: LAW 2002 Administrative Laws, LAW 3002 Civil and Criminal Procedure
- Assessment: 3000 word paper 70\%, submission of group report, project, presentation

The course will include a detailed examination of the philosophy and practice of ADR methods in the context of an adversarial legal system. It will assume basic knowledge of the range of ADR options available, and will develop understanding of the operation and implications of various ADR theories and practices in our legal system. It will evaluate the experience in Australia and other common law countries of the development and incorporation of ADR options in dispute resolution, the civil, administrative, family and criminal contexts. By examining both philosophy and practice, the course aims to develop ability to critically assess the legal, social and other issues intrinsically linked to the values imputed to ADR, and to understand the implications of the operation of those theories in an adversarial legal context. The course will include the following: (i) the nature of disputes, and the psychological, political, cultural, economic and social issues that affect dispute resolution; (ii) The relevance and social acceptance of ADR as a credible alternative
to litigation; (iii) theory, features and values of various forms of ADR; (iv) Justice reform-the role of the courts in justice deliveryprovision of courts annexed ADR, the "multi-doored" court and the value of judicial decision making; (v) power and control issue in dispute resolution; (vi) the role of mediators-ethical standards; (vii) legal rights and responsibilities flowing from ADR outcomes.

## LAW 5010

## Accreditation for Mediators

- 2 units
- Intensive course
- Available for Non-Award Study
- Prerequisite: Alternative Dispute Resolution

Assessment: may include written feedback on performance as mediator, learning/evaluative journal, written exam, presentation/or a combination of these

This workshop builds on theory explored in Alternative Dispute Resolution. Students will engage in simulated mediation exercises playing the role of parties and mediators. Students will have their performance as mediators formally assessed with written feedback. Associated sessions will include evaluation and critique of techniques in mediation and implications for justice access.

## LAW 7008

## Research Project (PG)

- 3 units - summer, winter semester, semester 1 or 2
- Eligibility: MCL, LLM \& MBL students


## LAW 7024

## Comparative Law (PG)

- 6 units - semester 1
- 48 hours -4 lecture hours, supplemented by seminars
- Eligibility: MCL, LLM \& MBL students
- Assessment: Part A - multiple choice questionnaire 50\%, Part B essay questions $50 \%$ - 5000 word essay may be presented in lieu of Part B, seminar presentation (if required) 15\%

This course will cover the following topics: comparative law as an academic discipline; the world's families of legal systems; comparative evaluation of the merits of differing legal solutions to social problems; legal history and comparative law; law understood as divine revelation and law as a human creation (exemplified by an analysis of the roots of European and North American law and a survey of the history and present day practice of Islamic law); the impact of the philosophy of the Enlightenment on European and North American law (the theory and practice of human rights and the codification movement in civil law and common law countries); codified and uncodified law, highlighting prominent features of civil
law and common law systems, eg, the rule of precedent (common law), reliance on good faith (civil law) and differing standards of interpretation of statute law; the investigatory civil procedure (civil law) and the adversarial civil procedure (common law). Selected civil law judgments (translated into English) and common law judgments which have similar fact patterns will be compared.

## LAW 7025

## Dissertation (MCL)

- 6 units - semester 1 or 2
- Assessment: 12000-15000 word essay


## LAW 7055

## Comparative Corporate Rescue Law (PG)

- 3 units - winter semester
- 6 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

The aim of the course is to identify the role of insolvency law regimes in the global corporate environment, with particular emphasis on formal and informal rehabilitation processes for corporations experiencing financial difficulties. The course will cover the following topics as they relate to corporate rescue systems operating in major trading regions of the world: when is rehabilitation appropriate; access to the process; protection afforded to the company on entering into the process; formulating a rehabilitation plan; the role of an independent administrator in the process; the role of creditors, members, and company officers in the process; the role of the court; informal v formal rehabilitation processes.

## LAW 7056

## Competition Law: Comparative Perspectives (PG)

- 3 units - semester 2
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

This course examines the policy objectives of competition law and the economic foundations of competition policy in the context of a comparative treatment between Australia, the United States and the European Union. The course considers the regulation of anticompetitive conduct such as price fixing, exclusive dealing and resale price maintenance. Comparative measures aimed at structuring a competitive market such as prohibitions on vertical and horizontal monopolisation will also be considered. The various roles of institutional bodies such as the ACCC, the US Federal

Trade Commission and the European Commission will be examined. The operation of competition law in a global economy will also be a focus of the course. Topics covered will include:The extraterritorial reach of competition law; Efforts to co-ordinate international investigation through bilateral and multilateral treaty; Efforts to harmonise the enforcement of competition law through organisations such as the WTO and the OECD or an international competition agency.

## LAW 7057

## Corporate Governance (PG)

- 3 units - not offered in 2006
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

The collapse of Enron and WorldCom in the United States and the collapse of HIH in Australia were seen as failures of corporate governance, and consequently have led to substantial and onerous new corporate governance requirements particularly in relation to
audit committees. This course will examine the principles and practices that shape the current corporate governance debate. Students will examine:The relationship between corporate governance and corporate performance; The role, structure and composition of the board and other senior management company organs; The relationship between the board and management;

The rights and responsibilities of shareholders including institutional shareholders; Risk management practices; Audit requirements; Executive remuneration; Corporate social responsibility.

## LAW 7058

## Dispute System Design and Implementation (PG)

- 3 units - not offered in 2006
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar
Individual, organisations and countries have different needs and interests. Inevitably those needs and interests will conflict. The manner in which that conflict is dealt with will affect individual, organisational and national well-being. Ideally, dispute resolution systems at the local, national and international levels will deal with conflict efficaciously and fairly. This course examines the design and implementation of dispute resolution systems to achieve fairness, efficacy and the promotion of social welfare. Various methods of dispute resolution including negotiation, conciliation, mediation and arbitration will be examined in different contexts.

The course will examine how best to choose between these various methods or how best to combine them to achieve an effective means of managing conflict with an emphasis on preventative lawyering.

## LAW 7059

## European Union Law (PG)

- 3 units - semester 1
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

The European Union is one of Australia's major trading partners. European Union Law strongly impacts on the legal systems of its twenty-five Member States. It is important for Australian lawyers to understand how the legal system of the European Union operates in order to give advice on commercial transactions or other relations with the Union or any of its Member States. Furthermore, knowledge of EU law is today vital to comprehend the legal system of the United Kingdom.

The course examines the legal, administrative and political structure of the European Union. The basic treaties on which the European Union is founded and current issues such as demands for treaty reform and the EU's enlargement will be considered. Specific topics covered will include the difference between the European Union and the European Communities; the institutional structure of the Union; law making in the EU; the impact of EU Law on the legal systems of the Member States and on individuals, especially the doctrines of direct effect, supremacy and state liability; the single market with the four basic market freedoms and the single currency; the external relations of the Union, especially with Australia; the future of the EU.

## LAW 7060

## Federal Criminal Law (PG)

- 3 units - semester 2
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

Federal Criminal Law is now codified in the Commonwealth Criminal Code. The Code, which now consists of eight chapters, ranging in subject matter from theft, through terrorism to sexual slavery, is prefaced by a comprehensive codification of the general principles of criminal responsibility. The Code is not yet complete. Some significant areas of federal criminal law - drug related offences are the most notable example - have yet to be brought within the structure of the Code. Since December 15 2001, however, all

Commonwealth criminal offences are subject to the general principles of criminal responsibility set out in the Code. The course will provide an overview of federal criminal law, ranging from the general principles to federal sentencing law. Topics will be drawn from the following list: Chapter 2: General Principles of Criminal Responsibility, Corporate Crime and Cultures of Non Compliance, Federal jurisdiction; Chapter 7:Theft, Fraud and Bribery; Chapter 4:Foreign Bribery; Chapter 10: Cybercrime; Customs Act; Drug Offences: Codification and the Constitution; The Civil/Criminal Divide: forfeiture and pecuniary penalties; Federal Sentencing Law.

## LAW 7061

Globalisation \& the Legal Regulation of Work (PG)

- 3 units - not offered in 2006
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

The course focuses upon the nature of globalisation and its impact in law, especially the law governing work. Students will consider the role of the ILO and the intersection of international trade law and labour regulation. In this context, students will examine the role of human rights and the development of corporate codes of conduct regarding labour matters. Students will also consider themes underpinning debate concerning the scope and application of labour regulation and the new forms of regulation governing work.

## LAW 7062

## Global Issues in Intellectual Property Law (PG)

- 3 units - not offered in 2006
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

The course will examine development of law and policy related to globalisation, cultural diversity, issues of world trade and the Internet. On the international level, students will examine the development of major international agreements, dispute resolution methods and for dealing with international disputes over intellectual property. In particular students will examine the significance of minimum standards of intellectual property rights required by the TRIPS agreement for members of the World Trade Organisation, as well as international developments for more effective protection of intellectual property rights in a digital information age reflected in WIPO's Copyright Treaty of 1996 and in the US/Australia free trade agreement. From a practical perspective students will also examine cross-border protection of intellectual property rights accompanying technology transfer, and transnational licensing and franchising.

## LAW 7063

Government, Business \& Regulation (PG)

- 3 units - semester 1
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

This course will examine legal principles of government procurement, including the powers and limitations on government instrumentalities entering into contracts, the respective roles of the three branches of government in the process, the processes of contract formation and ongoing contractual management, the resolution of disputes arising out of both processes and the various forums for dispute resolution. Topics will include: Open Tenders and Sealed Bids; Negotiation; The problems of offer, acceptance and consideration; The authority of government agents to contract; Crown privileges and immunities - including government liability in contract, tort and equity; The government and the Trade Practices Act and Fair Trading legislation; Contract Administration and Variation, including the impact of evolutionary or relational theories of contract upon the management of government contracts; Contract termination; Executive necessity; Legislative overriding of contractual obligations; Raising an estoppel against the government; Administrative law remedies for breach of contract; The accountability structure of government as it impacts on contract with government.

## LAW 7064

## Intellectual Property Law (PG)

- 3 units - winter semester
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

This course aims, through a treatment of laws relating to patents, trademarks, confidential information, copyright and other regimes, to examine the protection provided by the law in regard to ideas, inventions, information and other forms of creative effort. The course also aims to explore how the law deals with a particular problem, and how solving that problem the law must balance interests and protect investment while taking into account the public welfare and technological developments. The course will explore the inter-relationship of the different regimes in the commercialisation or exploitation of intellectual property. Upon completion of the course, students will have a basic grounding in the law of the area, its limitations, policies and objectives, including the basic features of the various systems of protection.

## LAW 7065

## International Commercial Arbitration (PG)

- 3 units - not offered in 2006
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

International commercial arbitration has become the primary form of dispute resolution in international trade settings. This course will consider: The nature of international arbitration including its advantages and disadvantages as a form of dispute resolution in the international trade context; The distinction between international and domestic arbitration; Jurisdictional issues relevant to international arbitration; Choice of Law in International Arbitration; UNCITRAL Model Law and its application in Australia and elsewhere; Other model rules; Enforcing international arbitration agreements; Appointment and qualifications of arbitrators; Due process review of the arbitration - including bias, failure to observe procedural fairness; Privacy and Confidentiality of the parties and evidence; Challenging the award; Enforcing the award.

## LAW 7066

## International Conflicts of Law (PG)

- 3 units - semester 1
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

The course deals with the law applicable to international business transactions, including the law of contract, the law of torts, and equitable duties. It will also examine the recognition of foreign law as well as the recognition of Australian law overseas, in particular of law, which purports to apply extraterritorially. In this context, the course will critically evaluate whether the law appropriately balances comity against sovereignty. The development of international treaties to achieve such a balance will also be considered.

The jurisdiction of Australian courts over defendants resident in other countries and the mutual recognition of jurisdiction over Australian defendants by foreign courts will be studied. Consequently, the recognition of foreign judgements and awards and international treaties governing mutual recognition will also be examined.

## LAW 7067

## International Criminal Law (PG)

- 3 units - not offered in 2006
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

This course examines the general principles of international criminal law as well as the fundamentals of international criminal procedure, providing a practical and theoretical framework for the rules, concepts and legal constructs key to the subject.

## LAW 7068

## International Energy Law (PG)

- 3 units - not offered in 2006
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

The course examines the formulation of international energy law and policy at an international level in organisations such as: United Nations - UNEP, UNDP, IAEA; OECD - IEA, NEA; World Bank, ERBD and other financial institutions. It will also examine state jurisdiction over: Energy resources and co-incident activity; The regulation of exploration for oil and gas; Maritime and overland transport of oil and gas.

The intersection between state jurisdiction and international energy law as well as international trade law through WTO law will also be considered.

## LAW 7069

## International Law (PG)

- 3 units - not offered in 2006
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

The course provides those wishing to specialise in international law treatment of: Recognition of states; State responsibility; State sovereign immunity and other immunities; The institutional framework for the formulation and recognition of international law; International jurisdiction; International dispute resolution; The role of the International Court of Justice; International intervention.

## LAW 7070

## International Trade Law (PG)

- 3 units - not offered in 2006
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

This course will examine the law governing international transactions including contracts for the sale of goods, transport, payment and insurance. In addition, the course will look at the legal vehicles available to facilitate international transactions including distribution, agency, licensing, franchising and transfer of technology. Dispute resolution methods applicable to international transactions will be examined. Choice of law and the recognition of foreign awards and judgements will also be considered.

## LAW 7071

## Superannuation Law (PG)

- 3 units - not offered in 2006
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

The course will examine the regulatory framework governing superannuation. It will begin by examining the development of superannuation and how the law has responded to those developments. Trends in superannuation and characteristics of superannuation funds will be examined against a backdrop of a matrix of equitable, statutory and common law duties. Topics covered in the course will include: The obligations of trustees and rights of beneficiaries, both statutory and fiduciary will be considered; Trustees duties in relation to investment; The institutional role of APRA; The institutional role of ASIC; Review of trustee decision making; The role of the Superannuation Complaints Tribunal; Taxation aspects of superannuation; The superannuation guarantee charge, reasonable benefit limits, death and disability benefits; Superannuation and Divorce.

## LAW 7072

The Law of Work in the New Economy (PG)

- 3 units - semester 2
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

The course examines the impact of deregulation and new technology in the workforce focussing on issues such as nonstandard labour relations, the impact of restructuring of business on employment and labour relations, privacy in the workplace and the use of new technology.

## LAW 7073

## Transnational Crime \& Terrorism (PG)

- 3 units - not offered in 2006
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

Contemporary Crime and Criminal Justice is increasingly characterised by the globalisation of criminal activities and international efforts to combat transnational crime. The focus of this course is with the growing body of international criminal law, increasing numbers of international conventions to combat transnational crime and domestic efforts in Australia to accede to and implement this body of law. This course is concerned with the criminalisation of transnational criminal activities, and national, regional and international efforts to investigate such crime and prosecute offenders. The course examines the opportunities and limitations of international conventions on the prevention of crime. Australia's experiences with transnational criminal activities and its efforts to fight these activities.

## LAW 7074

## Transitional Justice (PG)

- 3 units - not offered in 2006
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

Transitional justice is those measures by which a society accounts for past abuses as it transits from a state of conflict, apartheid or dictatorship, where the perpetrators of violence enjoy impunity, to civil peace, where the state seeks to provide justice and security to its citizens. In this course, students consider the effectiveness of these measures, which include constitution-making, amnesty agreements, truth commissions, lustration processes and courts, whether international, local or hybrid. These measures are examined through case studies: South Africa's Truth and Reconciliation Commission, the work of international organisations and courts in Bosnia and Herzegovina, the United Nations' Mission in East Timor, local 'Gacaca' courts in Rawanda and the process of drafting constitutions in countries such as Afghanistan and Iraq. The course also addresses the aims of these transitional measures,
for example, the fact that restorative justice in the form of a truth commission places emphasis on the need for reconciliation between victims and perpetrators rather than simply punishment of the latter.

## LAW 7075

## Wine Law (PG)

- 3 units - not offered in 2006
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

This course aims to foster an understanding of the legal framework in which the wine industry operates both domestically and internationally. It examines a number of legal issues of commercial concern to grape growers, wine producers, wine wholesalers and wine retailers. Issues included are: basic licensing requirements for establishing a vineyard, retail outlet and restaurant; business organisations and relationships; transactions among wine industry participants (including e-commerce); protection of commercial identity; wine label law; product liability; environmental and planning law, biotechnology rights and export control.

## LAW 7076

World Economic Law (PG)

- 3 units - summer semester
- 36 hours
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

The course examines the institutions and operations of the basic blocks of the international trade law system after the inauguration of the World Trade Organisation. The institutions examined include the World Trade Organisation; the World Bank Group; the International Monetary Fund; the UN Group; the EU and NAFTA; and commodity exchanges. The course examines the aims and objectives of these organisations and critically evaluates their success in implementing their aims and in fostering stable international trading and monetary systems.

## LAW 7078

## Revenue Law

- 3 units - semester 1
- 40 hours
- Eligibility: M.Bus.Law \& MCL students only
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

This course will cover the constitutional aspects of taxation and the distinction between capital and income receipts and deductions, the provisions of part 3.1 and 3.2 of the Income Tax Assessment Act 1997, which relates to Capital Gains Tax. In addition, this course will deal with tax accounting, income assignments and the taxation of entities (in particular partnerships, companies and trusts) and tax avoidance.

## LAW 7079

## Corporate Law

- 3 units - not offered in 2006
- 40 hours
- Eligibility: M.Bus.Law students only
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

Examination of the legal regulation of corporate activity including formation; comparison with non-corporate entities, attributes of corporate personality (property, contract, tort, member liability); the corporate contract; corporate governance (directors' duties, shareholder primary norm, members' rights and remedies); public regulation of corporate activity (ASIC and ASX); corporate finance (debt and equity); corporations in financial trouble (administration, receivership and winding up); and rights attendant upon dissolution.

## LAW 7085

## Contractual Relations (MCL)

- 3 units - semester 1 or 2
- 36 hours
- Eligibility: MCL only
- Assessment: Assessment: participation, assignments/research paper and/or exam as determined at first seminar

This course acquaints students with the content and application of common law, equitable and statutory rules relating to enforceable agreements and puts those rules in their practical and social perspective. Although the course is not concerned with the various statutory modifications made with respect to specific classes of contract (eg employment, land, consumer finance etc), which are dealt with in other courses, an understanding of the basic conception of a contract is vital not just as a starting point for those statutory models but also for an understanding of everyday commercial agreements. The following topics will be covered: Creation and content of a contract (formation, privity, agency, terms); statutory remedies for misleading and deceptive conduct in
trade and commerce; misrepresentation; unconscionable dealing; improper pressure; performance and discharge of obligations (performance, breach, frustration, variation and discharge by agreement); and remedies (enforcement, compensation, restitution).

## LAW 7087

## Negligence and Intentional Wrongs (MCL)

- 3 units - semester 1 or 2
- 36 hours
- Eligibility: MCL only
- Assessment: Assessment: participation, assignments/research paper and/or exam as determined at first seminar

This course considers the tort of negligence including defences, with some consideration to damages, concurrent liability and alternative methods of providing compensation for accidental injury. A representative range of other torts and their defences that may include intentional torts to the person and torts to physical objects will also be examined.

## LAW 7092

## Contractual Relations

- 4 units - semester 1 or 2
- 36 - 40 hours
- Eligibility: M Bus Law students only
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

This course acquaints students with the content and application of common law, equitable and statutory rules relating to enforceable agreements and puts those rules in their practical and social perspective. Although the course is not concerned with the various statutory modifications made with respect to specific classes of contract (eg employment, land, consumer finance etc), which are dealt with in other courses, an understanding of the basic conception of a contract is vital not just as a starting point for those statutory models but also for an understanding of everyday commercial agreements. The following topics will be covered: Creation and content of a contract (formation, privity, agency, terms); statutory remedies for misleading and deceptive conduct in trade and commerce; misrepresentation; unconscionable dealing; improper pressure; performance and discharge of obligations (performance, breach, frustration, variation and discharge by agreement); and remedies (enforcement, compensation, restitution).

## LAW 7093

## Negligence and Intentional Wrongs

- 4 units - semester 1 or 2
- 36 - 40 hours
- Eligibility: MBL students only
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

This course considers the tort of negligence including defences, with some consideration to damages, concurrent liability and alternative methods of providing compensation for accidental injury. A representative range of other torts and their defences that may include intentional torts to the person and torts to physical objects will also be examined.

## LAW 7094

## Principles of Australian Law

- 4 units - semester 1 or 2
- 36-40 hours
- Eligibility: MBL students only
- Available for Non-Award Study
- Assessment: participation, assignments/research paper and/or exam as determined at first seminar

This course provides the introduction to Australian Law and Legal System, forming a basis for the further study of law. In particular, the course examines law making and court processes and hierarchies in Australia; the role of Courts and legislature in Australia, including their historical background and the development of the Australian legal system; legal system taxonomy, including the Australian federal system, public and private law, other families of legal systems, including the international legal system and comparative law; an introduction to human rights law; and an introduction to legal theory, addressing the nature of law and critical legal thinking. The course will also provide an introduction to legal research and problem solving.

## LAW 7096

## Sport Law (PG)

- 3 units - semester 2
- 36 hours
- Available for Non-Award Study
- Assessment: class participation $20 \%$, research essay (7,00010,000 words) $80 \%$

Sport has become a global business, generating large incomes for leading industry participants, and raising a number of commercial
and legal issues of concern to players, administrators and supporters. This course seeks to guide sport industry participants, their legal advisors and others having a general interest in the area through the principal legal issues affecting commercial sport. Relevant legal principles from torts, contracts, employment and labour relations, restrictive trade practices, administrative law and intellectual property will be used to analyse common transactions and structures in commercial sport with particular attention to specialised applications and rules. The analysis will cover team membership agreements, professional player contracts, liability and compensation for injury, collective bargaining, player representation, labour market controls, league arrangements, disciplinary proceedings and dispute resolution, marketing and sponsorships, and sports broadcasting. The focus will be on Australian law with reference to global arrangements and comparative perspectives where appropriate.

## LAW 7097

Anglo-American Constitutional History (PG)

- 3 units - summer semester
- 36 hours
- Available for Non-Award Study
- Assessment: class participation 20\% 7,000-10,000 word research essay $80 \%$

The course will examine the historical background of the United States Constitution with particular emphasis on the influence of English constitutionalism on the creation and development of United States constitutional law. The course will culminate in a detailed study of the constitutional issues raised by the United States Civil War and ask whether constitutionalism has any constructive role to play in matters that raise profound moral, social, religious, political and economic questions.

## LAW 7098

## Insurance Law (PG)

- 3 units - semester 1
- 36 hours
- Available for Non-Award Study
- Assessment: class participation 20\%, research essay (7,00010,000 words) $80 \%$

Analysis of risk, the nature of insurable risk and the insurance mechanism are key to understanding the way in which the insurance industry operates in Australia. The course introduces students to economic theories underlying insurance and outlines fundamental features of the insurance contract including formation, coverage and interpretation, duties and responsibilities of the insurer, the duty of utmost good faith, the duty of disclosure and prohibitions against misrepresentation. The course also examines the role of agent and brokers in relation to the insurance contract.

In addition, the course examines the legal and regulatory environment in which the insurance industry operates including the relationship of the insurance industry with ASIC and APRA.

## LAW 7111

## Principle of Australian Law (MCL)

- 3 units - semester 1 or 2
- 36 hours
- Eligibility: MCL only
- Assessment: class participation, written assignment(s), exam

This course provides the introduction to Australian Law and Legal System, forming a basis for the further study of law. In particular, the course examines law making and court processes and hierarchies in Australia; the role of Courts and legislature in Australia, including their historical background and the development of the Australian legal system; legal system taxonomy, including the Australian federal system, public and private law, other families of legal systems, including the international legal system and comparative law; an introduction to human rights law; and an introduction to legal theory, addressing the nature of law and critical legal thinking. The course will also provide an introduction to legal research and problem solving.

## LINGUISTICS

## LING 5001

## Computer Assisted Language Learning - CALL

- 6 units - not to be offered in 2006
- Eligibility: postgraduate. Applied Linguistics students
- Assessment: review of CALL research, documentation of project on the use of information technologies for communication

A practical introduction to the use of information technology, this course develops skills in the creation and use of electronic environments for communication and educational purposes. Students have the opportunity to develop projects with applications to workplaces.

## LING 5004

## Language and Meaning

- 6 units - semester 1
- Eligibility: postgraduate Applied Linguistics students
- Assessment: text analyses, report of investigation into language use

Language is embedded in everyday actions as it is used to carry out different functions. The purpose of this course is to investigate the linguistic choices which differentiate uses of language, for
example the differences between spoken and written language, between academic discourse and informal language. Students are introduced to the analysis of texts using functional grammar.

## LING 5009

## Language Teaching in Specific Settings

- 6 units - semester 2
- Eligibility: postgraduate Applied Linguistics students
- Assessment: critical review of topic on curriculum design, documentation of curriculum in action, curriculum design project

For this course students study examples of contemporary curriculum and the design of curriculum for different purposes and contexts. The contexts include teaching English to speakers of other languages (TESOL), first language education and adult literacy. There is a particular focus on curriculum in action together with a critical review of various approaches to curriculum design.

## LING 5010

## English for Academic Purposes

- 6 units - semester 2
- Eligibility: postgraduate Applied Linguistics students
- Assessment: 3 assignments analysing discipline-specific texts

The aim of this course is to extend students' command of English language for working in academic and educational contexts. Students analyse characteristic features of academic texts from different disciplines.

## LING 5011

## Language and Learning

- 6 units - semester 1
- Eligibility: postgraduate Applied Linguistics students
- Assessment: review of research, report on research project

In this course students analyse leading-edge developments in language and literacy education. The course combines practical teaching strategies with theoretical analyses of language and language learning. The course has applications to teaching English to speakers of other languages (TESOL) as well as to literacy and language education.

## LING 5017

## Language Teaching Methods: TESOL/LOTE/Literacy

- 6 units - semester 2
- Eligibility: postgraduate Applied Linguistics students
- Assessment: teaching portfolio, report on classroom observations, teaching practicum

The course is designed to prepare students for teaching language in different settings. It introduces a theoretical framework for language pedagogy which conceptualises language learning and teaching as processes of socialisation. Students review instructional techniques, plan lessons, develop teaching resources, and construct assessment procedures. They examine a variety of syllabuses and curricula to become familiar with preparation of teaching materials based on them. Students rehearse techniques in micro-teaching sessions, which are video-recorded for analysis. The course includes a Practicum, in which students systematically document lesson observations, prepare instructional materials and teach under supervision. Students who are practicing teachers will negotiate a classroom study topic as an alternative to the practicum.

## LING 5059

## Special Topic in Linguistics

- 6 units - semester 1 or 2
- Eligibility: postgraduate Applied Linguistics students
- Assessment: 4000 word essay, 5 practical exercises or annotated diary of data observation - analysis to total of 5000 words

Content is based on areas of expertise of Distinguished Visiting Scholars.

## LING 5501

## Dissertation in Linguistics F/T

- 12 units - semester 1 or 2
- Eligibility: M.A.(Applied Linguistics) students
- Assessment: dissertation of 18000 words


## LING 5502A/B

## Dissertation in Linguistics $\mathbf{P} / \mathrm{T}$

- 12 units - full year
- Eligibility: M.A.(Applied Linguistics) students
- Assessment: dissertation of 18000 words


## MANAGEMENT

## COMMGMT 7006

## Organisational Behaviour (M)

- 3 units - semester 2
- 3 hour seminar per week
- Assessment: test, oral presentation, written assignment, exam

This course focuses on the theories and concepts that underlie employee behaviour in organisations. In particular, this will include
a consideration of how the organisation is influenced by attributes and behaviours of individuals, group processes, and elements of the organisation system. Further, a practical perspective will be accommodated and current challenges facing organisational behaviour will be covered.

## COMMGMT 7007

Strategic Management (M)

- 3 units - semester 2
- 3 hour seminar per week
- Assumed Knowledge: Management Practice (M) - concurrent enrolment sufficient
- Assessment: Assignments, exam as determined at first lecture

This course introduces students to the fundamentals of strategic management. A key objective of the course is to develop students' understanding of the issues related to longer-term strategy formulation in the context of public, private and not-for-profit business sectors. Key topics covered in the course include strategic planning, strategic implementation, and strategic control. Consideration is also given to a range of specialist issues in strategic management.

## COMMGMT 7008

## Management Practice (M)

- 3 units - semester 1
- 3 hour seminar per week
- Assessment: assignment, exam as determined at first lecture

This course introduces students to the fundamentals of management practice by surveying the roles and functions undertaken by managers. It introduces the concept of an organisation and explains the need for management, the development and evolution of management theory, the types and levels of managers, and their internal and external environments, including an analysis of the ethical and social responsibilities owed to those environments. Extensive coverage of the four key management functions (planning and decision-making, organising, leading and motivating, and controlling) is also included. Finally, the course addresses a number of emerging issues in management.

## COMMGMT 7009

## Structure and Performance in Organisations

- 3 units - semester 1
- 3 hour seminar per week
- Assessment: assignments, exam as determined at first lecture

Drawing on insights found in contemporary literature on organisational structure and design, this course will develop an understanding of the role organisation design plays in enhancing
organisational performance. In particular, this course will focus upon the nature, functions, and dysfunctions of various structural alternatives and the need to match organisational structure and design to the organisation and its environment. Topics covered include: "classic" organisational designs such as the simple, functional, divisional, hybrid, and matrix forms; mechanistic and organic organisations; open system design elements; contingency approaches to organisational design; employee involvement and empowerment; outsourcing, downsizing and organisational reengineering; virtual organisational structure and design; and using structural means to promote innovation.

## COMMGMT 7010

## Optimising Human Performance (M)

- 3 units - semester 1
- 3 hours seminar per week
- Assessment: assignments, exam as determined at first lecture

This course examines the role of assessment and evaluation as a basis for optimising human performance in organisations. It adopts an employment life cycle perspective whereby the importance of assessment and evaluation is considered in relation to: the initial recruitment, selection and induction of employees; their subsequent maintenance and motivation through human resource management practices such as training and development, performance and appraisal, compensation, career development and succession planning; and their final departure from the organisation (whether via resignation, retirement, or termination). In addition to its focus on assessment and evaluation at an individual level, the course also considers how these activities can be used to establish the "bottom-line" justification for an organisation's human resource management practices.

## COMMGMT 7011

Corporate Governance and Globalisation (M)

- 3 units - semester 1
- 3 hours seminar per week
- Assessment: assignments, exam as determined at first lecture

This course will provide an understanding of the systems and practice of governance in corporations. Taking an international focus, the course will compare the current Australian practice with American, Asian and European systems of corporate governance. The issues of executive remuneration, monitoring mechanisms, and the effects of government regulations are explored and current reforms of corporate governance are analysed. Further issues addressed will include board profiles, roles and performance, CEOboard relationships, reasons for and governance lessons from corporate failures, and approaches to assessing governance effectiveness

## COMMGMT 7012

## Managing Social Responsibility (M)

- 3 units - semester 2
- 3 hours seminar per week
- Assessment: test, group oral presentation, group assignment, exam

This course reflects the major contemporary trends in corporate citizenship, social and environmental responsibility and accountability. Communities and governments now require organisations to be responsible and accountable for their performance in relation to their social and environmental responsibilities, and these responsibilities have increasingly formed part of organisations' ethical values and strategic agendas. In addressing the issue of effective performance management in these areas of responsibility, this course will include consideration of the enlarged spectrum of corporate stakeholders; corporate social responsibilities, citizenship and reputation; business-government relationships and political environmental management; sustainable development; environmental management and accountability; social investing and corporate philanthropy; community and employee relationships; and public affairs and media management. Accordingly, this course focuses on understanding and implementing enhanced organisational performance that includes social, environmental and ethical performance indicators in addition to the traditional financial performance indicators.

## COMMGMT 7013

## Strategic Evaluation and Control (M)

- 3 units - semester 2
- 3 hours seminar per week
- Assessment: test, group oral presentation, group assignment, exam

This course will examine control and related performance evaluation issues inherent in corporate, business and functional level organisational strategies. Foundations for effective control will be built on the recursive relationship between organisational planning and control and generic approaches to organisational control, and behavioural and output control. The course will also address issues of operational and financial control in relation to organisational structure and culture, performance evaluation and reward systems, and risk management across private, public and non-profit sectors.

## COMMGMT 7014

## Strategic Compensation Management (M)

- 3 units - semester 2
- 3 hour seminar per week
- Assessment: group case study, group oral presentation, exam

This course focuses on compensation as a component of human resource systems. It will explore how human resources design
strategic compensation programs to promote company success. Micro and macro level compensation concepts will be considered. This will include issues relating to contextual factors, job analysis and evaluation, bases for pay, the design of compensation systems, and employee benefits. Further, current challenges such as international compensation and compensating a flexible workforce will be covered.

## MANAGEMT 7000

## Entrepreneurship

- 3 units - summer semester
- Prerequisite: Accounting for Managers, Marketing Management
- Assessment: assignments, case study analyses, group or individual projects, class participation

Entrepreneurship is increasingly recognised as an important driving force in the economic development and prosperity of a community. While broader issues of entrepreneurship are covered, the course focuses on entrepreneurship in new venture creation, identifying opportunities, business planning for a new venture, obtaining venture capital, growth, technological innovation, harvesting wealth and coping with failure and bankruptcy.

## MANAGEMT 7002

## European Business Strategy

- 3 units
- Prerequisite: Strategic Management
- Assessment: assignments, case study analyses, group or individual projects, class participation

The development of the European Union (EU) over the last 20 years or so has had major strategic implications for companies within the member countries. Given that the EU is one of the major regional markets in the world, the EU also has had significant implications for the competitive strategies of companies in non-EU countries. As membership of the EU continues to expand and the degree of economic integration of the member countries increases, its significance for the rest of the world will increase. The EU has been traditionally important to Australian companies as an export market and also for the location of offshore operations. This course will examine the strategic implications of the EU for companies inside and outside of the Union, and provide participants with an understanding of the topics necessary to successfully implement strategies within the EU. Topics include an analysis of the European environment and the single market concept, developing a sustainable competitive position in a European context, the impact of the EU on organisational structure, developing strategic alliances within the EU, and implementing strategies in the single European market.

## MANAGEMT 7009

## Public Sector Management

- 3 units - summer semester
- Assessment: assignments, case study analyses, group or individual projects, class participation

This course will acquaint students with the special and unique characteristics of management in the public sector, and the key issues facing public sector managers. Topics to be covered may include the interaction of public sector organisations and the political process; the opportunity for strategic planning; the machinery of government; public finance and resource allocation; the management of human resources in the public sector; accountability; service delivery; the organisation of public commercial activities.

## MANAGEMT 7012

## Business Performance Improvement

- 3 units - trimester 1
- Prerequisite: Fundamentals of Leadership, Accounting for Managers, Managerial Finance, Economics for Management, and Managing Contemporary Organisations
- Assessment: Individual assignment, group assignment, group presentation, participation in class activities

This course provides students with the knowledge and skill-set required to formulate and implement sustainable improvement strategies aimed at improving business performance and overall competitiveness. It provides a practical appreciation and understanding of the various improvement strategies and techniques that have come to prominence during the past few decades, including Total Quality Management, Business Process Re-engineering and more recently Six Sigma. It considers these approaches and their use against the broader agenda of how to achieve sustainable improvement and the development of sustainable sources of competitive advantage.

In particular, students are introduced to the idea of 'process thinking' and related concepts such as cost of quality, complexity, variation etc. i.e. considering the business and identifying improvement opportunities by viewing it from a process perspective. Students are also introduced to methodologies for business review and diagnosis - similar to the approaches used by the major management consulting firms.

The later stages of the subject considers implementation issues arising with business performance improvement strategies to ensure that organisations are able to learn and achieve cumulative improvements over time, rather than temporary 'fad chasing' as is often the case.

## MANAGEMT 7015

## Business in East-Asia

- 3 units - trimester 3
- Prerequisite: Strategic Management
- Assessment: assignments, case study analyses, group or individual projects, class participation

This course examines contemporary business activity and the business policy environment in the economies of both Northeast and Southeast Asia. It has an explicitly regional focus within which each of the more important economies is given some degree of separate attention. This permits participants to familiarise themselves with some of the historical and institutional features of the region, country by country and, thereby, deepen their understanding of local business custom and preference. In this way, the course provides useful background for those may be considering initial forays into 'new' markets in the region, or, those who want to further develop their relationship with regional business partners. Local case studies are used.

## MANAGEMT 7022

## Business Law

- 3 units - trimester 2 or 3
- 36 hours
- Prerequisite: Fundamentals of Leadership; Accounting for Managers; Marketing Management

This course will introduce managers to a range of legal issues that impact on their business and on their duties and responsibilities as managers. There is an increasing trend in the law to make managers personally liable for breaches of the law by their business. The course will help managers to identify areas of legal liability and risk and suggest how to minimise legal risk.

The topics covered in the course include an introduction to the Australian legal system, the law of business structures, contract law, intellectual property law, employment law, law of business torts, consumer protection law, competition law and electronic commerce law. In each topic, emphasis is placed on identifying the legal duties that apply to a manager and the legal liabilities that may be attracted by their actions.

## MANAGEMT 7025

## Company Failure and Renewal

- 3 units - trimester 2
- Prerequisite: Accounting for Managers; Managing Contemporary Organisations, Managerial Finance

This course should create an awareness of the reasons why organisations experience crises and what might be done to identify problems, to avoid potential failure and to transform organisations
to enable them to succeed in the future. The symptoms, causes and processes of failure will be examined in depth, as well as the techniques, both quantitative and qualitative, that may be used to identify the onset of difficulties as early as possible. In particular, the following issues will be addressed: what failure means; how it is caused; how its approach can be identified from within the organisation; the process of organisational decline; how failure in companies may be predicted from their financial reports; how cultural differences can influence failure; what can be learnt from past collapses; insolvency law and how it affects companies and those who manage them; opportunities and strategies for business revival; whether there might be a new beginning for businesses after failure; strategies for turnaround and transformation; cases related to failure and turnaround.

## MANAGEMT 7031

Operations Management

- 3 units - trimester 2
- Check with School for Non-Award Study
- Prerequisite: Managing Contemporary Organisations, Managerial Finance
- Assessment: assignments, case study analyses, group or individual projects, class participation

This course examines the role of the Operations Manager and addresses both traditional and contemporary issues involved in the effective management of operations. Topics covered include the traditional areas of operations strategy, operations analysis and systems design, the management of materials flow and inventories, production planning and control. Contemporary issues include total quality management and the management of quality, benchmarking, technology, maintenance management, the changing views of workforce management and productivity, the linkages between business strategy, marketing and operations, and operations as a source of competitive advantage.

## MANAGEMT 7033

## The Learning Organisation

- 3 units
- Prerequisite: Managing Contemporary Organisations
- Assessment: assignments, case study analyses, group or individual projects, class participation

The objectives of this course are: 1) to realise that there are forces that are reshaping workplaces and pressing managers to consider the role of learning in organisations; 2) to realise that learning occurs and may be analysed in different ways and different contexts; 3) to realise that there are many different elements, processes and skills involved in implementing a learning organisation; 4) to realise that organisational learning is interrelated with most organisational and management goals; 5) to realise that
the strategies for building learning organisations may vary with particular theoretical sets and mental models of the process.

## MANAGEMT 7039

## Management of Change

- 3 units - trimester 2
- Prerequisite: Fundamentals of Leadership, Managing Contemporary Organisations
- Assessment: assignments, case study analyses, group or individual projects, class participation

The objectives of this course are to explore approaches to understanding and to managing the organisational change process, and to identify practical approaches to effective change implementation. The course will strike a balance between theory and research on the one hand, and practical management tools and techniques on the other.

The course will consider management skills in change implementation as well as the organisation's ability to encourage innovation, and to cope with change. One integrating theme of the course will be the expertise of the change agent, the nature of that expertise, and how it can be developed. A second integrating theme will concern the organisational attributes that either encourage or stifle creativity, innovation, and change, and how to develop creative organisation cultures that are receptive to innovation and change.

## MANAGEMT 7040

## Project Management (AGSB)

- 3 units - summer semester or trimester 3
- Check with School for Non-Award Study
- Prerequisite: Accounting for Managers, Managerial Finance
- Assessment: assignments, case study analyses, group or individual projects, class participation

This course investigates the increasing use of projects to accomplish limited duration tasks in many organisations and the unique style of administration required to manage them. Projects considered include RandD studies, campaigns, construction, emergency operations and other such endeavours. Topics include the selection of projects, creativity and technological forecasting, the role of the project manager, how to organise and plan a project, negotiation and conflict resolution, budgeting and cost estimation, project scheduling (PERT/CPM) and resource location among multiple projects, project monitoring and information systems (including project management software), controlling projects, auditing projects, ways of terminating projects and running projects in multicultural settings.

## MANAGEMT 7041

## International Marketing

- 3 units - trimester 3
- Prerequisite: Marketing Management
- Assessment: assignments, case study analyses, group or individual projects, class participation

Marketing Australian products and services overseas requires an understanding of cultural, economic and political forces that strongly influence business strategies regardless of firm size. It is, however, recognised that the resources available to large and small exporters are quite different and therefore the approaches taken to developing export markets are different. This course aims to build a series of frameworks that will enable the student to develop market entry and market development strategies in global markets. Market development strategies rely on an analysis of international markets and implementation of an international marketing mix, which will be adapted to international buyers.

## MANAGEMT 7042

## Corporate Strategy

- 3 units - summer semester or trimester 3
- Prerequisite: all compulsory core courses in the MBA program
- Assessment: examination, written assignments, case study analyses, group or individual projects, class participation

An integrated study of strategic decision making in organisations that builds on the concepts introduced in Strategic Management, and on knowledge gained from previous studies in functional areas of management. Prior studies in business level strategic management enables the focus in this course to be directed towards corporate and multi-business strategy, on globalisation and cross organisational relationships, and on the role of the senior management team. The course is based on presentations by the course coordinator, on case studies, and group presentations on organisational strategies. Specific topics include diversification, managing the multi-business organisation, mergers and acquisitions, transformation, strategic alliances, globalisation, top management teams, and the implications of developments in information technology and communication for corporate strategies.

## MANAGEMT 7044

## Strategic Management (AGSB)

- 3 units - trimester 1, 2 or 3
- Prerequisite: Fund. of Leadership, Economics for Management, Accounting for Managers, Marketing Management
- Corequisite: Managing Contemporary Organisations and Managerial Finance
- Assessment: exam, written assignments, case study analyses, group or individual projects, class participation

This course presents a unified way of thinking about the issues of strategic thinking and the management of change. Strategic thinking involves searching for a favourable and sustainable, competitive position in an attractive industry; while the management of change, from a strategic perspective, is concerned with innovation and the transformation of resources and skills into strategic capabilities that provide the bases for sustainable advantages. Positioning - once the heart of strategy - is rejected as too static for today's dynamic markets and changing technologies. This course argues that the quest for productivity, quality, and speed has spawned a remarkable number of management tools and techniques and almost imperceptibly these management tools have taken the place of strategy. Strategic continuity should make an organisation's continual improvement more effective and must not imply a static view of the competition.

Strategic management is important because it can help focus the firm in terms of the customer. It also identifies a direction for the firm and enables a clear articulation of the path chosen. The process of developing strategy adds value and understanding throughout the organisation, leading to managers thinking strategically.

## MANAGEMT 7045

## Services Marketing

- 3 units - trimester 2
- Check with School for Non-Award Study
- Prerequisite: Marketing Management
- Assessment: assignments, case study analyses, group or individual projects, class participation

Services dominate the Australian economy and are becoming critical for competitive advantage in companies across the globe and in all industry sectors. For manufacturers like GE and IBM, services represent their primary growth and profitability strategies into the 21st century. Superior service quality drives the competitive advantage of excellent companies like Marriot Hotels and FedEx, traditional service businesses. And the Internet is one big service, the success of companies using this channel will depend heavily on the quality of their services from the customer's point of view. This course aims to provide an understanding of the theory and practices in the development and execution of service relationship marketing strategies.

## MANAGEMT 7046

## Negotiation Skills

- 3 units - summer semester or trimester 2
- Check with School for Non-Award Study
- Prerequisite: Fundamentals of Leadership, Managing Contemporary Organisations
- Assessment: assignments, case study analyses, group or individual projects, class participation

The purpose of this course is threefold. The first is to explore the major concepts and theories of negotiation, as well as the dynamics of interpersonal and intergroup conflict and its resolution. This will entail material about the structural (eg parties, positions, interests) and process (cognitive, interactional) dynamics that are required for a sound critical background. The second objective is to develop skills relevant to a broad range of applied contexts. This involves direct training in identifying crucial elements of negotiation situations and implementing appropriate resolution strategies. The third objective is to develop teamwork skills by working within and through group exercises.

## MANAGEMT 7049

Topics in Marketing: Advanced Promotional Strategy

- 3 units - summer semester
- Check with School for Non-Award Study
- Prerequisite: Marketing Management

International markets are growing in complexity, as both consumers and business buyers become increasingly demanding and discriminating. The power, and financial resources standing behind global brands convey significant competitive and differential advantage to existing (often European, US or Japanese) incumbents, and make it difficult for market challengers from less developed regions to compete globally. An important initial focus of this course will be to first examine the buyer response to commercial messages for goods as well as services in poor and often rural, but rapidly developing markets. A special emphasis will be placed on East and Southeast Asian markets, especially Transition Economies moving from centrally planned direction to market mechanism, such as Vietnam, China, Laos, Cambodia and Myanmar. Best practice examples from China and India will be discussed. Once the market trends of rapidly industrialising economies are understood, the emphasis will evolve to the planning, implementation and control of appropriate promotional strategies (ranging from advertising to public relations, sales promotion to direct marketing etc) designed to market basic consumer goods, advanced services and importantly high technology and medical technologies increasingly demanded by fast growing economies.

## MANAGEMT 7052

## International Financial Management

- 3 units - trimester 3
- Prerequisite: Managing for Value Creation or Managerial Finance

The course is designed to provide students with the strategic skills necessary for a CFO or Bank Business Unit Head to operate an international finance function. It covers the key financial instruments and financial engineering techniques; Global financial market operations; International financial diagnostics; global
banking operations- structures, profit drivers and operations and International corporate financial risk management.

This knowledge is reinforced with a series of actual case studies and strategic issues. The course will only use actual case studies

## MANAGEMT 7059

Advanced Managerial Finance

- 3 units - trimester 2
- Prerequisite: Managing for Value Creation or Managerial Finance
- Assessment: to be advised

This course extends the range of topics, complexity of analysis, of the material covered Managerial Finance. Topics to be covered include financial analysis, financial planning, current asset management, leasing, futures markets, long term financing, mergers and acquisitions, international finance and risk management.

## MANAGEMT 7064

Advanced Marketing (GSM)

- 3 units - trimester 1, 2 or 3
- Prerequisite: Marketing Management
- Assessment: assignments, case study analyses, group or individual projects, class participation

This course builds on the knowledge of marketing theory and practice gained in Marketing Management. It embraces up-to-theminute thinking and practice in mainstream marketing and is relevant across consumer, business, service, commodity, and information sectors. The course requires participants to prepare a complete marketing plan with budget and other supporting documents.

## MANAGEMT 7075

Advanced People Management Skills

- 3 units
- Assumed Knowledge: Managing Contemporary Organisations
- Assessment: assignments, case study analyses, group or individual projects, class participation
This course will provide a 'hands on' opportunity for students to learn the skills of management. Note that this course will focus on practice, not theory. Upon completion of the course students will demonstrate their ability to name the correct intervention strategy required for employee situations and conduct the following meetings with employees: coaching, counselling, change management, career counselling, delegation, interviewing and selection, problem solving, decision-making, one-on-one training and performance management.


## MANAGEMT 7079

## E-Business: New Dimensions

- 3 units - trimester 1, 2 or 3
- Prerequisite: Marketing Management
- Assessment: group project, individual project, exam

This course has been re-written and, as such, informs and enlightens business managers on the specifics of electronic innovations and how they can add value to a firm's product and/or service offering. This course essentially explains both current and upcoming technologies and provides the necessary assessment criteria for managers to overlay these innovative technologies into their current strategic plan and determine appropriateness. This course does not seek to provide managers with high level technical skills - nor an intrinsic understanding of electronic specifics such as payment systems, web infrastructure/coding and the like. Participants will instead be introduced to the principles of strategic management as well as reflect on their knowledge in marketing management in order to develop a revised managerial and marketing planning framework which encompasses electronic technologies.

## MANAGEMT 7080

Applied Corporate Finance

- 3 units - trimester 2
- Prerequisite: Managing for Value Creation or Managerial Finance

This course in the MBA program focuses on the application of financial theory to real problems. It builds on the theory, concepts and practice of finance covered in foundation finance course.

This course covers topics such as financial analysis and planning, managing working capital, capital expenditure analysis, capital structure policies, raising new capital, financial restructuring, and corporate valuation. Throughout the course the integrating factor will be creating value and related managerial incentives.

## MANAGEMT 7081

## Global Business

- 3 units - summer semester, trimester 1,2 or 3
- Prerequisite: Accounting for Managers, Marketing Management, Managerial Economics, Managing Contemporary Organisations
- Assessment: exam, written assignments, case study analyses, group or individual projects, class participation

This course builds participants' knowledge and understanding of cross-border business activity in two ways. First, it exposes participants to some of the practical requirements of managing businesses which are global in scope. Second, it organises participants with contemporary thinking about achieving global competitiveness. Among everyday issues included are: the analysis of international trade flows, the drivers of foreign direct
investment, the institutions of the global trading system, the different levels of regional economic integration, the character of the international monetary system and global capital market.

The course also helps participants understand the different ways in which companies organise themselves to achieve global competitiveness in diverse business environments. Global competitiveness is examined from three perspectives: public policy, senior managers responsible for results, and the CEO concerned with the internal structure of a global business.

## MANAGEMT 7086

## Fundamentals of Leadership

- 3 units - trimester 1, 2 or 3
- Assessment: exam, written assignments, case study analyses, group or individual projects, class participation

To achieve success in today's competitive environment it is essential that managers develop the ability to interact positively with others, whether they be employees, employers, colleagues, customers or suppliers. Strong interpersonal skills are also required if students are to maximise the benefits from their management studies. Positioned at the beginning of the MBA program, this course encourages students to explore issues and develop personal skills implicit in leadership. By exploring their selfperceptions, students will be well placed to broaden their understanding of others.

Upon completion, students will possess an understanding of the development of management thought and practice, providing a background against which new trends in management can be viewed. Students will be able to identify and discuss the major challenges facing management in today's environment, and, with heightened self-awareness, develop the understanding and communication skills required to effectively lead and manage a diverse workforce.

## MANAGEMT 7087

## Managing Contemporary Organisations

- 3 units - summer semester, trimester 1, 2 or 3
- 36 hours
- Prerequisite: Fundamentals of Leadership
- Restriction: Students that have completed Organisational Behaviour cannot enrol in this course
- Assessment: exam, written assignments, group/individual projects

This course exposes students to some key influences and perspectives on the management of organisations. Its focus is primarily on human issues that affect and are dealt with by managers day-to-day. While some of the topics addressed may seem somewhat theoretical or even 'philosophical' in nature, the whole course is designed to provide a foundation for practical
action in the field. The ability to analyse and to think clearly and independently about these issues will be the basis of effective action. The course begins by examining the nature of 'organisation' as an 'open system'. We then look at the management challenge in relation to various facets of organisation - learning, leadership, motivation, performance, values, culture, innovation, decisionmaking, structure and change. Throughout the course there will be an emphasis on thinking about and asking useful questions rather than fixing on 'right' answers.

## MANAGEMT 7088

## Strategic Performance Drivers

- 3 units - trimester 3
- Prerequisite: Managing Contemporary Organisations; Accounting for Managers, and Marketing Management

At this stage in your MBA you will have harnessed information about learning and growth within the organisation and have an intrinsic understanding about 'the customer', as well as possess financial knowledge - but how does this all fit together? How can you set targeted goals and objectives and subsequently monitor their effectiveness and realisation?

That is precisely what Strategic Performance Drivers will offer you: the ability to bring together internal systems, employees, the customer and the financials and appropriately manage what you measure. This course will introduce you to Kaplan and Norton's balanced scorecard and help you discover how to create and implement a performance measurement system that goes beyond number crunching and provides you with an excellent management tool that works 'on the business' and not 'in the business'

## MANAGEMT 7090

## Strategic Operations Management

- 3 units - summer semester
- 36 hours
- Check with School for Non-Award Study
- Prerequisite: Marketing Management and Managing Contemporary Organisations
- Restriction: Students that have completed Operations Management may not undertake this course towards their program

Assessment: Group project and 2 individual assignments
Operations is the term used in management to refer collectively to the many processes through which an organisation's strategies for competing in the marketplace are put into action. Obviously, in any organisation's operations there are many kinds of processes that must be managed -- inbound logistics, production, outbound logistics, and customer support in many forms, to name only a few broad types of processes. Whatever the type of process undertaken by an organisation, however, managers must clearly
understand how each specific process can contribute most effectively to the success of the organisation in pursuing its strategies. In this course, we will first develop an overview of the range of processes that can make up the operations of an organisation. We then focus on some key issues in managing certain fundamental processes that are critically important to the strategies of many organisations today. Accordingly, the emphasis in this course is not on specific techniques of operations management (although we will touch on some techniques that are in wide use today), but on understanding how the fundamental processes of an organisation can contribute to its strategic success, and how those processes must be analysed, designed, and optimised to be most effective in supporting the strategies of an organisation. In this course, in keeping with the fundamental importance of information technology (IT) in the design and execution of operations of all types, we will pay special attention to state-of-the-art practices and strategies in using IT in various forms in managing operations.

## MANAGEMT 7100

## Accounting for Managers (MBA)

- 3 units - trimester 1, 2 or 3
- 36 hours
- Assessment: exam, in-class test, written assignments, case study analyses, group and individual projects

Participants in this course will develop the essential ability of all managers, to use complex accounting information as a platform for decision-making. As the course unfolds, participants will build an increasingly sophisticated level of understanding of the language of accounting and its key concepts. In addition the course develops skills in interpreting earnings statements, balance sheets, and cash flow reports. This ability to analyse financial statements will enable participants to deal more effectively with strategic options for their businesses or business units.

Strong foundations in financial analysis, and development of crucial basic accounting skills will also enable participants to develop a management accounting focus. From this second phase of the course students will take away highly relevant skills in areas such as budgeting, product and service costing and short-run decision making. Such skills, ability and knowledge will enable participants to more effectively identify profitable opportunities and to contribute significantly to better management within their own organisations.

## MANAGEMT 7101

## Managerial Finance

- 3 units - trimester 1,2 or 3
- Prerequisite: Accounting for Managers

This course initially will cover the concepts of valuation in finance, and show how they can be applied to valuing corporate securities.

Adopting a value creation perspective, the course will then consider capital expenditure decision approaches and their application to a range of situations, as well as evaluation of the results. Then, risk is considered, with a risk-return model developed that can be applied in managing for value creation. The course examines the concept of the weighted average cost of capital, before turning to consider corporate financing and capital structure decisions.

## MANAGEMT 7102

## Managing Technology Innovation

- 3 units - trimester 2
- Prerequisite: Strategic Management
- Assessment: exam, written assignments, case study analyses, group or individual projects, class participation

Managing Technology and Innovation (MTI) examines the challenges of managing technology and innovation from the general manager's point of view. MTI will help students understand the root causes of common problems in technology and innovation, showing how these can manifest themselves symptomatically in various stages of the development process, and in different areas of the company. The purpose of MTI is first to help managers build the tools to understand the real, underlying reasons why efforts to innovate so often fall short of expectations - and then with that understanding as a foundation, to learn how to build action plans that resolve the root problems.

Expected course outcomes are to: Identify that it is often 'good' rather than 'bad' management that leads companies to miss certain strategically critical innovations; Understand the challenges of finding new markets for new technologies, and develop a set of principles by which they can manage searches for innovative product-market ideas; Understand how and why the streams of innovative products and services that firm introduce to the market can easily become disconnected from the strategies that managers intend for their firms to pursue; Identify the very capabilities that enable an organisation to execute certain innovations very effectively whilst constituting rigidities or disabilities in tackling innovations of a different nature; Understand when and why it is important to be a technology leader, and when it is advisable to follow other technology pioneers.

## MANAGEMT 7103

## Economics for Management

- 3 units - trimester 1, 2 or 3
- Assessment: exam, written assignments, case study analyses, group or individual projects, class participation

This course provides an introduction to economic thinking and its relevance and application to managing organises. Approximately two thirds of this subject deals with an analysis of the microeconomic environment in which business firms operate. The
topics covered include determination of market equilibrium, elasticity of demand and managerial decision-making, the impact of government policies on market equilibrium and efficiency, pricing and output decision under competitive and non-competitive market structure and regulation on monopolies. The rest of this course deals with macroeconomic issues that affect business firms. The topics covered include introduction to measurement of GDP, inflation and employment. Aggregate demand and Aggregate supply framework is used to demonstrate the impact of fiscal and monetary policies on output, employment and inflation both in the short and the long-run. An understanding of these issues will help students to understand the role and impact of economic policy. The focus of the course is on current issues and their implications for managers and competitive organisations.

## MANAGEMT 7104

## Marketing Management (MBA)

- 3 units - trimester 1, 2 or 3
- Assessment: exam, written assignments, case study analyses, group or individual projects, class participation

Marketing lies at the core of all business. Whatever the character or size of your entity, its profit can come from only one place; the marketplace. All businesses are dependent on the income they earn from their customers, clients or buyers. In most larger businesses it is marketing managers who are primarily responsible for keeping their company close to its customers. In any case, all those who have a direct responsibility for identifying, reaching and satisfying customers are engaged in marketing and everybody in a business needs to understand its marketplace activities. This course offers a complete introduction to professional marketing thought and action.

The course explains the nature and purpose of marketing, followed by the fundamentals of each of the most important marketing tasks. It analyses the business need for customer orientation, the evaluation of markets and the targeting of market opportunities. There is then assessment of buyer behaviour and the role of market information. In addition, the course explains how to integrate product and service decisions with those on pricing, distribution and promotion - and why this is necessary.

## MANAGEMT 7106

## Topics in Management: International HRM

- 3 units - summer semester
- Prerequisite: Managing Contemporary Organisations

Increasingly, we recognise that sustainable competitive advantage comes largely through intangible assets - people and how they are organised. This course explores how to attract, mobilise and develop people with both operational effectiveness and long-term competitive capability in mind. It steers away from the narrow
focus on functional human resource activities, generally reduced to expatriation. The course does not get into technical details of HRM that are best left to specialists - be it the use of selection tests or the specifics of job evaluation. The course adopts the perspective of the general manager who addresses human resource topics from a business point of view.

## MANAGEMT 7107

## Cross-Cultural Management

- 3 units - trimester 3
- Weeknights or intensive
- Prerequisite: Managing Contemporary Organisations
- Assessment: attendance, participation, group assignment, case study

The increase of interaction between nations and countries due to the unprecedented growth of international trade and investment, economic integration and creation of regional trading blocks as well as tourism and migration of population around the globe have spawned the demand for cross-cultural competence. Cross-cultural skills are fast becoming a necessary attribute for success in most professional fields.

The study of Cross-Cultural Management is based upon a multidisciplinary approach to the communicative and managerial problems encountered in interactions between individuals within modern organisations and society/ies. The ability to communicate effectively is at the core of all human interaction including management. Cross-cultural management is a fascinating field that develops awareness and appreciation of cultural differences and similarities in the organisational context.

This course aims to equip graduates with knowledge and skills essential for successful managerial careers in an increasingly globalised world.

## MANAGEMT 7222

## Business Intelligence

3 units - summer semester or trimester 1, 2 or 3
Prerequisite: Accounting for Managers; Managing Contemporary Organisations and, Managerial Finance

Assessment: Class participation, group assignment, final exam
This course will consider both business Intelligence and competitive intelligence and assess their impact on corporate strategy. It will examine how systems designed for business Intelligence transform raw data within an organisation into valuable information that is understandable and useful to decision makers. The course will analyse and discuss the essential structures and technologies used to construct business intelligence systems identifying what is to be achieved with business intelligence.

## MANAGEMT 7224

## Knowledge Management

- 3 units - trimester 2
- Prerequisite: Managing Contemporary Organisations, Accounting for Managers, Marketing Management
- Assessment: case studies, projects and active participation in a market based simulation

The value of most organisations today greatly exceeds their net tangible assets. This course addresses contemporary issues in managing knowledge, intellectual capital and other intangible assets.

Beginning with a view that these intangibles are strategies assets, the course will introduce the fundamentals of managing knowledge and intellectual capital, understanding some of the measurement issues, processes and cycles involved in their management and the specific issues in managing knowledge based workers and the organisations in which they work. The course then turns to the strategic issues of creating value from flows in intangible assets and organisation structures to support knowledge and intellectual capital development leading to an examination of the management of knowledge intensive businesses. The course concludes with a review of specific application issues, global issues, application to the public sector and current developments in the field.

## MANAGEMT 7225

## Business Project

- 3 units - trimester 1, 2 or 3
- 3 hour initial class, 1 hour final presentation
- Prerequisite: All core MBA courses
- Assessment: Assessment: 3000 word interim report $25 \%, 6000$ word final report $50 \%$, group presentation $25 \%$

This course provides the opportunity for a group of students to work on a real organisation issue for an organisation, and so apply some of the concepts, frameworks and skills learnt in the MBA core to a project of practical value to that organisation.

Projects may be sourced by individual students, groups of students or the AGSB. The Course Coordinator and the organisation must approve the project before beginning. Each project will be allocated an academic project supervisor. Much of the time for this course will be in practical field work or desk research. The project will conclude with a presentation by the student group, or individual, to members of the organisation and the AGSB at which time a final written report will be given to the organisation.

## MANAGEMT 7226

## Competitive Business Strategy

- 3 units - trimester 2
- Prerequisite: Strategic Management
- Assumed Knowledge: all core MBA coursework
- Assessment: case analysis 30\%, class participation 20\%, group research report 50\%

This course is designed to provide students with an understanding of the strategic implications of competitive interactions between organisations in a variety of market situations. It builds on the core strategic management course where the focus is on understanding the situation of the organisation itself at a particular point in time. In this course, the focus is on understanding the relationship between that organisation and its competitors, considering actions and reactions over an ongoing time period, primarily using longitudinal case studies as the vehicle for assessment of strategic behaviour.

## MANAGEMT 7227

## Current Issues in Management

- 3 units - trimester 3
- Assessment: $4 \times 2000$ word papers

This course provides students with the opportunity to be briefly exposed to a variety of current areas of management which are of importance, but which cannot be included as whole courses in the core MBA. The course aims to give students the opportunity to choose electives, which deepen their knowledge in particular areas of interest to them in their own careers, and to ensure that they have some exposure to these important areas of management practice.

The issues covered will vary periodically to reflect changes in the issues of current importance. For instance, issues which may be covered could include legal responsibilities in business, business data analysis, managing information technology and operations management.

## MANAGEMT 7228

## Family Business and SME Management

- 3 units - summer semester
- Prerequisite: Fundamentals of Leadership
- Assessment: 3000 word essay/case study $40 \%$, business owner presentation evaluations $30 \%$, group assignment $30 \%$

The subject aims to enhance our understanding of private sector businesses by concentrating on the most common organisational form, the small to medium enterprise (SME). It will explore the challenges of family owned and managed businesses using a systems approach integrating the family, the business, and ownership subsystems. The course will explore the growth and professionalisation of the SME, and the implications of family
control. Other topics include the interactions between family members and non-family working in the business, human resource management for the competitive SME, and governance issues. Business owners' presentations, including a site visit, will be an integral part of the course.

Objectives include:To understand the operation of SMEs and family businesses through a systems approach and how a family business learns from and adapts to its particular environment; To identify how the needs and aspirations of the variety of stakeholders and participants in the family and the business systems can be optimised; To examine complexities of planning for both ownership and management succession and the implications for day to day operations; To discuss the acquisition of resources and establishing of appropriate governance structures for the business. To investigate the development of family and SME managerial capabilities and competencies to ensure sustainable competitive advantage, and where applicable, smooth transition to the next generation. To provide an integrated view of family and SME businesses, which can be utilised by advisors other interacting with them.

## MANAGEMT 7229

## Winning Organisations

- 3 units - trimester 3
- Prerequisite: Strategic Management
- Assumed Knowledge: all core MBA courses
- Assessment: class participation 20\%, class presentation 20\%, written organisational analysis 60\%

This course considers the research findings in holistic studies of winning organisation practices. In particular the US studies of In Search of Excellence, Built to Last and Good to Great are contrasted with the recent Australian findings of The First XI. Collectively, the elements from these studies provide a framework for defining sustainable organisational excellence, for all types of organisations - listed companies, private companies, government organisations and not-for-profits.

Students will have the opportunity to apply the framework to their own organisation, or another, which they can source to compare their organisation's performance with that of winning organisations.

## MANAGEMT 7300

Implementing Strategy

- 3 units - trimester 2
- Prerequisite: Strategic Management
- Assessment: One 3000 word research-based assignment; One 3000 word practical-based assignment

This course provides a detailed conceptual and practical framework for dealing with the many issues involved in moving strategic
thinking and analysis into action. Many great strategies and strategic plans do not come to fruition due to lack of attention to implementation issues. This course considers what those barriers are to implementation and how they may be overcome.

Specifically the course will cover the following topics: Frameworks for implementing strategy; change management; planning for implementation; leadership; system development and alignment; understanding developing and managing culture and values; people management; capability development; appropriate organisational structures; managing networks; managing perceptions and communications; implementing strategy internationally.

## MARKETING

## MARKETNG 7005

## Marketing Principles (M)

- 3 units - semester 1 or 2
- 2 lectures, 1 tutorial per week
- Assessment: assignments, exam as determined at first class

The course introduces a comprehensive range of professional marketing thought and action, in the framework of the marketing management process. Topics: the nature and purpose of marketing, the need for customer orientation, evaluating markets, targeting market opportunities, assessing buyer behaviour, the role of market information, products and services, pricing, distribution and promotion.

## MARKETNG 7023

## Consumer Behaviour (M)

- 3 units - semester 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: MARKETNG 7005 Marketing Principles (M)
- Assessment: assignments, exam as determined at first class

The course will explain the theory of consumer behaviour and how it relates to the practice of marketing. Topics: consumer behaviour from perspectives of psychology, anthropology, social and behavioural sciences, consumer behaviour within the consumer decision process and its main influencing factors.

## MARKETNG 7024

International Marketing (M)

- 3 units - semester 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: MARKETNG 7005 Marketing Principles (M), MARKETNG 7023 Consumer Behaviour (M)
- Assessment: group work on case studies, major project, final exam as determined at first class

This course is designed to introduce you to modern marketing philosophies and practices associated with international marketing. It spotlights the special marketing problems posed by export markets and examines the special marketing management problems faced by multinational organisations. Principle issues include the importance of culture in international marketing, the economic, political and cultural environments, global marketing strategy and research, and the four 'Ps' of international marketing.

## MARKETNG 7025

## Marketing Communications (M)

- 3 units - semester 1
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: MARKETNG 7005 Marketing Principles (M), MARKETNG 7023 Consumer Behaviour (M)
- Assessment: assignments, exam as determined at first class

The objective of the course is to help students understand the principles and practices of marketing communications, involving tools used by marketers to inform consumers and to provide a managerial framework for integrated marketing communications planning. Topics: the role of integrated marketing communications, organising for advertising and promotion, consumer behaviour perspective, the communication process, promotional objectives and budgets, creative strategy, media planning and strategy, broadcast/print \& support media, direct marketing, sales promotions, PR and publicity, personal selling, international promotion, business-to-business promotions, and regulations and ethics.

## MARKETNG 7026

## Market Research \& Planning (M)

- 3 units - semester 2
- 2 lectures, 1 tutorial per week
- Assumed Knowledge: MARKETNG 7005 Marketing Principles (M), MARKETNG 7023 Consumer Behaviour (M)
- Assessment: assignments, exam as determined at first class

The course will assist students to understand the process by which market information is collected and analysed and to apply this understanding to the development of a marketing plan in response to a real life client problem. Topics: role of market research, the research process, measurements including univariate data analysis depth interviews and focus groups, bivariate data analysis, multivariate grouping procedures, surveys and questionnaire design, multivariate analysis with dependant variables, sample size, field operation and data processing, experiments, and reporting.

## MARKETNG 7027

## Brand Management (M)

- 3 units - semester 1
- 3 hour seminar per week
- Assumed Knowledge: least 2 marketing specialisation courses
- Assessment: assignments, exam as determined at first class

The course builds on existing communications and consumer behaviour models in order to explore many of the issues facing a modern day brand manager. Topics: evaluation of brands, brands and their relationships with consumers, the brand manager position and the variety of tasks, tools associated with the role of brand manager, and how to effectively manage brands.

## MARKETNG 7028

## E-Marketing (M)

- 3 units - semester 1
- 3 hour seminar per week
- Assumed Knowledge: least 2 marketing specialisation courses
- Assessment: Assignments \& exam as determined at first class

The course examines the theoretical and practical issues associated with electronic commerce in terms of the internet's use in dealing with stakeholders and developing and marketing new products and services. Topics: introduction to the internet, e-commerce and emarketing, specific features of internet based marketing, the internet marketing plan, internet marketing mix, internet marketing research, customer relationship management and the internet, electronic business communication, security issues, taxation legal $\&$ ethical issues, future development and issues of the internet.

## MARKETNG 7029

## International Market Entry Strategies (M)

- 3 units - semester 1
- 3 hour seminar per week
- Assumed Knowledge: MARKETNG 7024 International Marketing (M)
- Assessment: assignments, exam as determined at first class

The main objective, as the name suggests, is to show the student how to design and execute international market entry strategies that aim to achieve a sustainable presence in foreign markets. Students will develop an understanding of an effective entryplanning model that identifies key decisions regarding entry to international markets. The principle issues that the course will cover include the importance of global segmentation and positioning, global branding, indirect/direct exporting, licensing, franchising, joint ventures and wholly-owned subsidiaries.

## MARKETNG 7030

Marketing Ethics (M)

- 3 units - semester 1 or 2
- 3 hour seminar per week
- Assumed Knowledge: least 2 marketing specialisation courses
- Assessment: case study, group presentation, participation, exam

The course will assess marketing ethical decision-making processes, issues and organisational control mechanisms. Topics: Defining Marketing ethics, relevant theories to examine ethical questions, code of conducts and ethical guidelines, a stepwise ethical marketing decision process, ethics in relation to marketing decisions: market research, segmentation, product, price, distribution, advertising and marketing communications and international marketing.

## MARKETNG 7031

## Relationship Marketing (M)

- 3 units - semester 2
- 3 hour seminar per week
- Assumed Knowledge: least 2 marketing specialisation courses
- Assessment: Assignments \& exam as determined at first class

The course examines the processes and outcomes of business interaction with consumers and other businesses to achieve longterm relational exchanges. Topics: interactions and relationships in consumer and business markets, the consumer as an active channel member, managing relationships with customers, business marketing and networks, managing business relationships, technology and relationships, building a relationship offering, transferring the offering, valuing relationships by price costs and value, developing a relationship strategy, relationship termination.

## MARKETNG 7032

## Strategic Marketing (M)

- 3 units - semester 1 or 2
- 3 hour seminar per week
- Assumed Knowledge: least 2 marketing specialisation courses
- Assessment: assignments, exam as determined at first class

The course examines the development and implementation of marketing strategy by providing a framework from which to identify and evaluate strategic options and programs. Topics: forecasting and contextual possibilities, product-market definition, relationships with channels of distribution, relationships with customers, competitive analysis, financial models for marketing strategists, portfolio models, benchmarking and the PIMS models, timing changes and strategy assessment of marketing channels, strategic assessment of offerings, marketing strategy implementation systems.

## MATHEMATICS

## APP MTH 7000

## Applied Mathematics Honours Topic D

- 3 units - semester 1 or 2

Further advanced work in Applied Mathematics as determined by the Head of Applied Mathematics.

## APP MTH 7007

## Masters Applied Mathematics Project

- 6 units - semester 1 or 2

Further advanced work in Applied Mathematics as determined by the Head of Applied Mathematics.

## APP MTH 7011

## Transform Methods and Signal Processing (Masters)

- 3 units - semester 2
- 30 hours lectures and tutorials
- Available for Non-Award Study
- Assumed Knowledge: Level II Applied Mathematics courses with an aggregate value of 6 units
- Assessment: written assignments $10 \%$, project work $30 \%$, final exam 60\%

Introduces various transform techniques including DFT and FFT as well as wavelet transforms, and introduces the basic principles of signal processing to provide an understanding of the fundamentals, implementation and applications of signal processing. At the end of the course students should have good concepts of various transform techniques used in communication theory and information theory, discrete-time signals in both time and frequency domains use of wavelet transforms for signal analysis.

## APP MTH 7018

## Aerodynamics

- 3 units - semester 2
- 30 hours lectures and tutorials
- Available for Non-Award Study
- Assumed Knowledge: fluid mechanics such as in APP MTH 3002 Fluid Mechanics III; APP MTH 2002 Vector Analysis and Complex Analysis or APP MTH 2006 Methods in Applied Mathematics II, and a computer programming language (Matlab, Fortran or C)
- Assessment: written and computing assignments $15 \%$, final exam 85\%

Humans have been interested in flight for thousands of years, yet it is only within the last 100 years or so that we have been able to
accomplish flight with heavier-than-air machines. This course describes classical and modern aspects of aerodynamic theory, focusing on low-speed, incompressible flow. It will present analytical and numerical techniques for solving mathematical problems in aerodynamics, with an emphasis on the concepts of lift and drag.

## APP MTH 7026

## Communication Network Design (Masters)

- 3 units - semester 1
- 30 hours lectures and tutorials
- Available for Non-Award Study
- Assumed Knowledge: Basic concepts of nonlinear and discrete optimisation such as APP MTH 2008 Operations Research II, APP MTH 3014 Optimisation III and APP MTH 3005 Mathematical Programming III
- Assessment: written assignments 10\%, final exam 90\%

This is a very large field and the course will look at some subtopics in depth, rather than trying to cover the whole area. Nevertheless the range of topics is broad enough to give a flavour of the area. The approach is deterministic; probabilistic effects are hidden in the objective function or constraints. The principal decision to be made in network design is the routing of the offered traffic through the network; once this decision has been made; the design of the network is largely determined.

## APP MTH 7044

## Applied Mathematics Topic C

- 3 units - semester 1 or 2
- Available for Non-Award Study

Further advanced work in Applied Mathematics as determined by the Head of Applied Mathematics.

## APP MTH 7045

## Applied Mathematics Topic B

- 3 units - semester 1 or 2

Further advanced work in Applied Mathematics as determined by the Head of Applied Mathematics.

## APP MTH 7048

## Applied Mathematics Topic A

- 3 units - semester 1 or 2
- Available for Non-Award Study

Further advanced work in Applied Mathematics as determined by the Head of Applied Mathematics.

## APP MTH 7049

## Applied Mathematics Topic D

- 3 units - semester 1 or 2

Further advanced work in Applied Mathematics as determined by the Head of Applied Mathematics.

## APP MTH 7052

## Computational Fluid Dynamics (Engineering)

- 3 units - semester 1
- 30 hours lectures and tutorials
- Available for Non-Award Study
- Assumed Knowledge: Numerical Analysis or Numerical Methods and Fluid Mechanics
- Assessment: written and computing assignments $20 \%$, project work 20\%, final exam 60\%

Review of classical hydrodynamics, the Navier Stokes equations for fluid flow, methods of computational grid generation, solution of systems of equations, modelling of turbulence and the finite volume, finite difference and finite element forms of solutions.

## APP MTH 7054

## System Modelling and Simulation

- 3 units - semester 1
- 30 hours lectures and tutorials
- Available for Non-Award Study
- Assessment: project work 40\%, final exam 60\%

The course will provide students with the skills to analyse and design systems using modelling and simulation techniques. It will involve an introduction to modelling and simulation techniques.

The theory and application of simulation modelling will be discussed. Case studies will be undertaken involving hands-on use of simulation packages. The application of simulation in areas such as manufacturing, telecommunications and transport will be investigated. At the end of this course, students will be capable of identifying practical situations where simulation modelling can be helpful, reporting to management on how they would undertake such a project, collecting relevant data, building and validating a model, analysing the output and reporting their findings to management.

Students are also expected to complete a project in groups of two or three, to write a concise summary of what they have done and to report their findings to the class.

## APP MTH 7056

## Telecommunications Systems Modelling III

- 3 units - semester 2
- 36 hours lectures and tutorial
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2008 Operations Research II, familiarity with STATS 2002 Introduction to Mathematical Statistics or STATS 2004 Laplace Transforms and Probability and Statistics is advantageous
- Assessment: written assignment and project work 20\%, final exam 80\%

Definition of continuous-time Markov-chains, classical queueing examples, transient behaviour, the stationary distribution, hitting probabilities and expected hitting times. Stochastic Modelling of traffic streams. Effective bandwidth and quality of service. Evaluation of exact and approximate performance measures for both queueing networks and loss networks. TCP/IP protocols and performance measures. Applications of the above concepts to complex models of telecommunication systems.

## APP MTH 7057

## Special Studies in Engineering Mathematics

- 3 units - semester 1 or 2
- 36 hours lectures and tutorials
- Available for Non-Award Study

Further advanced work in Applied Mathematics as determined by the Head of Applied Mathematics.

## APP MTH 7060

## Differential Equations and Fourier Series

- 2 units - semester 1
- 30 hours lectures and tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I) or corequisite MATHS 2004 Mathematics IIM
- Assessment: written \& computing assignments $15 \%$, final exam 85\%

Ordinary differential equations: First order, second order, series solutions. Fourier series for functions of arbitrary period, half range expansions, even and odd functions, complex form of Fourier series. Partial differential equations: heat equation, separation of variables, wave equation, Laplace's equation. Applications in boundary value problems.

## APP MTH 7061

## Vector Analysis and Complex Analysis

- 2 units - semester 1 or 2
- 30 hours lectures and tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I) or co-requisite MATHS 2004 Mathematics IIM
- Assumed Knowledge: Concurrent (or prior) enrolment in APP MTH 2000 Differential Equations and Fourier Series or prior enrolment in APP MTH 2007 Differential Equations II
- Assessment: written \& computing assignments $15 \%$, final exam 85\%

Vector calculus: vector fields, gradient, divergence and curl. Line, surface and volume integrals, integral theorems of Green Gauss and Stokes, with applications. Orthogonal curvilinear coordinates. Complex analysis: elementary functions of a complex variable, complex analytic functions, complex integrals, Taylor Series, Laurent Series, Residue Theorem.

## APP MTH 7062

## Modelling with Differential Equations II

- 2 units - semester 2
- 30 hours lectures and tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series or APP MTH 2007 Differential Equations II
- Assessment: written \& computing assignments $15 \%$, final exam 85\%

This course introduces techniques for the use of differential equations in modelling and in particular provides introduction to nonlinear differential equations and to numerical methods. Laplace Transforms: Laplace Transform techniques are used to solve ordinary and partial differential equations and integral equations. In particular the ability is provided to handle commonly occurring non continuous input functions. Nonlinear Differential Equations: An introduction to the concepts of phase plane, trajectories and fixed points. Applications include competing population models. Numerical solutions of Differential Equations: Initial value problems, Euler's method and Runge-Kutta method. Application of numerical techniques. Classification of Partial Differential Equations: the Laplace, heat and wave equations. Introduction to scaling and nondimensionalisation of Partial Differential Equations. Applications of Partial Differential Equations. Numerical Solution of Partial Differential Equations by finite difference methods: explicit and implicit schemes, direct and iterative solution methods.

## APP MTH 7063

## Operations Research II

- 2 units - semester 2
- 30 hours lectures and tutorial
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I); or MATHS 2004 Mathematics IIM (Pass Div I)
- Assessment: written \& computing assignments $15 \%$, final exam $85 \%$

Linear Programming: Simplex Algorithm Phase I and Phase II, duality theory and complementary slackness, interpretation of dual variables. Probability and applications: formulation and solution of probability problems in applications. Includes topics from: gambler's ruin, dimensioning teletraffic networks, epidemic modelling, economic applications.

## APP MTH 7064

## Computational Mathematics III

- 3 units - not offered in 2006
- 36 hours lectures and tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2007 Differential Equations II or APP MTH 2000 Differential Equations and Fourier Series and a computer programming language (Matlab, Fortran or C)
- Assessment: written \& computing assignments $20 \%$, final exam 80\%

Mathematical models of the real world generally give rise to problems that cannot be solved exactly by hand, and an approximate numerical solution must be found instead. Computers are essential for solving important but otherwise intractable mathematical problems, from weather prediction to the earthquake response of buildings. The ability to solve problems numerically is an important tool in any mathematician's or engineer's toolkit. It is also important to be able to assess the likely accuracy (or otherwise) of the numerical solutions that you compute: computers readily generate garbage, yet humans have a tendency to believe computergenerated results, regardless. This course develops students; knowledge of appropriate numerical techniques for tackling mathematical problems and assessing the accuracy of the numerical results that are obtained. It provides methods appropriate to common mathematical models: algebraic equations, ordinary and partial differential equations and integrals. It discusses causes of numerical errors and ways to estimate the effects of those errors on the computed solution to a problem. It also gives practice in writing computer codes to implement effective numerical algorithms.

## APP MTH 7065

Applied Probability III

- 3 units - semester 1
- 36 hours lectures and tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: some knowledge of Markov Chains as in second half of APP MTH 2008 Operations Research II
- Assessment: written assignments $10 \%$, final exam $90 \%$

The course aims to provide a basic toolkit for modelling and analysing real-world problems in which there is a significant probabilistic component. A methodology is developed and illustrated using a variety of problems from such areas as population modelling, genetics, simple games, diffusion of gases, reservoir operation, warehouse inventories and optimal decisionmaking in various commercial contexts.

## APP MTH 7066

Life Contingencies III

- 3 units - not offered in 2006
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012, MATHS 1000A/B (Pass Div I) at least one of STATS 1000 (Pass Div I), ECON 1008 (Pass Div I),MATHS 1008 (Pass Div I),STATS 2004, APP MTH 2009, STATS 2001, APPL MTH 2010
- Assumed Knowledge: MATHS 3014 Mathematics of Finance III or CORPFIN 2006 Business Finance II or ECON 2008 Economics of Finance II
- Assessment: written assignments 10\%, final exam 90\%

Life tables and force of mortality; select, aggregate and ultimate mortality tables; annuities immediate and due, assurances and premiums. Relations between mortality functions; policy values, reserves and mortality profit. Multi-decrement tables and associated single-decrement, combined tables and monetary functions. Both practical and theoretical aspects of the above will be discussed.

## APP MTH 7067

## Mathematical Programming III

- 3 units - not offered in 2006
- 36 hours lectures, tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: Some knowledge of duality theory as in APP MTH 2008 Operations Research II
- Assessment: written \& computing assignments $10 \%$, final exam 90\%

Many interesting optimisation problems can be expressed as linear programs, in particular, problems related to network flows, scheduling, etc. The focus in this course will be in formulating models and developing solution methods for such optimisation problems. Topics will be chosen from:, network theory, advanced linear programming, integer programming, dynamic programming and applications.

## APP MTH 7068

## Industrial Mathematics III

- 3 units - not offered in 2006
- 36 hours lectures and tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2007 Differential Equations II, APP MTH 2000 Differential Equations and Fourier Series or APP MTH 2010 Differential Equations and Stat Methods (Civil)
- Assessment: written assignments 10\%, project work 5\%, final exam 85\%

Mathematical modelling is the art of representing a real-world process by mathematical equations, and investigating this 'mathematical model' to obtain better understanding of the process. Differential-equation models have been recognised for some decades as a valuable tool in the development of modern industrial technologies and processes. In recent times they have been successfully used for problems arising in medicine and the biological sciences, an exciting and growing area of mathematical application. Industrial problems which might be modelled with differential equations include spontaneous ignition, contaminant dispersion, desalination, casting of sheet steel, and solar heating; medical/biological problems include drug delivery, blood oxygenation, dialysis, and growth of tumours.

This course will give students an understanding of general modelling methodology. In addition to model development, a variety of mathematical methods for solving these models will be considered. The emphasis throughout is on using mathematics to obtain practical answers to realistic problems. Case studies from the above, or similar, examples will be used to demonstrate how to develop and use models. Students will also develop their own modelling skills through a project investigation of a real-world problem. The skills acquired will be applicable across a wide range of disciplines.

## APP MTH 7069

## Variational Methods and Optimal Control III

- 3 units - semester 2
- 36 hours lectures and tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series or APP MTH 2007 Differential Equations II
- Assessment: written \& computing assignments $15 \%$, final exam 85\%

Many problems of optimisation and control in the sciences and engineering seek to find the shape of a curve or surface satisfying certain conditions so as to maximise or minimise some quantity. For example, shape a yacht hull so as to minimise fluid drag. Variational methods involve an extension of calculus techniques to handle such problems. This course develops an appropriate methodology, illustrated by a variety of physical and engineering problems.

## APP MTH 7070

## Financial Modelling III

- 3 units - semester 2
- 36 hours lectures and tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: familiarity with Excel spreadsheets
- Assessment: written computing assignments 20\%, final exam 80\%

Discrete time financial modelling of various financial assets, interest rates and exchange rates. Valuation of financial products (derivative products) using binomial lattice models with implementation on spreadsheets. Hedging and Interest Rate Management, including the Ho and Lee Term Structure Model for interest rates and related models, together with their application to interest rate risk management with implementation on spreadsheets.

## APP MTH 7071

## Differential Equations III

- 3 units - semester 1
- 36 hours lectures and tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series or APP MTH 2007 Differential Equations II or APP MTH 2010 Differential Equations and Statistical Methods (Civil)
- Assessment: written assignments 10\%, final exam 90\%

Differential equations describe a wide range of practical problems in such areas as biology, physics, engineering, economics and finance. This course will provide students with the techniques required to solve the classes of ordinary and partial differential equations which commonly occur in applications.

The course will include discussion of (i) methods for the solution of initial value problems for systems of first order linear and non-linear ordinary differential equations; (ii) techniques for the solution of two point boundary value problems for second order linear ordinary differential equations with variable coefficients; (iii) classification of partial differential equations and the solution of boundary value problems for these equations using the methods of (a) reduction to ordinary differential equations by use of separation of variables, (b) integral transforms, (c) characteristics.

## APP MTH 7072

## Optimisation III

- 3 units - semester 1
- 36 hour lectures and tutorials
- Available for Non-Award Study
- Assessment: written \& computing assignments $15 \%$, final exam $85 \%$

Modern optimisation methods in areas such as Communication Network Design, Finance, etc, rely on the classical underpinnings covered in this course. One-dimensional (line) searches; multivariable unconstrained optimisation, in particular, for convex functions; a random search technique, such as Simulated Annealling or Genetic algorithms; constrained optimisation, including Kuhn-Tucker conditions and the Gradient Projection Method. Other topics such as penalty methods, quasi-convexity, etc, will be covered as time permits.

## APP MTH 7074

## Modelling Telecommunication Traffic

- 3 units - semester 2
- 30 hours lectures and tutorials
- Available for Non-Award Study
- Assessment: written \& computing assignments $30 \%$, final exam 70\%

Traffic modelling is a popular area of current research due to the rapid rise of the Internet, and the discovery of interesting properties such as self-similarity in this traffic, the implications of which are still being discovered. This area has a long history of practical
application in the telecommunications industry and is just as important today through application to Internet systems. Areas of application include: Network planning and optimisation, Traffic engineering, Protocol design, Network post-mortems, Network anomaly detection: which requires the ability to estimate traffic parameters and detect deviations from normal behaviour.

The course's content is geared towards the applications of traffic analysis, some of which are listed above. The course's specific content includes: basic packet network modelling, with the concept of stochastic modelling of queues; block-matrix methods for modelling, and analysis; traffic parameter estimation; structural (flow-based) modelling of traffic (On/Off models, M/G/infinity models); traffic self-similarity, long-range dependence, and heavytailed distributions; and dynamic modelling of congestion controls, in particular TCP. Additional topics focus on the issues of real Internet measurements, such as inference techniques required to obtain information such as traffic matrices from the available link measurements.

## APP MTH 7075

## Fluid Mechanics III

- 3 units - semester 2
- 36 hours lectures and tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series or APP MTH 2007 Differential Equations II; APP MTH 2002 Vector Analysis and Complex Analysis or APP MTH 2006 Methods of Applied Mathematics II
- Assessment: written assignments 10\%, final exam 90\%

Fluid Mechanics is the study of fluids, whether they are gases (the air we breathe), water (as in the oceans) or more complex fluids (like the oil in our car engines). Fluid flows govern the way in which we interact with our environment. The energy we require for our survival is dependent upon the motion of fluids in the Sun. Technological society is founded upon the motion of fluids. Our entire physiology is based around the flow of fluids, from the air in our lungs through to blood flow in our arteries and veins. The weather we experience is a result of the complex motion of the oceans and the atmosphere. From the smallest scale of nanotechnology to the largest scale of astrophysical flow in stars, the motion of fluids is important.

This course will introduce students to the fascinating subject of modelling fluid flows. We derive the basic equations governing the motion of fluids and use these equations to explore a variety of practical fluid flows. The techniques that will be used in this course come from the study of differential equations (both ordinary and partial). It will provide students with an understanding of how, and why, fluids flow and how they impact upon our world.

## APP MTH 7076

## Mathematical Biology III

- 3 units - semester 2
- 5 lectures, 1 tutorial every 2 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series
- Assessment: written assignments $10 \%$, final exam $90 \%$

Science and Technology was the driver for many of the developments in Applied Mathematics in the 20th century. In the 21 st century much of Applied Mathematics will be driven by, and contribute to, applications in the areas of biomedical science and biology. The subject Mathematical Biology will introduce students to the fascinating world of modelling biological systems. The focus will be less on developing mathematical versatility rather on how to develop (and interpret) good biological models. No previous exposure to biology is necessary.

## APP MTH 7078

## Information Theory

- 3 units - semester 1
- 30 hours lectures and tutorials
- Available for Non-Award Study
- Assessment: written assignments $20 \%$, final exam $80 \%$

Uncertainty, Shannon's uniqueness theorem, properties of uncertainty, information, noiseless coding, unique decipherability, instantaneous codes, Huffman constructions. Kraft's theorem, McMillan's theorem, Shannon's first coding theorem, ideal observer and maximum likelihood decision schemes, fundamental theorem of coding, stationary sources, uncertainty of a source, Markov sources, unifilar sources, uncertainty of a state. The asymptotic equipartition property. Error correcting codes, parity check for group codes, decoding parity check codes, cyclic codes, feedback shift registers, Bose-Chaudhuri-Hocquenhem codes.

## APP MTH 7079

## Waves

- 3 units - semester 1
- 36 hours lectures and tutorials
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series
- Assessment: written \& computing assignments $15 \%$, final exam 85\%

The wave equation, waves on stretched strings and membranes, waves on beams, electromagnetic waves, sound waves, waves in fluids, standing/progressive waves, dispersion relations, transmission and reflection of waves at interfaces. Nonlinear waves.

## APP MTH 7080A/B

## Masters Project

- 12 units - full year
- 480 hours
- Assessment: evaluation of research including: research thesis, literature review $\&$ oral presentation

Students will work in small groups on a research thesis in the field of telecommunications under the supervision of an academic staff member.

## MATHS 7008

## Mathematical Signal \& Information Processing Project

- 3 units - full year

Those students undertaking the full Masters award may wish to complete a project on a specialised topic of their choice. A project supervisor will be appointed to each student.

## PURE MTH 7002

## Pure Mathematics Honours Topic B

- 3 units - semester 1 or 2

Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7003

## Geometry 1

- 3 units - semester 2

Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7010

## Algebra 3

- 3 units - semester 2

Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7019

## Algebra 2

- 3 units - semester 2

Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7021

## Algebra 1

- 3 units - semester 1

Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7023

## Pure Mathematics Honours Topic D

- 3 units - semester 1 or 2

Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7024

## Geometry 2

- 3 units - semester 2

Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7028

## Topology 3

- 3 units - semester 1

Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7030

## Analysis 3

- 3 units - semester 1

Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7032

## Analysis 2

- 3 units - semester 1

Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7038

## Pure Mathematics Honours Topic A

- 3 units - semester 1 or 2

Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7041

## Mathematical Coding and Cryptology

- 3 units - semester 2

Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7047

## Pure Mathematics Honours Topic C

- 3 units - semester 1 or 2

Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7049

## Real Analysis 2

- 3 units - semester 2
- 5 lectures, 1 tutorial per fortnight
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Restriction: Cannot be counted with 7389 Real Analysis II (pre 2001) or PURE MTH 3017 Real Analysis III
- Assessment: 3 hour exam, small percentages may be allocated to class exercises $\mathcal{E} /$ or tutorials

The real numbers, infimum and supremum. Sequences: convergence, limit properties, subsequences, conditions for convergence. Series: tests for convergence. Continuous functions: Key properties, uniform continuity, existence of the Riemann
integral. Differentiation: mean value theorems, l'Hopital's rules, Taylor polynomials. Power series and Taylor series.

Convergence of sequences and series of functions. Fourier series.

## PURE MTH 7050

## Fields and Geometry 3

- 3 units - semester 2
- 5 lectures, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: PURE MTH 2002 Algebra II
- Restriction: Cannot be counted with 3786 Projective Geometry III
- Assessment: 3 hour exam, small percentages may be allocated to class exercises $\mathcal{q} /$ or tutorials

Fields and extensions, algebraic and simple extensions. Finite fields. Affine and projective geometries. Desargues (2 and 3-d) and Pappus theorems. Duality. Coordinatising a plane. The Little Desargues Axiom. Translation planes. Homogeneous coordinates. Field planes. Automorphism group and the Fundamental Theorem. Conics, arcs, ovals and hyperovals. Quadrics.

## PURE MTH 7051

## Fractal Geometry 3

- 3 units - not offered in 2006
- 2 lectures per week, tutorial every 3 weeks - some may be computing tutorials using packages
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assessment: 2 hour exam, small percentage for class exercises

A survey of fractal geometry including classical fractals, fractal dimension, encoding imagery modelling nature, chaos. Feigenbaum diagram, Mandelbrot and Julia sets. Students have opportunity to construct their own fractals.

## PURE MTH 7052

## Logic 3

- 3 units - semester 2
- 2 lectures a week; tutorial every 3 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assessment: 2 hour exam, small percentage may be allocated for class exercises \&/or tutorials

Mathematical foundations. Propositional calculus, first order theories, interpretations and models. Godel's completeness theorem for predicate calculus. Computability: Turing machines, recursive functions and the halting problem. Undecidability of predicate calculus. Godel's theorem for elementary number theory.

## PURE MTH 7053

## Number Theory 3

- 3 units - semester 1
- 2 lectures a week; tutorial every 3 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assessment: 2 hour exam, small percentage may be allocated for class exercises $\mathcal{f} /$ or tutorials

An introduction to classical elementary number theory, with modern applications to computer science, cryptography etc. Divisibility and primes, congruences, arithmetic functions. Primitive roots, quadratic residues. Continued fractions and rational approximation.

## PURE MTH 7054

## Complex Analysis 3

- 3 units - not offered in 2006
- 2 lectures per week, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Restriction: 2959 Complex Analysis II, PURE MTH 2006 Real and Complex Analysis II, PURE MTH 2001 Complex Analysis II
- Assessment: final exam, small percentage for class assignments

Basic concepts, holomorphic functions, Cauchy-Riemann equations. Standard elementary functions. Complex power series. Cauchy's integral theorem and consequences, including integral formula and power series representations. Residue theorem and applications. Conformal mapping and applications. Further results on holomorphic functions.

## PURE MTH 7055

## Topology and Analysis III

- 3 units - semester 1
- 5 lectures, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Restriction: Cannot be counted with 6848 Analysis and Topology III
- Assessment: 3 hour exam, small percentages may be allocated to class exercises $\mathcal{q} /$ or tutorials

Sets, functions, metric spaces, compactness and completeness. Banach fixed point theorem and applications, uniform continuity. General topological spaces. Introductory functional analysis: normed linear spaces, topological duals. Convexity and HahnBanach theorems. Hilbert spaces, operators on Hilbert spaces, the Spectral theorem.

## PURE MTH 7056

## Discrete Mathematics 2

- 2 units - semester 1
- 2 lectures per week; 1 tutorial a fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 1014 Mathematics IMB (Pass Div I) or MATHS 1008 Mathematics for Information Technology I (Pass div I) or corequisite MATHS 2004 Maths IIM
- Assessment: 2 hour exam, small percentage may be allocated for class exercises $\mathcal{G} / 0$ r tutorials

Permutations and combinations, recurrence relations, generating functions and the inclusion-exclusion principle. Additional topics of special relevance to Computer Science and other mathematical sciences courses, including geometry for Computer Graphics and Computer Vision.

## PURE MTH 7057

## Pure Mathematics Diploma Project A

-4 units - semester 1
Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7058

## Pure Mathematics Diploma Project B

- 2 units - semester 2

Further advanced work in Pure Mathematics as determined by the Head of Pure Mathematics.

## PURE MTH 7059

## Groups and Rings 3

- 3 units - semester 1
- 5 lecture, 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: PURE MTH 2002 Algebra II
- Restriction: Cannot be counted with either 1273 Groups III or 6508 Rings, Fields and Matrices III
- Assessment: 3 hour exam, small percentages may be allocated to class exercises $\mathcal{E} /$ or tutorials

Groups, subgroups, factor groups, homomorphism and isomorphism theorems. Finitely generated abelian groups. Conjugacy. Cayley's and Sylow's theorems. Rings, ideals, factor
rings and homomorphisms. Polynomials. Unique factorisation. Euclidean domains, Gaussian integers.

## PURE MTH 7060

## Multivariable Calculus 2

- 2 units - semester 1
- 2 lectures per week; 1 tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assessment: final exam, small percentage for class assignments

Functions of several variables; limits, continuity and extrema; gradient, differentiability, Chain Rule; Taylor expansions, classification of critical points; Lagrange multipliers. Line integrals, differential 1-forms; double integrals, triple integrals; surface integrals; Green's theorem; the Divergence theorem; differential 2forms and Stokes Theorem.

## PURE MTH 7061

Methods of Modern Mathematics 3

- 3 units - semester 2
- 5 lectures, 1 tutorial per fortnight
- Prerequisite: MATHS 1012 Mathematics IB (Pass Div I) or MATHS
- Assumed Knowledge: PURE MTH 3002 Topology \& Analysis III
- Assessment: 3 hour exam; small percentage may be allocated for class exercises $\mathcal{q} /$ or tutorials

Vector spaces, linear operators and functionals, semigroups of operators. Classical normed spaces, Fourier series, generalised functions. Heat and Wave equations: classical, variational and generalised solutions, semigroup approach. Illustrative applications in mathematical physics, financial mathematics and quantitative risk analysis.

## MUSIC

## MUSPED 6001

## Pedagogy Seminar IV

- 6 units - semester 1
- 2 hour seminar per week/12 weeks
- Assessment: portfolio of annotated teaching materials 50\%, $3 \times 1000$ word written assignments or equivalent $50 \%$

An initial ungraded but required bibliographic study will be followed by seminars focusing on teaching techniques and materials for pupils of various ages and levels of musical development. Consideration will be given to the development of pupils' aural
acuity, general musicianship, and learning in a variety of genres and modes (including group and laboratory situations, the technology environment, preparation for examinations, competitions and recitals). Technical, stylistic and interpretive matters covering a wide variety of styles will be considered.

## MUSPED 6002

## Pedagogy Practicum IV

- 6 units - semester 2
- 1.5 hour workshop per week / 4 weeks, 3 hours teaching practice/coteaching/observation per week / 12 weeks
- Assessment: teaching practice, coteaching, observation 50\%, teaching $\log 50 \%$

Teaching observation, co-teaching and one teaching project with defined aims and duration will be undertaken within teaching programs approved by the Program Convenor. These activities will be monitored during regular workshops and through a written Teaching Log outlining the candidate's implementation and evaluation of the tasks undertaken.

## MUSPED 7001

## Pedagogy Seminar V

- 6 units - semester 1
- 2 hour seminar per week/12 weeks
- Assessment: portfolio of annotated teaching materials $50 \%$, 2500 word seminar paper $50 \%$

Seminars will focus on contextual practices that underpin and inform instrumental teaching. The development of the specialism, professional and business issues, historical contexts, regional and cultural matters will be addressed, together with related investigations in child development and educational psychology.

## MUSPED 7002

## Pedagogy Practicum V

- 6 units - semester 2
- 1.5 hour workshop per week /4 weeks, 3 hours teaching practice/coteaching/observation assessment per week 12 weeks
- Assessment: teaching practice, coteaching, observation 50\%, written curricula, diagnoses \& evaluations $50 \%$

Teaching, observation, co-teaching and two major teaching projects with defined aims and duration will be undertaken within teaching programs approved by the Program Convenor. Each project will comprise a written curriculum, teaching implementation, written diagnosis and evaluation. Assessment tools for teaching practice will include video recordings as well as live scenarios. These activities will be monitored during regular workshops.

## PERF 6008A/B

## Major Recital IV

- 12 units - full year
- All recital projects supported by 1 hour 1:1 tuition per week /15 weeks, 1.5 hour workshop per week/5 weeks
- Prerequisite: credit or above in appropriate Level III performance course or audition or both
- Restriction: 65-minute public recital

A program of works in the repertoire of the instrument studied. Repertoire may include solo works, chamber music, orchestral material, concerti, accompaniment etc. Recital programs are subject to approval and details must be submitted within the first 6 weeks of the program.

## PERF 6015A/B

## Minor Recital IV

- 6 units - full year
- All recital projects supported by 1 hour 1:1 tuition per week /15 weeks, 1.5 hour workshop per week/5 weeks
- Assessment: 35-minute public recital

A program of works in the repertoire of the instrument studied. Repertoire may include solo works, chamber music, orchestral material, concerti, accompaniment etc. Piano Performance and Pedagogy candidates should select works of pedagogical significance from a stylistic and /or historical perspective. It is expected these will comprise works which encourage developing technical and musical skills at intermediate to advanced levels such as JS Bach's Sinfonias and Preludes and Fugues, Sonatas of Classical Period, shorter descriptive solos of the Romantic Period, Bartok's Mikrokosmos, etc. Recital programs are subject to approval and details must be submitted within the first 6 weeks of the program.

## PERF 6016A/B

## Negotiated Project IV

- 6 units - full year
- 1 hour 1:1 tuition per weeks/15 weeks
- Assessment: 30 minute lecture-demonstration

A course intended to allow candidates to select an activity that complements their major study. Piano Performance and Pedagogy candidates should present a 30-minute lecture/demonstration of pedagogical literature. It is expected this will comprise works which assist technical and musical growth in pupils from elementary to intermediate levels such as the Classical Sonatinas and Studies of Clementi, Kuhlau, Bergmuller and Diabelli, and educational works by Swinstead, Kabalevsky, Gillock and Vandall.

## NURSING

## CLIN NUR 5101HO

Apheresis Nursing I

- 6 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad.Cert.Nursing Science students only
- Assessment: 2000 word mid term assignment $35 \%$, tutorial presentation/synopsis(equiv. to 1500 words) $20 \%, 3500$ word case study $45 \%$ - students must pass each component of course

This course will examine nursing and medical science underpinning therapeutic and donor apheresis. Topics will include principles of basic haematology, coagulation, the ABO/Rh system and immunology. Basic pathophysiology of diseases treated by therapeutic apheresis will be covered. Students will also examine the principles of therapeutic apheresis including plasma exchange, red-cell exchange and cyto-reduction. This course will be studied by the flexible learning mode.

## CLIN NUR 5102HO

## Apheresis Nursing II

- 6 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad.Cert. Nursing Science students only
- Assessment: 2000 word mid term assignment $35 \%$, tutorial presentation/synopsis (equiv. to 1500 words) $20 \%, 3500$ word case study $45 \%$ - students must pass each course component

This course will examine apheresis procedures with a focus on patient/donor centred issues. Topics will include types of machines and technical procedures; donor selection and management, patient care including care of paediatric patients, common complications, validation of procedures and processes, legal and professional issues.

## CLIN NUR 5103H0

## Hyperbaric Nursing II

- 6 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad.Cert. Nursing Science students only
- Assessment: 2000 word mid term assignment $25 \%$, tutorial presentation with full text narrative (equiv. to 2000 words) $25 \%$, 3500 word essay $50 \%$

This course will build on the topics considered in hyperbaric Nursing I and will be studied by the flexible learning mode. Topics will include safety issues relating to hyperbaric nursing and advanced clinical issues such as unit management.

## CLIN NUR 5104HO

## Microbiology and Epidemiology

- 6 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad.Cert. Nursing Science students only
- Assessment: 3000 word study portfolio $50 \%, 1500$ word essay $30 \%$, course workbook $20 \%$ - students must pass each course component

This course will build on the student's knowledge of basic microbiology and will consider the epidemiology of common infectious diseases seen in the Australian population. The role of the infection control nurse will be considered in relation to the epidemiological research, education and disease surveillance.

## CLIN NUR 5105HO

## Principles and Practices of Retrieval Nursing

- 6 units - semester 1 or 2
- $13 \times 3$ hour lectures
- Eligibility: Grad.Cert. Nursing Science students only
- Assessment: 3000 word essay $40 \%, 30$ min. viva voce/practical $35 \%$, case presentation and briefing paper (equiv. to 2000 words) $25 \%$, clinical skills Pass/fail - students must pass each component

This course will present the principles of retrieval and the physical and psychosocial needs of patients. Topics will include anatomy, physiology, psychosocial care, nursing care of retrieval patients and aeronautical medicine. International repatriation and retrieval of patients requiring hyperbaric treatment will also be considered. Students will be required to participate in supervised field experience in a level 3 intensive care unit for 150 hours.

## CLIN NUR 5106HO

## Trauma Nursing

- 6 units - semester 1 or 2
- $13 \times 3$ hour lectures
- Eligibility: Grad.Cert. Nursing Science students only
- Prerequisite: CLIN NUR 5105HO Principles and Practices of Retrieval Nursing
- Assessment: 3000 word essay $40 \%, 30$ min viva voce/practical $35 \%$, case presentation \& briefing paper (equiv. to 2000 words) $25 \%$, clinical skills Pass/fail - students must pass each component

This course will examine nursing and medical science in relation to trauma, the principles of trauma nursing and the physical and psychosocial needs of those who experience trauma. Topics will include anatomy, physiology, psychosocial care, nursing care of trauma patients, principles of early management of severe trauma
(EMST) and the teaching/learning process in patient education. Students will be required to participate in supervised field experience in a level 3 ICU for 150 hours and in addition participate as an active team member in a minimum of 5 retrievals.

## CLIN NUR 5109HO

## An Introduction to Evidence Based Health Care

- 6 units - semester 1 or 2
- Flexible learning mode
- Assessment: 2000 word formulation of clinical question, 2000 word types of evidence, 3500 word development of search strategy This course will introduce the concept of evidence based practice. Topics will include the history of Evidence Based Health Care and constructing a question (topic identification). Students will develop skills in searching for evidence and determining the quality of evidence using critical appraisal of literature.


## CLIN NUR 5110HO

## Change Management and Evaluation

- 6 units - semester 1 or 2
- Flexible learning mode
- Assessment: 2000 word annotated bibliography and a 3500 word plan for an implementation strategy

This course will consider the issues and strategies used to implement Evidence Based Practice. Change management theories and their applicability to nursing will be examined. Evaluation of practice change and clinical audit will also be considered.

## CLIN NUR 6101HO

## Developing Advanced Practice in Health Systems I

- 4 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2000 word annotated bibliography 40\%, 3000 word essay 60\%

This course will consider a number of issues faced by registered nurses in advanced practice settings. Concepts such as accountability, decision-making and politics are considered as this course assists students to explore the supports and constraints within which nurses work. Some specific issues such as ethical matters, skill-mix, specialisation, multi-skilling, transcultural nursing and being part of a multi-disciplinary team are addressed with regard to the present and future role of the registered nurse.

## CLIN NUR 6102HO

## Developing Advanced Practice in Health Systems II

- 4 units - semester 1 or 2
- 2 hours per week/flexible learning mode
- Eligibility: Grad. Dip. Nursing Science students only
- Assessment: 1250 word clinical audit proposal $25 \%, 3750$ word clinical audit report $75 \%$

Drawing on your knowledge from your previous and current studies as well as your experience as a nurse this course assists you to systematically evaluate an area of nursing practice by engaging in the process of a clinical audit.

## CLIN NUR 6103HO

## Focused Reading in Clinical Nursing

- 4 units - semester 1 or 2
- 2 hour lecture/flexible learning mode -individual supervision by appointed supervisor
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2000-3000 word literature review $50 \%$, presentation and justification of a revised practice standard $50 \%$

This course will examine contemporary clinical nursing practice through a systematic review of the literature. Students will be required to follow a protocol to ensure scientific rigour and minimise potential bias.

## CLIN NUR 6104HO

## Nursing \& Medical Science in Anaesthesia \& Recovery I

- 4 units - semester 1 or 2
- 3 hours per week for 13 weeks
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word evidence based practice essay or equiv. $50 \%$, learning portfolio $50 \%$ - students must pass each component

This course will build on the clinical and core courses in the specialty of Anaesthetic and Recovery Nursing. The focus will be on physiology, biochemistry, therapeutics and nursing science.

## CLIN NUR 6105HO

## Nursing \& Medical Science in Anaesthesia \& Recovery II

- 4 units - semester 1 or 2
- 3 hours per week for 13 weeks
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word equiv. class presentation \& briefing paper $50 \%$, learning portfolio $50 \%$ - students must pass each component

This course will build on Nursing and Medical Science in Anaesthetic Nursing I and the other specialty Anaesthetic and Recovery Nursing courses. The focus will be on physiology, biochemistry, therapeutics and nursing science.

## CLIN NUR 6108HO

## Cardiac Nursing I

-4 units - semester 1

- 2 hours per week as required for workshops, 300 hours clinical practice
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word case study $50 \%, 30$ min. viva voce exam 50\%, competency assessment Pass/fail - students must pass each component

This course will largely consist of field based learning within the area of cardiac nursing, supported by workshops. Advanced clinical skill acquisition will occur based on theoretical frameworks of care so that skills are not acquired within a vacuum that does not include the patient and family in context.

## CLIN NUR 6109HO

## Cardiac Nursing II

- 4 units - semester 2
- 2 hours per week as required for workshops, 300 hours clinical practice
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: $2 \times 1250$ word clinical assessment sheets $50 \%, 30$ min. viva voce exam $50 \%$, competency assessment Pass/fail students must pass each component

This course will build on student's previous learning in Cardiac Nursing I. It will focus on advanced clinical skill acquisition, based on theoretical frameworks of care through field based learning within the area of cardiac nursing.

## CLIN NUR 6110HO

## Nursing \& Medical Science in Cardiac Nursing I

-4 units - semester 1

- 3 hours per week for 13 weeks
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: Tutorial presentations, briefing paper equiv. to 2500 words 50\%, 2 hour exam 50\% - students must pass each component

This course will build on the clinical and core courses in the specialty of cardiac nursing. The focus will be on physiology, biochemistry, therapeutics and nursing science.

## CLIN NUR 6111HO

## Nursing \& Medical Science in Cardiac Nursing II

- 4 units - semester 2
- 3 hours per week for 13 weeks
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word essay 50\%, 2 hour exam 50\% students must pass each component

This course will build on Nursing and Medical Science in Cardiac Nursing I and the other specialty cardiac courses. The focus will be on physiology, biochemistry, therapeutics and nursing science.

## CLIN NUR 6112HO

## Advanced Nursing Skills for Activities of Living

- 4 units - semester 1 or 2
- 40 hours delivered as five study days
- Assessment: 2000 word essay 40\%, 3000 word essay 60\% students must pass each component

This course is designed to have students make a serious review of what they have designated as 'basic nursing care'. The course takes a strong consumer focus and uses a variety of specialist health professionals to deepen the student's knowledge of and nursing response to, the activities of daily living which maintain and restore patient health.

## CLIN NUR 6113HO

## Cardiac Monitoring

- 4 units - semester 1 or 2
- 2 hours per week for 11 weeks
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word case study $50 \%$, viva voce (30 min.) $50 \%$ - students must pass each component

This course will examine nursing and medical science in relation to cardiac monitoring. Topics will include basic electrocardiography; identification of arrhythmias; nursing management of myocardial ischaemia, injury and infarction; and patient education processes.

## CLIN NUR 6114HO

## Diabetes Education

- 4 units - semester 1 or 2
- 32 hours
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2000 word class paper $40 \%, 3000$ word essay 60\%, - students must pass each component

This course will examine nursing and medical science in relation to diabetes. Topics will include the pathophysiology of diabetes, the management of diabetes, pharmacology, human nutrition and the teaching/learning process in patient education.

## CLIN NUR 6115HO

## Working with Loss and Grief

- 4 units - semester 1 or 2
- 40 hours delivered as five study days
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2000 word essay $40 \%, 3000$ word essay $60 \%$ students must pass each component

This course will examine the experience of loss and grief. Topics will include the psychology of loss and grief; coping with death; and the role of the nurse in caring for the dying and their significant others. Small group tutorials and experiential learning will be utilised to assist students to develop individual strategies to effectively help those who are grieving.

## CLIN NUR 6116HO

## Hyperbaric Nursing I

- 6 units - semester 1 or 2
- Eligibility: Grad.Cert./Grad.Dip. Nursing Science students only
- Assessment: Skills check list pass/fail workbook 35\% viva voce $35 \% 1$ hour exam $35 \%$ - students must pass each component

This course will examine nursing and medical science in relation to the indications for hyperbaric treatment, the principles of hyperbaric nursing and the physical and psycho-social needs of those undergoing hyperbaric treatment. Topics will include anatomy, physiology, psychosocial care, hyperbaric management and the teaching/learning process in patient education. Students will be required to participate in field experience.

## CLIN NUR 6117HO

## Infection Control Nursing

- 6 units - semester 1 or 2
- 2 hours per week, field visits
- Eligibility: Grad.Cert. Nursing Science students only
- Assessment: 1500 word mid term essay $20 \%, 2000$ word clinical scenario $30 \%, 3250$ word infection control project $50 \%$ - students must pass each component.

This course will examine nursing and medical science in relation to the control of infection. Topics will include microbiology, the management of infection, the teaching/learning process in staff education and contemporary issues in infection control.

## CLIN NUR 6118HO

## Management of Incontinence

- 6 units - semester 1 or 2
- 40 hours delivered as five study days
- Assessment: 1500 word mid term assignment $20 \%$, tutorial presentation (equiv. to 1500 words) $20 \%$, 3000 word essay $40 \%$, 1 hour exam 20\% - students must pass each component

This course will examine nursing and medical science in relation to continence management. Topics will include anatomy and physiology of the eliminatory system; diagnosis and treatment of incontinence; the management of incontinence; the lived experience of incontinence and the teaching/learning process in patient education.

## CLIN NUR 6119HO

## Mental Health Care in Acute Settings

- 4 units - semester 1 or 2
- 40 hours delivered as five study days
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2000 word essay 40\%, 3000 word essay 60\% students must pass each component of course

This course addresses mental health care issues arising in the acute (physical) care setting. Topics include the Mental Health Act and its implications for nurses, characteristics of the most common types of mental illness and consumer expectations. Students will be provided with an experiential introduction to techniques such as counselling, visualisation and conflict minimisation.

## CLIN NUR 6120HO

## Rehabilitation Nursing

- 6 units - semester 1 or 2
- 48 hours delivered as six study days

Assessment: 1500 word mid term assignment 20\%, tutorial presentation (equiv. to 1500 words) $20 \%, 3000$ word essay $40 \%$, 1 hour exam 20\% - students must pass each component

This course will examine nursing and medical science in relation to the process, principles and practice of rehabilitation nursing. Topics will include anatomy and physiology of disability; the development of rehabilitation as a specialist area of practice; the role of the
multidisciplinary team; principles of rehabilitation nursing; and the teaching/learning process in patient education.

## CLIN NUR 6121HO

## Stomal Therapy

- 6 units - semester 1 or 2
- 4 hours per week, plus field placements
- Assessment: 1500 word mid term assignment 20\%, tutorial presentation (equiv. to 1500 words) $20 \%, 3000$ word essay $40 \%$, 1 hour exam 20\% - students must pass each component.

This course will examine nursing and medical science in relation to the indications for the creation of a stoma, the principles of stomal therapy and the physical and psycho-social needs of those with a stoma. Topics will include anatomy, physiology, psychosocial care, stomal management and the teaching/learning process in patient education. Students will be required to participate in field experience.

## CLIN NUR 6122HO

## Wound Management

- 6 units - semester 1 or 2
- 40 hours delivered as five study days
- Eligibility: Grad.Dip. Nursing Science students only

Assessment: 1500 word mid term assignment $20 \%$, tutorial presentation (equiv. to 1500 words) $20 \%, 3000$ word essay $40 \%$, 1 hour exam $20 \%$ - students must pass each component

This course will examine nursing and medical science in relation to the management of wounds. Topics will include anatomy and physiology of the integument, wound classification, wound management, microbiology, the management of infection and the teaching/learning process in staff and patient education.

## CLIN NUR 6126HO

Reflective Practice in Primary Health Care

- 4 units - semester 1
- 3 hours per week
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 1000 word mid - term assignment $30 \%, 4000$ word assignment 70\%

This course will examine the epidemiology of mental illness; the promotion of mental health; the principles of primary health care; and strategies for the promotion and maintenance of mental health in communities.

## CLIN NUR 6127HO

## Emergency Nursing I

- 4 units - semester 1
- 2 hours per week as required for workshops, 300 hours clinical practice
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2000 word case study $50 \%$, viva voce 30 min. exam $50 \%$, competency assessment. pass/fail - students must pass each component

This course will largely consist of field based learning within the area of Emergency Nursing, supported by workshops. Advanced clinical skill acquisition will occur based on theoretical frameworks of care. Skills will predominantly be concerned with assessment of the person presenting to an emergency department.

## CLIN NUR 6128 HO

## Emergency Nursing II

- 4 units - semester 2
- 2 hours per week as required for workshops, 300 hours clinical practice
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: Poster 500 word equivalent $50 \%, 30$ minute viva voce exam $50 \%$, competency assessment pass/fail - students must pass each component

This course will build on student's previous learning in Emergency Nursing I. It will focus on advanced clinical skill acquisition, through field based learning within the area of Emergency Nursing. In particular skills associated with minor injuries, paediatric and obstetric care, preserving evidence, bereavement, pain and the coroner will be taught in tutorials.

## CLIN NUR 6129HO

Nursing \& Medical Science in Emergency Nursing I

- 4 units - semester 1
- 3 hours per week
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word essay 50\%, 2 hour exam 50\% students must pass each component
This course will build on the clinical and core courses in the specialty of Emergency Nursing. The focus will be on physiology, biochemistry, therapeutics and nursing science.


## CLIN NUR 6130HO

## Nursing \& Medical Science in Emergency Nursing II

- 4 units - semester 2
- 3 hours per week
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2,500 word (or equiv) report critique 50\%, 2 hour exam $50 \%$ - students must pass each component

This course will build on Nursing and Medical Science in Emergency Nursing I and the other specialty emergency courses. The focus will be on physiology, biochemistry, therapeutics and nursing science.

## CLIN NUR 6131HO

## Emergency Care in General Practice

- 2 units - semester 2
- 2 hours per week as required for workshops/flexible learning mode; 300 hours clinical practice
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: Viva voce exam, competency assessment pass/fail - students must pass each component

This course will largely consist of field based learning within the area of emergency care. It will focus on advanced clinical skill acquisition, based on theoretical frameworks of care through field based learning.

## CLIN NUR 6132HO

## General Practice Nursing I

-4 units - semester 1

- 2 hours per week as required for workshops/Flexible learning mode; 300 hours clinical practice
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2000 word case study $50 \%$, competency assessment 50\%

This course will largely consist of field based learning within the area of General Practice nursing, supported by workshops.
Advanced clinical skill acquisition will occur based on theoretical frameworks of care.

## CLIN NUR 6133HO

## Health Assessment

- 3 units - semester 1 or 2
- 2 hours per week/Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2000 word description of health assessment $50 \%$, demonstration of a health assessment $50 \%$

Taking a holistic approach, this course will present methods of taking a health history, physical examination skills and health promotion techniques. These skills will assist general practice nurses to function in a multidisciplinary setting and in isolated practice.

## CLIN NUR 6134HO

## Nursing and Medical Science in Primary Health Care

- 4 units - semester 1
- 3 hours per week/Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 1000 word mid-term assignment $25 \%$, mid-term test paper $25 \%, 3000$ word essay $50 \%$

This course focuses on epidemiology, health education and promotion, the sociology of health and illness and models of primary health care.

## CLIN NUR 6135HO

Pathology \& Pharmacology in General Practice

- 3 units - semester 1 or 2
- 3 hours per week/Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2000 word essay 50\%, 1.5 hour open book exam 50\% - students must pass each component

This course advances students' understanding of pathology and pharmacology, as they relate to specific diseases. Students will be required to apply this knowledge to the clinical problems encountered in their daily nursing practice.

## CLIN NUR 6136HO

## Contemporary Issues in Aged Care

- 4 units - semester 1 or 2
- 2 hours per week or equivalent/Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word essay activity portfolio $50 \%, 2500$ word essay 50\%

This course will examine contemporary issues and debates specifically related to service delivery in the aged care sector. The impact of government policies and funding arrangements on the delivery of professional services to elderly people will be studied in detail. Courses will be directly related to the management and administration of a nursing service for elderly people in Australia.

## CLIN NUR 6137HO

## Functional Assessment

- 4 units - semester 1 or 2
- 39 hours of tutorials/Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word activity portfolio $50 \%, 2500$ word essay 50\%

This course will focus on the skills of assessment and the planning of care and services. Topics will include physical assessment; assessment of activities of living; psychosocial assessment; problem identification and management; and enablement processes.

## CLIN NUR 6138HO

## Gerontological Nursing

- 4 units - semester 1 or 2
- 2 hours per week or equiv., 200 hours of clinical practice/flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word activity portfolio 50\%, 2500 word essay 50\%

This course examines the ageing process and uses the knowledge gained from understanding the ageing process to advance clinical skill acquisition based on theoretical frameworks of care through field based learning within the area of Gerontological Nursing

## CLIN NUR 6139HO

Palliative Nursing in Aged Care

- 4 units - semester 1 or 2
- 2 hours per week as required for workshops or equivalent/flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word activity portfolio $50 \%, 2500$ word essay 50\%

This course focuses on the special needs of the elderly at the end of life and will examine the role of the nurse in aged care providing palliative services. The course combines contemporary knowledge with field based learning within the area of Palliative Care Nursing in Aged Care. Topics covered include pain assessment and management, symptom control, support processes, spiritual issues, complementary therapies, loss, grief and bereavement and ethical issues.

## CLIN NUR 6144HO

## Intensive Care Nursing I

- 4 units - semester 1
- 2 hours per week as required for workshops; 300 hours clinical practice
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word essay $50 \%, 30$ min. viva voce exam $50 \%$, competency assessment pass/fail - students must pass each component

This course will largely consist of field based learning within the area of Intensive Care nursing, supported by workshops. Advanced clinical skill acquisition will occur based on theoretical frameworks of care so that skills are not acquired within a vacuum that does not include the patient and family in context.

## CLIN NUR 6145HO

## Intensive Care Nursing II

- 4 units - semester 2
- 2 hours per week as required for workshops; 300 hours clinical practice
- Eligibility: Graduate Diploma in Nursing Science students only
- Assessment: 2500 word case study $50 \%, 30$ min. viva voce exam 50\%, competency assessment Pass/fail. - students must pass each component

This course will build on student's previous learning in Intensive Care Nursing I. It will focus on advanced clinical skill acquisition, based on theoretical frameworks of care through field based learning within the area of Intensive Care nursing.

## CLIN NUR 6146HO

## Nursing \& Medical Science in Intensive Care I

- 4 units - semester 1
- 3 hours per week for 13 weeks
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: Clinical assessment sheets 1-3 50\%, 2 hour exam $50 \%$ - students must pass each component

This course will build on the clinical and core courses in the specialty of Intensive Care nursing. The focus will be on pathophysiology, biochemistry, therapeutics and nursing science.

## CLIN NUR 6147HO

## Nursing \& Medical Science in Intensive Care II

- 4 units - semester 2
- 3 hours per week
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: student presentation \& 1000 word synopsis $50 \%, 2$ hour exam 50\% - students must pass each component

This course will build on Nursing and Medical Science in Intensive Care I and the other specialty Intensive Care courses. The focus will be on pathophysiology, biochemistry, therapeutics and nursing science.

## CLIN NUR 6152HO

## Nursing \& Medical Science in Oncology Nursing I

-4 units - semester 1

- Flexible delivery mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: portfolio equivalent to 2500 words $50 \%$, essay equiv. to 2500 words $50 \%$

This course focuses on the disease of cancer, how it is treated and the effects of treatment. Topics include physiology of cancer, treatment selection; the action of different treatment types, the effect on the individual undergoing treatment, cancer genetics, palliative care issues, and complimentary and psychological therapies.

## CLIN NUR 6153HO

Nursing \& Medical Science in Oncology Nursing II

- 4 units - semester 2
- Flexible delivery mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: Portfolio equivalent to 2500 words $50 \%$, presentation/synopsis paper equivalent to 2500 words $50 \%$

This course builds on the knowledge gained during the previous semester, developing an understanding of specific diseases and their management. The impact of malignancy is considered including patient education and trials in oncology. Other specific areas discussed include legal and ethical considerations for oncology nurses.

## CLIN NUR 6154HO

## Oncology Nursing I

- 4 units - semester 1
- Flexible delivery mode, 300 hours clinical practice per semester is equivalent to 2.5 days per week
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: Case study equivalent to 2500 words $50 \%$, presentation/synopsis paper equivalent to 2500 words $50 \%$, skills book/diary pass/fail, online classroom participation pass/fail

This course addresses the specialised clinical skills necessary to practice as a registered nurse in the oncology setting and will largely consist of field based learning within the clinical practice setting of haematology/oncology nursing supported by title holders. Participative workshops and online tutorials will support learning.

## CLIN NUR 6155HO

Oncology Nursing II

- 4 units - semester 2
- Flexible delivery mode, 300 hours clinical practice per semester is equivalent to 2.5 days per week
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: Poster presentation equiv. to 2500 words $50 \%$, essay equiv. to 2500 words $50 \%$, skills book/diary pass/fail, online classroom participation pass/fail

This course builds on the previous semester. Topics include leadership and research in cancer nursing, consumer perspectives, clinical trials, community supports and survival issues. Visits to various care settings are required. Participative workshops and online tutorials will support learning.

## CLIN NUR 6156HO

## Nursing and Medical Science in Orthopaedics I

- 4 units - semester 1
- Flexible delivery mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: Portfolio equiv. to 2500 words $50 \%, 2500$ word evidence based practice essay 50\%

This course focuses on nursing and medical science specific to the field of orthopaedic nursing. The focus is on the physiology, pathophysiology, biochemistry and therapeutics supporting the prevention, assessment and diagnostic studies of musculoskeletal conditions. Specific musculoskeletal disorders are then discussed utilising the same theoretical framework.

## CLIN NUR 6157HO

## Orthopaedic Nursing I

- 4 units - semester 1
- Flexible delivery mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: Poster equiv. to 2500 words $50 \%$, case study 2500 words $50 \%$, clinical diary pass/fail, online tutorial \& workshop attendance pass/fail

This course largely consists of field based learning within the area of orthopaedic nursing, supported by tutorials and workshops. It focuses on advanced clinical skill acquisition based on theoretical frameworks of care, aligned with topics covered in Nursing and Medical Science in Orthopaedics I.

## CLIN NUR 6158HO

## Orthopaedic Nursing II

- 4 units - semester 2
- Flexible delivery mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: presentation equiv. to 2500 words $50 \%$, case study 2500 words $50 \%$, clinical diary pass/fail, online tutorial \& workshop attendance pass/fail

This course builds on student's previous learning in Orthopaedic Nursing I. It focuses on further advanced clinical skill acquisition based in theoretical frameworks of care, aligned with topics covered in Nursing and Medical Science in Orthopaedics II.

## CLIN NUR 6159HO

Nursing \& Medical Science in Perioperative Nursing I

- 4 units - semester 1 or 2
- 3 hours per week/13 weeks
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word evidence based practice essay $50 \%, 2$ hour exam $50 \%$ - students must pass each component

This course will build on the clinical and core courses in the specialty of Perioperative Nursing. The focus will be on physiology, biochemistry, therapeutics and nursing science.

## CLIN NUR 6160HO

## Nursing \& Medical Science in Perioperative Nursing II

- 4 units - semester 1 or 2
- 3 hours per week/13 weeks
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: Class presentation \& briefing paper $50 \%, 2$ hour exam $50 \%$ - students must pass each component

This course will build on Nursing and Medical Science in Perioperative Nursing I and the other specialty Perioperative Nursing courses. The focus will be on physiology, biochemistry, therapeutics and nursing science.

## CLIN NUR 6161HO

## Perioperative Nursing I

- 4 units - semester 1 or 2
- 2 hours per week as required for workshops, 300 hours clinical practice
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word case study $50 \%, 30$ min. viva voce exam $50 \%$, competency assessment pass/fail - students must pass each component

This course will largely consist of field based learning within the area of Perioperative Nursing, supported by workshops. Advanced clinical skill acquisition will occur based on theoretical frameworks of care so that skills are not acquired within a vacuum which does not include the patient and family in context.

## CLIN NUR 6162HO

## Perioperative Nursing II

- 4 units - semester 1 or 2
- 2 hours per week as required for workshops, 300 hours clinical practice
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word case study $50 \%, 30$ min. viva voce exam $50 \%$, competency assessment pass/fail - students must pass each component of course

This course will build on student's previous learning in Perioperative Nursing I. It will focus on advanced clinical skill acquisition, based on theoretical frameworks of care through field based learning within the area of Perioperative Nursing.

## CLIN NUR 6163HO

## Contemporary Issues in Public Health Nursing

- 4 units - semester 1 or 2
- 2 hours per week/13 weeks
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: Health promotion proposal and viva $50 \%, 3000$ word essay $50 \%$ - students must pass each component

This course will examine the role of the nurse in health promotion and health surveillance in the following public health areas -
women's health; men's health, maternal and child health; immunisation; substance abuse and mental health. It will focus also on advanced clinical skills acquisition with reference to theoretical frameworks of care through field based learning, supported by tutorials, within the area of public health nursing.

## CLIN NUR 6167HO

## Contemporary Issues in District Nursing

- 4 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 5000 word incremental portfolio

This course will focus on issues in District Nursing, Primary Health and New Public Health. The specific objectives are for students to understand primary health care philosophies underpinning practice; understand the socio-political environments in which care is delivered; and further develop 'transferable' management and communication skills.

## CLIN NUR 6168HO

Population Profiling in Chronic Illness

- 4 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word need analysis report 50\%, 2500 word project proposal $50 \%$

This course will require students to apply the skills and knowledge gained form the previous courses in order to fufill the following objectives: to be able to profile populations and establish need; and to have the ability to create supportive environments and strengthen 'community' action in order for individuals/families'/communities to respond and help determine their own health status.

## CLIN NUR 6169HO

## District Nursing I

- 4 units - semester 1 or 2
- Flexible learning; 300 hours clinical practice
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word wound assessment form 50\%, 2500 word self-evaluation \& critical reflection regarding wound management practices 50\%

This course will predominantly consist of field based learning. Students will be expected to develop expertise based on current research evidence and reflective practice. Students will be expected to develop literature searching and critical evaluation
skills. Students will be able to select two of the following topics: health promotion, continence management, wound management, and an elective.

## CLIN NUR 6170HO

## District Nursing II

- 4 units - semester 1 or 2
- Flexible learning; 300 hours clinical practice
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word literature review 50\%, 2500 word case study 50\%

The specific objectives are for students to develop an aspect of care based on current research evidence: acquire literature searching critical evaluation skills using systematic procedures; and further develop 'transferable' management and communication skills. Students will be able to select two of the following topics: principles of management within the context of community/primary care, palliative care, diabetes, HIV/AIDS, disabilities, and aged care.

## CLIN NUR 6175HO

## Nursing \& Medical Science in Orthopaedics II

- 4 units - semester 2
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: Portfolio equiv. to 2500 words $50 \%, 2500$ word evidence based practice essay 50\%

This course builds on student's previous learning in Nursing and Medical Science in Orthopaedics I. Specific musculoskeletal disorders, therapeutic management of comorbidities, peri-acute rehabilitation and discharge planning of the orthopaedic patient are addressed supported by the underpinning physiology, pathophysiology, biochemistry, therapeutics and nursing science.

## CLIN NUR 6178HO

## Anaesthetic and Recovery Nursing I

- 4 units - semester 1 or 2
- 2 hours per week as required for workshops, 300 hours clinical practice
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word case study 50\%, 30 min. viva voce exam 50\%, competency log book/assessment pass/fail - students must pass each component

This course will largely consist of field based learning within an anaesthetic room environment, supported by workshops. Advanced clinical skill acquisition will occur based on theoretical
frameworks of care so that skills are not acquired within a vacuum which does not include the patient and family in context.

## CLIN NUR 6179HO

## Anaesthetic and Recovery Nursing II

- 4 units - semester 1 or 2
- 2 hours per week as required for workshops, 300 hours clinical practice
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word case study presentation $50 \%, 30$ min viva voce exam 50\%, competency log book/assessment pass/fail - students must pass each component

This course will build on student's previous learning in Anaesthetic Nursing I. It will focus on advanced clinical skill acquisition, based on theoretical frameworks of care through field based learning within the area of anaesthetic room nursing.

## CLIN NUR 6181HO

## Nursing \& Medical Science in Burns Nursing I

- 4 units - semester 1 or 2
- Flexible learning mode
- Assessment: 2500 word essay 50\%, portfolio 50\% - students must pass each course component

This course will examine nursing and medical science in relation to burn management and the principles of burn nursing. Topics will include anatomy \& physiology, wound management, pathophysiology, pain management and surgical interventions.

## CLIN NUR 6182HO

## Nursing \& Medical Science in Burns Nursing II

- 4 units - semester 1 or 2
- Flexible learning mode
- Assessment: 2500 word essay $50 \%$, portfolio $50 \%$ - students must pass each course component

Course will focus on the rehabilitation of the burn patient and their family. The role and the future professional development of the burns nurse will also be addressed. Topics will include physical therapy, psychosocial care, discharge planning, disaster management, burn prevention and education. Students will be required to participate in field experience.

## CLIN NUR 6183HO

## Burns Nursing I

- 4 units - semester 1 or 2
- Flexible learning mode
- Assessment: Poster 2500 word equivalent $50 \%$, presentation \& synopsis 1250 word equivalent $50 \%$, online participation pass/fail - students must pass each course component

This course will largely consist of field based nursing within the area of clinical practice, supported by online discussions. Students will explore the specialist skills required for management of the patient with a burn injury.

## CLIN NUR 6184HO

## Burns Nursing II

- 4 units - semester 1 or 2
- Flexible learning mode
- Assessment: Online discussion board, 1700 words equivalent 50\%, presentation \& synopsis 1250 words equivalent $50 \%$, online participation pass/fail - students must pass each course component

This course will largely consist of field based nursing within the area of clinical practice, supported by online discussions. Students will explore the skills required for meeting the holistic needs for the management of the patient with a burn injury. The focus will be on case management, therapies, and the transition of patients with a burn injury back into the community.

## CLIN NUR 6185HO

## Rural Nursing I

- 4 units - semester 1 or 2
- Flexible learning mode
- Assessment: Work portfolio 25\%, 2500 word essay 50\%, 1 hour written exam 25\% - students must pass each course component

This course combines rural and Primary Health Care (PHC) and is oriented toward an integrated community and consumer approach and examines the processes and factors that shape nursing practice and PHC in rural areas and the demands and challenges thereof. The overall aim is to provide the student with information on trends and practices of rural nursing underpinned by a PHC focus.

## CLIN NUR 6186HO

## Rural Nursing II

- 4 units - semester 1 or 2
- Flexible learning mode
- Assessment: 1250 word essay, 25\%, 15 min. viva exam $25 \%, 2$ hour written exam $50 \%$ - students must complete competency work book \& pass each component

The overall aim of this course is to provide the student with recent and comprehensive information on health assessment and management of emergency patient in a rural setting. This course combines health assessment and management of emergency patients giving the learner compressive skills to assess and manage clients. The course is presented into two sections and each section has six units. The course has a practical focus and encourages students to draw upon previous experiences while allowing the student to perform new advanced nursing skills in health assessment and management of emergency patients. For this purpose, a competence workbook has to be completed.

## CLIN NUR 6187HO

## Rural Nursing III

- 4 units - semester 1 or 2
- Flexible learning mode
- Assessment: 2500 word case study $50 \%, 2$ hour written exam $50 \%$ - students must complete a competency work book and pass each component

This course examines chronic medical and mental conditions in rural and general populations and the impact this has on nursing practice. The course uses principles of medical nursing and health promotion in the management of chronic conditions. Topics will include management of selected medical chronic conditions, mental health assessment and management of mental health emergencies, legal aspects and transportation of mental health clients.

## CLIN NUR 6190HO

## Nursing and Medical Science in Acute Care Nursing

- 4 units - semester 1
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 annotated bibliography 50\%, exam 50\%

This course is designed to provide a theoretical framework in nursing and medical science that is specific to the area of acute care practice. The focus is on physiology, pathophysiology, biochemistry, therapeutics and nursing science delivered via lectures and workshops in a thematic modular fashion.

## CLIN NUR 6191HO

## Acute Care Nursing

- 4 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 3000 word case study $50 \%$, portfolio 50\%

This course compliments the concepts and knowledge presented in Nursing and Medical Science in Acute Care Nursing. It links theory with practice and consists of field based learning within the area of acute care practice, supported by online tutorials and workshops. It focuses on clinical skills acquisition through field based learning in the practice setting of acute care nursing.

## CLIN NUR 6192HO

## Medical Nursing

- 4 units - semester 2
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: student presentation \& synopsis paper $50 \%, 2500$ word portfolio activities 50\%

This course is designed to provide a theoretical framework specifically in medical nursing intertwined with the acquisition of advanced clinical skills that are pertinent. The focus is on physiology, pathophysiology, biochemistry, therapeutics and nursing science, of the most prevalent conditions relevant to medical nursing. The course will be delivered via modules in a thematic fashion.

## CLIN NUR 6193HO

High Acuity Nursing

- 4 units - semester 2
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: poster presentation 50\%, portfolio 50\%

This course links theory with practice and consists of field based learning within the area of advanced practice in the acute care setting supported by online tutorials, lectures and workshops. It focuses on relevant advanced clinical skills acquisition covering topics from advanced life support, an introduction to mechanical ventilation, haemodynamic monitoring, assessment and management of the critically ill patient through to arrhythmia and ECG interpretation via field based learning in the practice setting.

## CLIN NUR 6194HO

## Surgical Nursing

- 4 units - semester 2
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 2500 word case study $50 \%, 3000$ word portfolio 50\%

This course is designed to provide a theoretical framework specifically in surgical nursing intertwined with the acquisition of
advanced clinical skills that are pertinent. The focus is on physiology, pathophysiology, biochemistry, therapeutics and nursing science, of the most prevalent conditions relevant to surgical nursing. The course will be delivered via modules in a thematic fashion.

## CLIN NUR 6195HO

## Working with Clients and Community

- 4 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: 3000 word incremental learning portfolio 60\%, 2000 word case study 40\%

Working with Clients and Community: A primary health care approach in district nursing practice will introduce students to primary health care. This course will enable students to understand primary health care philosophies underpinning practice and the principles of equity and social justice in health care. Specific areas that are addresses include; nursing in the community, assessment of the client and community, evidence for practice and health promotion.

## CLIN NUR 6196HO

## Acute Mental Health Care I

- 4 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: portfolio 60\%, 2000 word article critique 40\% students must pass each course component

This course explores the theory and practice of the nurse-client relationship as the foundation of mental health nursing. It will also examine fundamental models, theories and nursing strategies that form the basis of those areas of the physical, psychological and social sciences, which inform contemporary acute inpatient mental health nursing practice. Students will complete 300 hours of related clinical practice.

## CLIN NUR 6197HO

## Acute Mental Health Care II

- 4 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: portfolio 60\%, 2000 word case study $40 \%$ students must pass each course component

This course will build on the student's previous learning in Acute Mental health Care I in that it links theory with practice. The focus will be on the acquisition of clinical skills through field based
training in the acute inpatient practice setting. Students will complete 300 hours of related clinical practice.

## CLIN NUR 6198HO

## Primary Mental Health Care

- 4 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: poster $40 \%, 3000$ word essay $60 \%$ - students must pass each course component

This course will focus on the implications of the National Mental Health Reforms in the context of both inpatient and community settings. It will examine the epidemiology of mental illness as well as early intervention techniques and mental health promotion and prevention. Various therapeutic approaches will be identified, emphasising the principles of rehabilitation and recovery, community development and case management

## CLIN NUR 6199HO

## Therapeutic Advances in Acute Mental Health

- 4 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: counselling competencies 60\%, 2000 word annotated bibliography 40\% - students must pass each course component

This course will enable strong links to be made with theory and practice utilising field based experiential learning within the area of advanced practice as the primary mode. The nurse will focus on the beginning development of their own therapeutic system drawing on models and theories from the humanistic, cognitive and behavioural therapies.

## CLIN NUR 6200HO

## Community Mental Health Nursing

- 4 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad.Dip. Nursing Science students only
- Assessment: Power Point presentation of case 60\%, 2000 word annotated bibliography 40\% - students must pass each course component

This course will focus on the process and principles of community mental health nursing. It will consist of field based learning supported by flexible learning options. Topics covered will include, caseload surveillance, case management, multidisciplinary teamwork, community development, psychosocial rehabilitation,
risk assessment and consumer self-empowerment strategies, such as relapse prevention and crisis management.

## CLIN NUR 6201HO

## Advanced Infection Control Practice

- 4 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Grad. Dip. Nursing Science students only
- Assessment: 1500 word essay 35\%, 3000-4000 word assignment 65\%

This course will examine issues related to advanced infection control practice within the clinical setting. Students will cover various practice-related issues within their specific health care setting with particular reference to managing change of infection control practice.

## CLIN NUR 7001HO

## Empirical/Analytical Research in Nursing

- 3 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Master of Nursing Science students only
- Assessment: 3000 word portfolio 50\%, 3000 word research proposal 50\%

This course will build on student's previous learning on the empirico/analytical paradigm and focus on research design from this perspective. Topics will include experimental and quasiexperimental design; surveys; developing hypotheses; sampling; approaches to data collection; reliability and validity. Students will also be introduced to published nursing research reports which utilise this perspective and will be required to subject these to rigorous critique.

## CLIN NUR 7002HO

## Interpretive and Critical Research in Nursing

- 3 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Master of Nursing Science students only
- Assessment: 2400 word essay $40 \%, 3600$ word research proposal 60\%

This course will build on student's previous learning on the interpretive and critical paradigms and focus on research design from this perspective. Topics will include the critique of positivism and an introduction to interpretive methodologies, such as grounded theory, ethnography and phenomenology. There will be a brief overview of critical methodologies (feminist research and action research). Practical research activities such as literature
searching, conducting interviews and coding qualitative data will also be provided.

## CLIN NUR 7003HO

## International Issues in Nursing Service Delivery

- 3 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Master of Nursing Science students only
- Assessment: on campus - presentation \& 2000 word briefing paper $50 \%, 3000$ word essay $50 \%$; off campus $-2 \times 3000$ word essays each $50 \%$

This course is designed to introduce students to a variety of topical issues related to the health care system and nurses' roles within it, both on a national and international level. Topics will include health and the environment, the epidemiology of disease, epidemiological tools, poverty, global conflict, the economics of health care, political awareness, leadership and spheres of nursing.

## CLIN NUR 7004HO

## The Emergence of A Theoretical Base for Nursing

- 3 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Master of Nursing Science students only
- Assessment: 3000 word portfolio 50\%, 3000 word essay 50\%

This course will build on student's previous learning on nursing theory and will critique current discourses in nursing on theory development. Students will critically analyse nursing and locate and discuss the origins of dominant theories in nursing. They will apply and subsequently transform theory from other disciplines which inform nursing, develop theoretical understanding of nursing and advance the discipline of nursing through theoretical nursing in practice.

## CLIN NUR 7005HO

## Research Dissertation A

- 12 units - semester 1 or 2
- Individual supervision
- Eligibility: Master of Nursing Science students only
- Assessment: 20,000-25,000 word research dissertation

This component of the program requires the student to identify a research question or problem; obtain appropriate ethical approval for the study; to carry out a small research study based on this question; and to submit a fully developed report.

## CLIN NUR 7006HO

## Research Dissertation A Stage I

- 6 units - semester 1 or 2
- Individual supervision
- Eligibility: Master of Nursing Science students only
- Assessment: submission, peer review and ethical approval of a research proposal

This component of the program requires the student to identify a research question or problem; to develop a research proposal and commence data collection.

## CLIN NUR 7007HO

## Research Dissertation A Stage II

- 6 units - semester 1 or 2
- Individual supervision
- Eligibility: Master of Nursing Science students only
- Assessment: 20,000-25,000 word dissertation

This component of the program requires the student to identify a research question or problem; to carry out a small research study based on this question; and to submit a fully developed report.

## CLIN NUR 7008AHO/BHO

## Research Dissertation B

- 12 units - full year
- Individual supervision
- Eligibility: Master of Nursing Science students only
- Assessment: 30,000-35,000 word dissertation

This component of the program requires the student to identify a research question or problem; to carry out a substantial research study based on this question; and to submit a fully developed report.

## CLIN NUR 7009HO

## Research Dissertation B (P/T) Progressing

- 6 units - semester 1
- Individual supervision
- Eligibility: Master of Nursing Science students only
- Assessment: students receive satisfactory/unsatisfactory grade This component of the program requires the student to continue to work on their research.


## CLIN NUR 7010HO

## Research Dissertation B (P/T) Final

- 6 units - semester 1 or 2
- Individual supervision
- Eligibility: Master of Nursing Science students only
- Assessment: 30,000-35,000 word dissertation

This component of the program requires the student to identify a research question or problem; to carry out a substantial research study based on this question; and to submit a fully developed report.

## CLIN NUR 7011HO

## Clinical Management

- 3 units - semester 1 or 2
- Flexible learning mode
- Eligibility: Master of Nursing Science students only
- Assessment: 3000 word strategic plan $50 \%, 3000$ word portfolio 50\%

This course will explore contemporary issues in relation to health management in clinical nursing practice. Topics will include: health service organisation, strategic planning, financial planning, human resource management and clinical leadership.

## CLIN NUR 7012HO

## Systematic and Critical Reviews of the Research

- 3 units - semester 1 or 2
- Flexible learning mode with optional oncampus tutorials
- Eligibility: Master of Nursing Science students only
- Assessment: 2400 word essay $40 \%, 3600$ word review protocol 60\%

This course introduces the students to reviews of research, the need for these reviews and different types of research reviews. Through a program of reading, students will have the opportunity to explore systematic and critical reviews. Students will gain an understanding of the role and components of a review protocol and the principles of research and approaches to summarising and synthesising the findings of research will also be explored.

## CLIN NUR 7013HO

## Critical Review Project

- 6 units - semester 1 or 2
- No formal teaching
- Eligibility: Master of Nursing Science students only
- Assessment: 6000 word essay $60 \%, 4000-5000$ word article for publication 40\%

This course will provide students with the opportunity to review the research literature on a topic of interest. During this program of study the student will utilise the skills and knowledge gained in the other Master of Nursing Science courses such as Systematic and Critical Reviews of the Research. Students will undertake a critical review of the literature, and based on this review, produce an article for publication in a peer reviewed journal.

## CLIN NUR 7014HO

## Advanced Health Assessment

- 6 units - semester 1 or 2
- external delivery
- Eligibility: Master of Nursing Science students only
- Assessment: 20 min videotaped health assessment of child/older person $40 \%, 40$ min videotaped health assessment of person with chronic illness \& 2000 word report of person's health $60 \%$

This course builds upon the student's previous assessment skills offering more advanced health assessment content to provide a foundation for advanced practice nursing. For each part of the course the content will focus on three main assessment aspects: (i). older persons, (ii) children, (iii). adults. There will be an emphasis on focused assessment of: the chief complaint, risks to health, functional assessment and diverse populations and how they vary according to ethnicity, culture, gender and age.

An overview of health screening examination will occur together with some information on the ordering, performing and interpreting of laboratory and radiographic tests. Students will be expected to critically analyse these tests and other physical examination techniques for their validity and reliability in order to make a judgement about their usefulness.

Throughout the course effective communication, client teaching and counselling will be stressed as important tools necessary to discover the client's interpretation of health or illness. Documentation and the written description summarising the health assessment are important skills that will be addressed as part of the course.

## CLIN NUR 7015HO

## Applied Pharmacology in Nursing

- 6 units - semester 1 or 2
- external delivery
- Eligibility: Master of Nursing Science students only
- Assessment: 2000 word applied drug monograph $35 \%$, online multiple choice exam equiv. to 1000 words $15 \%, 3000$ word essay 50\%

This course will build upon an undergraduate understanding of drug use, prescribing and administration and some reading may be required. Course material will be introduced with a discussion of:
the South Australian and Australian legal requirements for the prescription and administration of drugs; ethical issues involved in the cost, prescription and clinical drug trials; the process of collating a patient's medication history.

Drugs will the be discussed according to their classes of action; this will be predominantly based on the body systems that they act on and are usually prescribed for. The review of each class of drug will concentrate on particular examples in which the composition of the drug and its mode of action will be outlined. Students will also learn about how drugs are chosen for particular effects. The pharmacological principles of: pharmacokinetics, pharmacodynamics, adverse effects, contraindications and precautions will be described using examples from different drug classes. At the end of the course students will consider the complexities of polypharmacy and the quality use of medicines. While this course will not prepare students for a role as a prescriber, they will be taught the concepts of safe prescribing and administration.

## CLIN NUR 8001HO

## Contemporary Issues in Service Delivery

- 8 units - semester 1
- 4 hours per week
- Eligibility: Doctor of Nursing students only
- Assessment: class presentation \& 750 word synopsis $20 \%, 5000$ word essay $80 \%$

This unit sets out to establish a critical perspective on change in health care delivery. Students will be given opportunities to develop collaborative strategies for designing, implementing and evaluating change alongside appropriate experts in the field.

## CLIN NUR 8002HO

Predicting, Critiquing and Visioning in Nursing

- 8 units - semester 1
- 4 hours per week
- Eligibility: Doctor of Nursing students only
- Assessment: 5000 word essay $80 \%$, class presentation \& 750 word synopsis $20 \%$

This unit focuses on encouraging students to articulate goals and visions that reflect a considered and theoretically informed nursing approach to health care delivery. It is designed to enable a synthesis of work from previous units as a point of departure for shaping future high quality practice. Students will explore alternative frameworks for defining and delivering health care.

## CLIN NUR 8003HO

Situating Scholarly Inquiry in Nursing

- 8 units - semester 1
- 4 hours per week
- Eligibility: Doctor of Nursing students only
- Assessment: 3000 word assignment $40 \%, 5000$ word assignment 60\%

This unit focuses on the development of skills in collaborative inquiry. It situates inquiry in the discipline of nursing in terms of its theoretical roots and encourages students to develop their own understandings of nursing as a practice.

This is designed to be the foundational unit of the course and sets out to prepare nursing leaders who are grounded in an understanding of their own discipline. As a practice discipline, it is imperative that a scholarly dialogue be established between practice and theoretical discourses in nursing. Students will embark on such dialogue in order to develop their own understandings of the ontology and epistemology of nursing as a scholarly practice.

## CLIN NUR 8004HO

## Field Based Inquiry in Nursing I

- 6 units - semester 2
- 3 hours per week for 3 weeks, negotiated access to a nominated supervisor
- Eligibility: Doctor of Nursing students only
- Assessment: 2000 word field observation report 40\%, 3000 word literature review 60\%

This unit is intended to enable candidates to integrate theory and practice in nursing and to develop the skills of scholarly inquiry that are necessary for the successful completion of both this unit and the doctoral program as a whole. Each candidate shall, in consultation with the Course Director and their supervisor, present a proposal for professional development experience which specifies the goals of their field experience in week 3 of the unit. The Field Based Inquiry into Nursing I unit shall proceed only after the proposal is approved by the Course Director.

This unit is designed to enable students to conduct a project which focuses on their field of practice and health service delivery. Drawing on processes of reflection, critique of practice and research skills, students will be expected to revisit, redesign, carry out and report on their projects. They will engage in a period of intensive reading, explore relevant aspects of practice, prepare reports for presentation within the organisation, at professional meetings and for assessment of progress within the course. Successful completion of this unit will prepare students to undertake large scale projects with increasing independence and confidence.

## CLIN NUR 8005HO

## Field Based Inquiry in Nursing II

- 6 units - semester 2
- 3 hours per week/3 weeks, negotiated access to nominated supervisor
- Eligibility: Doctor of Nursing students only
- Assessment: 2000 word observation report 40\%, 3000 word literature review 60\%

This unit is designed to challenge students to be more than just analytical. It is designed to facilitate the development of students' ability to recognise the implications of change in the broad arena of society in general and health care and nursing in particular. In satisfying criteria associated with this unit, students will need to demonstrate the ability to advance and successfully defend innovative thinking in relation to service delivery. Students will be required to engage in a period of sustained involvement in a professional nursing setting and to prepare and submit a paper which focuses on predictable, desirable and visionary change.

## CLIN NUR 8008HO

## Research I

- 6 units - semester 1 or 2
- Eligibility: Doctor of Nursing students only
- Assessment: research based activities

This component of the degree requires students to identify substantive research questions or problems; to carry out research based activities; and to submit a portfolio of approximately 50,000 words which represents an original contribution to knowledge in nursing. The research portfolio should contain two or three separate research projects, related in terms of the area of interest and presented as completed research reports. The portfolio may also contain published work, for example a systematic review and/or an article published in a refereed journal from the student's research.

## CLIN NUR 8009HO

## Research II

- 6 units - semester 1 or 2
- Eligibility: Doctor of Nursing students only
- Assessment: research based activities

This component of the degree requires students to identify substantive research questions or problems; to carry out research based activities; and to submit a portfolio of approximately 50,000 words which represents an original contribution to knowledge in nursing. The research portfolio should contain two or three separate research projects, related in terms of the area of interest and presented as completed research reports. The portfolio may also
contain published work, for example a systematic review and/or an article published in a refereed journal from the student's research.

## CLIN NUR 8010HO

## Research III

- 6 units - semester 1 or 2
- Eligibility: Doctor of Nursing students only
- Assessment: research based activities

This component of the degree requires students to identify substantive research questions or problems; to carry out research based activities; and to submit a portfolio of approximately 50,000 words which represents an original contribution to knowledge in nursing. The research portfolio should contain two or three separate research projects, related in terms of the area of interest and presented as completed research reports. The portfolio may also contain published work, for example a systematic review and/or an article published in a refereed journal from the student's research.

## CLIN NUR 8012HO

## Research V

- 6 units - semester 1 or 2
- Eligibility: Doctor of Nursing students only
- Assessment: research based activities

This component of the degree requires students to identify substantive research questions or problems; to carry out research based activities; and to submit a portfolio of approximately 50,000 words which represents an original contribution to knowledge in nursing. The research portfolio should contain two or three separate research projects, related in terms of the area of interest and presented as completed research reports. The portfolio may also contain published work, for example a systematic review and/or an article published in a refereed journal from the student's research.

## CLIN NUR 8013HO

## Research VI

- 6 units - semester 1 or 2
- Eligibility: Doctor of Nursing students only
- Assessment: research based activities

This component of the degree requires students to identify substantive research questions or problems; to carry out research based activities; and to submit a portfolio of approximately 50,000 words which represents an original contribution to knowledge in nursing. The research portfolio should contain two or three separate research projects, related in terms of the area of interest and presented as completed research reports. The portfolio may also contain published work, for example a systematic review and/or an article published in a refereed journal from the student's research.

## OCCUPATIONAL

## HEALTH \& SAFETY

## OH\&S 7014HO

## Occupational and Environmental Health Studies

- 3 units - semester 1 or 2
- Eligibility: Grad Cert, Grad Dip, M.OH \& S students
- Assessment: to be advised

This subject is an agreed program of study, negotiated between the student and the MOHS course coordinator. A variety of subjects may be considered from the fields of occupational, environmental or public health subjects, offered at either the University of Adelaide or the University of South Australia (including the twoweek intensive National Short Course in Environmental Health.

## OH\&S 7031HO

## Occupational Hygiene and Ergonomics

- 3 units - semester 2
- Internal \& external mode
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: written exam, exercises and assignments

This course is an introduction to practical occupational hygiene and ergonomics. There is broad coverage of chemical and physical hazards and of technologies for evaluation and control. Topics include their noise, vibration, thermal stress, shift work, biohazards and toxic chemicals. There will be discussion of exposure standards and the interpretation of hygiene data. There will also be an overview of ergonomics, including consideration of workstation and process design; displays and information systems; biomechanics; anthropometry; and psychological aspects.

## OH\&S 7105HO

## Diseases of Occupation

- 3 units - semester 1
- Internal \& external mode
- Eligibility: Grad Cert, Grad Dip, MPH students
- Available for Non-Award Study
- Assessment: assignments

This course offers a broad introduction to occupational health and safety. It will address the relationships between work, work processes and work exposures, and the occurrence of disease and injury. The nature, extent and distribution of work-related death, disease and injury will be considered, with special emphasis on the Australian environment. An important aim is to encourage a critical attitude towards health and safety issues, so that students will
learn to evaluate problems and formulate appropriate preventive measures on the basis of scientific principles. The elective includes some industrial visits.

## OH\&S 7114HO

National Short Course in Environmental Health

- 3 units - semester 2
- Intensive course - 5 days in December
- Eligibility: Grad Cert, Grad Dip, M.OH \& S students
- Assessment: to be advised

The course will focus primarily on the process of identifying, quantifying, evaluating and managing the health effects of population exposures to various environmental contaminants and other factors. 'Risk' will provide the framework, including hazard identification, risk assessment, risk management and risk communication. To address the potential hazards of ambient environmental exposures, various public health disciplines are needed: epidemiology to help identify hazards and quantify risk; toxicology to provide collaborative quantitative experiment data on biological effects of hazardous agents and understand the toxic process; environmental sciences to measure exposure; and various policy analysis-related disciplines (eg. environmental law, sociology, health economics) to appraise and manage risk. The course will illustrate the role of these disciplines in the investigation and management of environmental health problems. Viewed broadly, the study of environmental health encompasses urban design, transport noise management, and traditional public health issues in relation to human populations. It also encompasses macro problems such as climate change, ozone depletion and land degradation. These 'macro' topics will be briefly addressed but not systematically developed. As a result of attending this course, students will a) understand selected relationships between the environment and human health and b) be able to apply this information to develop risk assessment and risk management strategies.

## OH\&S 7131HO

## Occupational Safety and Statistics

- 3 units
- Eligibility: Grad Cert, Grad Dip, M.OH \& S students
- Assessment: to be advised at start of semester

This course develops participants knowledge and skills in relation to three important components of OHS management. These are the investigation and analysis of factors contributing to incidents and accidents; the application of a risk management process to the recognition and control of plant safety risks; and the use and interpretation of data relating to occupational injury, disease and hazardous exposures.

## OH\&S 7132HO

## OHS Management and Law I

- 3 units
- Eligibility: Grad Cert, Grad Dip, Master of OH \& S students
- Assessment: to be advised at start of semester

Historical perspective on socio-legal issues in occupational health and safety; the British factory legislation; Robens Report and other key influences. The Constitutional, common law, statute law and administrative framework for OH\&S. Introduction to injury causation; hazard identification, risk assessment and control. Principles and systems for $\mathrm{OH} \mathrm{\& S}$ management.

## OH\&S 7133HO

## Advanced Ergonomics

- 3 units
- 2 lectures, 1 tutorial per week, worksite visits
- Prerequisite: OH\&S 7031 Occupational Hygiene and Ergonomics
- Assessment: project \& report 60\%, written assignment 40\%

Application of human physiological considerations in ergonomic assessments; identification of ergonomic factors in complex systems; formulation of ergonomic objectives and strategies; implementation of strategies to achieve best practice in ergonomic design of work environments, plant, equipment and processes.

## OH\&S 7134HO

## Advanced Occupational Hygiene

- 3 units - semester 2
- Eligibility: Grad Cert, Grad Dip, M.OH \& S students
- Assessment: to be advised at start of semester

This elective course deals with advanced topics in the areas of hazard evaluation and control. There will be practical coverage of industrial ventilation, confined space operations, noise propagation and control, chemical exposure measurement and laboratory analytical methods. The course includes field visits to illustrate environmental monitoring and control technologies.

## OH\&S 7135HO

## Advanced OHS Management

- 3 units - semester 2
- Eligibility: Grad Cert, Grad Dip, M.OH \& S students
- Assessment: to be advised at start of semester

Identification of symptoms of malfunction in OHS systems; formulating change objectives and strategies for change; structural and behavioural implications in achieving change; implementing and monitoring an OHS change strategy; the nexus with OHS
management, quality and productivity initiatives in program implementation.

## OH\&S 7136HO

## Occupational Safety

- 3 units - semester 1
- Eligibility: Grad Cert, Grad Dip, M.OH \& S students
- Assessment: to be advised at start of semester

For each of the specific hazards of fire and explosion, dangerous goods, electricity and confined spaces the following will be covered: basic concepts, definitions, terminology, nature of hazards; relevant legislation and standards; prevention and control measures; emergency planning and response. Specific high industry cases studies (including mining, construction, farming).

## OH\&S 7137HO

## Occupational Toxicology

- 3 units - semester 2
- Eligibility: Grad Cert, Grad Dip, M.OH \& S students
- Assessment: assignment, exam

This course will review concepts in chemical toxicology which constitute a rational basis for the setting of chemical exposure standards. It will include an overview of the principles of toxicology, toxicity testing and risk assessment. Examples will be drawn from typical industrial exposure situations.

## OH\&S 7138HO

## OHS Management and Law II

- 3 units
- Eligibility: Grad Cert, Grad Dip, M.OH \& S students
- Assessment: to be advised at start of semester

This course will cover OH\&S and relevant employment relations legislation. It will explore legal relationships in OH\&S including employer/employee; principal/contractor, and supplier/purchaser. It will also address the enforcement pyramid and legal proceedings, OH\&S management systems, their elements and their implementation, international and Australian quality standards and their nexus with OH\&S.

## OH\&S 7139HO

## OHS Research Methods

- 3 units - semester 1
- 1 lecture, 1 tutorial per week
- Eligibility: M.OH\&S and GD.OH\&S students
- Assessment: to be advised at start of semester

This course aims to give an introduction to research methods in OHS, focusing on the application of epidemiology and biostatistics. Some basic numeracy skills will be required. At the completion of the course the student should be able to understand the applicability of epidemiology to occupational health; grasp basic concepts in epidemiology and statistics; have a basic understanding of quantitative research strategies; be able to identify the appropriate research designs for a particular research question; and be able to appraise critically the occupational health literature which uses epidemiological techniques.

## OH\&S 7140HO

## OHSM Dissertation

- 6 units - semester 1 or 2
- Eligibility: Grad Dip, M.OH \& S students
- Assessment: examination of written work

The dissertation is an analysis or critical study of an occupational health and safety question. It would normally be based on information collected specifically for this study, although this is not an essential requirement. The dissertation provides students with an opportunity to consider an issue or problem in detail. No minimum length is prescribed, but as a general guide a length of 10-15,000 words might be expected.

A regular series of seminars will be held, at which students will present their research plans or progress.

## OH\&S 7141HO

## Practical Occupational Health

- 3 units - semester 2
- Eligibility: Grad Cert, Grad Dip, M.OH \& S students
- Assessment: to be advised at start of semester

This course develops participants skills and knowledge to anticipate, identify and control specific health hazards. Relevant ethical issues, health surveillance, systems for management of work-caused disability and the scope and function of occupational health services are also addressed.

## OH\&S 7142HO

## OH\&S Research Thesis

- 12 units -
- Eligibility: Grad Dip, M.OH \& S students
- Prerequisite: PUB HLTH 7139HO OHS Research Methods
- Assessment: thesis

The thesis should constitute a piece of original research, aiming to test a hypothesis, or to analyse a proposition or concept. This may entail collection of original information, or fresh examination of
information collected previously for some other purpose. It should include a thorough literature review, an appropriate methodology, and display a critical approach to the topic. The implications for future research and/or OHS policy should be discussed. A regular series of seminars will be held, at which students will present their research plans and/or progress

## OH\&S 7143AHO/BHO

## OHS Research Thesis

- 6 units - full year

OHS Research Thesis to be completed over two semesters.

## OENOLOGY

## OENOLOGY 7000

## OENOLOGY 7000EX

## Introductory Grape and Wine Knowledge

- 3 units - semester 1
- External: 4 or 5 day residential school during mid semester break, Internal: up to 2 lectures, 3 hours tutorial/practical per week practical components may be held in mid semester break
- Eligibility: PG students in Wine Business
- Assessment: semester written exams, practical tests

Grapevine morphology, growth and development; grape berry development; changes in grape berry composition during ripening; physiology of smell and taste; basic winemaking principles.
Practical exercises sessions designed to train student's palate in wine sensory evaluation and to differentiate between Australian wine types and styles.

## OENOLOGY 7002

## OENOLOGY 7002EX

## Vineyard and Winery Operations I

- 3 units - semester 2
- External: 5 day residential school Internal: up to 2 lectures, 3 hours tutorials/practicals per week practical components may be held during mid semester break
- Eligibility: Postgraduate students in Wine Business
- Prerequisite: OENOLOGY 7000NW/7000EX Introductory Grape and Wine Knowledge
- Assessment: semester written exams, practical tests

Climatic requirements for grapevines; vineyard design, establishment and operations including pruning, irrigation, canopy management, soil management and pest and disease management; characteristics of major white wine grape varieties;
principles and practices of white and sparkling wine production; major white wine styles of the world; oak in winemaking.

Practical sessions relate to lecture topics and include viticulture exercises and wine sensory evaluation.

## OENOLOGY 7003NW

OENOLOGY 7003EX

## Vineyard and Winery Operations IIA

- 3 units - semester 1
- External: 4 day residential school Internal: 2 lectures per week, 24 hours practical component held in mid semester break
- Eligibility: Postgraduate students in Wine Business
- Prerequisite: OENOLOGY 7000NW/7000EX Introductory Grape and Wine Knowledge
- Assessment: written exams, practical tests \& reports

Characteristics of major red wine grape varieties; principles and practices of red wine production; major red wine styles of the world; techniques for grapevine improvement and biotechnology, as applied to the wine industry; wine packaging, bottling operations and quality standards; sensory science. Practical sessions relate to lecture topics and will include tasting sessions.

## OENOLOGY 7004WT

## Wine Packaging and Quality Management

- 3 units - semester 2
- Up to 6 hours per week, including lectures and practicals
- Prerequisite: OENOLOGY 7010WT Stabilisation and Clarification, OENOLOGY 7047WT Winemaking at Vintage
- Assessment: practicals, reports, written assignments, exams

Science and technology of bottling and packaging systems including chemical and physical properties of packaging materials, principles of filling machinery, design and process control of wine filling/packaging systems.

Wine and food laws and commercial forces as quality standards. Taints and residues in grapes and wine as quality issues. Approaches and systems of quality management using the wine industry as a focus, including the development of corporate quality cultures, standards and specifications. Visits will be made to commercial plants.

## OENOLOGY 7010WT

## Stabilisation and Clarification

- 3 units - semester 1
- Up to 6 hours per week, including lectures, practicals
- Prerequisite: OENOLOGY 7028WT Introductory Winemaking
- Assessment: practicals, reports, written assignments, exam

Principles and practices of wine clarification and stabilisation. Protein, tartrate, metal, colour oxidative, and microbiological stability and stability testing of wine. Wine clarification by means of settling, centrifugation, filtration and fining.

## OENOLOGY 7019WT

## Sensory Studies

- 3 units - semester 2
- Up to 6 hours per week including lectures, tutorials, practicals
- Assessment: practical report, tasting tests, group oral presentation, written exam

This course provides a scientifically based introduction to sensory evaluation and its relationship to the winemaking process, and promotes the development of technically accurate wine assessment skills. The physiology of taste receptors, olfaction and the structure of oral mucosa are examined. Recent advances in knowledge, including the function of signal transduction molecules and protein structure are used to explain current models of flavour, astringency and taste perception. Basic flavour chemistry of grapes and wine is introduced. An introduction to sensory measurement theory, psychophysics, aroma and taste interactions, threshold measurement, and the psychological and physiological factors affecting perception is presented. The concept of adaptation and its application to the sensory evaluation of wines, and elements of good sensory practice including data collection and statistical analysis are described. The practical program will be used to develop basic skills in sensory assessment of wines leading to the interpretation of wine characteristics in terms of wine style and quality. This is achieved by a progressive development of sensory skills, using model solutions to depict basic tastes and their interaction, followed by a detailed examination of white and red table, fortified and sparkling wines.

## OENOLOGY 7022WT

## Cellar and Winery Waste Management

- 3 units - semester 1
- Up to 8 hours per week (including lectures, practicals, field trips)
- Prerequisite: OENOLOGY 7028WT Introductory Winemaking
- Corequisite: OENOLOGY 7047WT Winemaking at Vintage
- Assessment: final exam, practical reports \& tutorial papers

Vintage planning; occupational health and safety, winery record keeping; microbial control, cellar hygiene; winery waste management, environmental management.

## OENOLOGY 7028WT

## Introductory Winemaking

- 3 units - semester 2
- Up to 6 hours per week, including lectures, practicals
- Assessment: practical reports, written assignments, written exam

Introduction to the Australian wine industry. Chemistry and unit processes of winemaking. Production of table wines, including dry floral fruity white, full bodied white, sweet white, rose, medium and full bodied red wines.

## OENOLOGY 7038WT

## Distillation, Fortified and Sparkling Winemaking

- 3 units - semester 2
- Up to 6 hours per week, including lectures, practicals - some practical components may be held in mid semester break
- Prerequisite: OENOLOGY 7028WT Introductory Winemaking, OENOLOGY 2022WT Sensory Studies, OENOLOGY 3016WT/7022WT Cellar and Winery Waste Management
- Assessment: practical reports, assignments, written exam

Distillation principles and wine distillation practices. Production of Australian and overseas grape spirits for fortified wine and brandy production. Production of potable distilled beverages other than brandy. Legal requirements of fortified wine production and distillation. Production of Australian and overseas sparking wine styles. Sensory evaluation of spirits, fortified and sparkling wines.

## OENOLOGY 7040WT

## Sensory Evaluation of Foods

- 3 units
- 2 lectures, 1 practical per week
- Assessment: to be advised

The role of sensory evaluation in marketing of food and beverages, physiological and psychological factors affecting sensory perception, relationships between sensory properties and product acceptability, measurement of sensory perception, design and conduct of sensory evaluation experiments, difference testing, preference testing, panel selection procedures, taste and aroma profiling, texture profiling, shelf life determination, sensory quality control, product development and optimisation, strategies for developing sensory evaluation programs. A range of food and beverage products will be assessed using the techniques and principles present in the lecture program.

## OENOLOGY 7045WT <br> Industry Experience (Oenology) A

- 4 units
- 10 weeks work experience
- Prerequisite: OENOLOGY 3011WT Winemaking, OENOLOGY 3016WT Cellar and Winery Waste Management
- Assessment: written diary, written report, poster presentation

This course is largely practically orientated, based on work experience at a commercial winery during vintage. A specified level of proficiency in the following operations is expected: grape receival and weighbridge; crushing; draining and pressing; fermentation and postfermentation operations and quality control procedures. Furthermore, an understanding of the contribution of each of the specified unit operations to the overall winemaking process is required.

## OENOLOGY 7046WT

## Fermentation Technology

- 3 units - semester 2
- Average 8 hours per week including lectures, tutorials, practicals, field trips
- Eligibility: Grad.Cert/Grad.Dip/Masters Oenology students
- Corequisite: OENOLOGY 7028WT Introductory Winemaking, OENOLOGY 7019WT Sensory Studies
- Assessment: exam, written work, practical reports, group oral presentations
This practical course provides students with the opportunity to gain hands on winemaking experience that expands on areas of fermentation technology and preparation of wine for bottling post vintage. The course introduces students to the planning and managing of winemaking strategies, and importantly complements the theory covered in the other wine technology courses for table wine production. Another objective of this course is to help students make a considerable progression in the development of their wine sensory evaluation skills


## OENOLOGY 7047WT

## Winemaking at Vintage

- 3 units - semester 1
- Up to 8 hours per week
- Eligibility: Grad.Cert/Grad.Dip/Masters Oenology, Grad.Dip/Masters Viticulture students
- Prerequisite: OENOLOGY 7028WT Introductory Winemaking, OENOLOGY 7019WT Sensory Studies
- Corequisite: OENOLOGY 7022WT Cellar and Winery Waste Management

This practical course provides students with the opportunity to gain hands on winemaking experience over the vintage period. The course introduces students to the planning and managing of winemaking strategies. It covers all aspects of grape processing, white juice preparation and red wine fermentation and is designed to complement the theory covered in the other wine technology courses for table wine production. This course also aims to help students make a considerable progression in the developments of their wine sensory evaluation skills.

## OENOLOGY 7048WT

## Advances in Oenology

- 3 units - semester 2
- Up to 6 hours per week (including lectures, practicals, field trips)
- Assumed Knowledge: OENOLOGY 7028WT Introductory Winemaking
- Assessment: written exam, reports on practical exercises, industry visits

Current research and practices in oenology. Particular emphasis will be placed on grape and wine phenolics and flavour compounds; methods of analysis in wine science; yeast biochemistry including nutrition, sugar transport, nitrogen and organic acid metabolism, ethanol toxicity, sulfur dioxide production and tolerance, yeast aroma compounds; the malolactic fermentation - biochemical and molecular approaches. Wine industry visits will focus on modern practices and recent developments to increase production efficiencies and wine quality.

## PHARMACOLOGY

## PHARM 5001EX

## Bio-behavioural Aspects of Drug Use

- 4 units - trimester 1,2 or 3
- Flexible learning mode
- Eligibility: Grad Cert, Grad Dip, M.A \& D St. students
- Assessment: exam

Students will learn how drugs affect the body, how they affect behaviour, why addiction occurs and what aspects of genetics, personality and social circumstances predispose to drug problems. The major drug classes to be considered are opioids, benzodiazepines, alcohol, psychomotor stimulants, 'party drugs', nicotine, caffeine, hallucinogens, cannabis and solvents. Pharmacodynamics and pharmacokinetics of the above drug classes, drug detection in body fluids and interpretation will be included.

## PHARM 5002EX

## Management of Drug Problems

- 4 units - trimester 1, 2 or 3
- Flexible learning mode
- Eligibility: Grad Cert, Grad Dip, M.A \& D St. students
- Assessment: exam, assignment; relative weights to be advised at commencement of teaching

This course will introduce students to a the full range of treatments for drug problems, from management of overdoses to substitution treatment, psychosocial interventions and withdrawal management. Methods of assessment suitable for a variety of situations and drug problems will also be covered.

## PHARM 5003EX

## Law, Policy and Prevention

- 4 units - trimester 1, 2 or 3
- Flexible learning mode
- Eligibility: Grad Cert, Grad Dip, M.A \& D St. students
- Assessment: Exam, assignments; relative weights to be advised at commencement of teaching

This course will cover drug-related crime, drug use prevention and education strategies, and current national policies on alcohol, tobacco and illicit drugs.

## PHARM 5004EX

Development of Drug Problems

- 4 units - trimester 1, 2 or 3
- Flexible learning mode
- Eligibility: Grad Dip, M.A \& D St. students
- Assessment: exam, assignments; relative weights to be advised at commencement of teaching

This course will examine the factors that lead to problematic drug use. These include biological, behavioural and social factors. Epidemiology of drug use and of drug-related problems will be discussed, together with drug problems in youth and indigenous Australians.

## PHARM 5005EX

## Community Responses and Interventions

- 4 units - trimester 1, 2 or 3
- Flexible learning mode
- Eligibility: Grad Dip, M.A \& D St. students
- Assessment: exam, essay; relative weights to be advised at commencement of teaching

This course will examine contrasting approaches to drug problems. At the community level, public health and legal responses to drug problems will be examined. At the individual level basic approaches to intervention will be reviewed with an emphasis on communication skills. Issues associated with co -occurance of mental health and drug issues will be discussed.

## PHARM 5006EX

Professional Study

- 4 units - trimester 1, 2 or 3
- Flexible learning mode
- Eligibility: Grad Dip, M.A \& D St. students
- Assessment: project report

Students will be required to analyse the role of drug and/or alcohol issues in their workplace or, through an attachment, in some other workplace and then to develop solutions to current problems. Data or other information will be collected to form the basis of a report on a topic approved by the course coordinator

## PHARM 7001EX

## Principles of Drug Action

- 4 units - trimester 1, 2 or 3
- Flexible learning mode
- Eligibility: Grad Dip, M.A \& D St. students
- Assessment: exam

This course will provide an introduction to the pharmacology of alcohol and other drugs of dependence. It will cover general principles of drug action as well as the pharmacology of specific drugs and drug classes. Also included will be material on drug interactions and pharmacological mechanisms of drug tolerance and dependence.

## PHARM 7002EX

## Aetiology of Drug Problems

- 4 units - trimester 1, 2 or 3
- Flexible learning mode
- Eligibility: Grad Dip, M.A \& D St. students
- Assessment: exam, case reports; relative weights to be advised at commencement of teaching

This course will examine the factors that predispose to problematic drug use. This will include the individual and social factors that can result in the development of drug problems. Epidemiology of drug use and of drug-related problems will be discussed, together with drug problems in specific populations.

## PHARM 7003EX

## Treatment Principles and Practice I

- 4 units - trimester 1, 2 or 3
- Flexible learning mode
- Eligibility: Grad Dip, M.A \& D St. students
- Assessment: exam, case reports; relative weights to be advised at commencement of teaching

This course will provide an overview of both assessment of patients with alcohol and drug problems and the options for treatment that are available. It will also include management of biomedical problems associated with alcohol and drug use including management of withdrawal, overdose and associated medical conditions.

## PHARM 7004EX

## Treatment Principles and Practice II

- 4 units - trimester 1, 2 or 3
- Flexible learning mode
- Eligibility: Grad Dip, M.A \& D St. students
- Assessment: exam, assignments; relative weights to be advised at commencement of teaching
This course will focus on psychosocial interventions appropriate for people with alcohol and drug problems. While a range of approaches will be covered, emphasis will be on behavioural therapies developed for the treatment of alcohol and drug problems. Topics will include relapse prevention, controlled drinking, family therapy and brief intervention. Psychiatric problems associated with alcohol and drug use will also be covered.


## PHARM 7005EX

## Public Health Principles and Drug Use

- 4 units - trimester 1, 2 or 3
- Flexible learning mode
- Eligibility: Grad Dip, M.A \& D St. students
- Assessment: exam, essay; relative weights to be advised at commencement of teaching
The public health perspective will be employed to examine how policy influences drug use and drug problems in our society. Issues to be covered include health promotion in the drug and alcohol area, supply and demand reduction and community action.


## PHARM 7006EX

## Practicum and Project

- 4 units - trimester 1,2 or 3
- Flexible learning mode
- Eligibility: Grad Cert, Grad Dip, M.A \& D St. students
- Assessment: case studies; relative weights to be advised at commencement of teaching

Students will be required to submit a number of case studies that show how they can apply what they have learned to clinical practice. It also offers them the flexibility to choose an area of interest in the alcohol and drug field where they wish to gain additional experience, or practice particular techniques, or improve their skills. Students may undertake the practicum within their own professional environment or choose to participate in some activity that is outside their current practice in order to gain some experience in an area that is relatively new to them.

## PHARM 7009AEX/BEX

## Alcohol \& Drug Studies Dissertation (F/T)

- 24 units - full year
- Flexible Learning Mode
- Eligibility: Master of Alcohol \& Drug Studies students only
- Prerequisite: Completion of Master of Alcohol \& Drug Studies coursework
- Assessment: dissertation

This course needs to be undertaken over two semester to fuffil the requirements of the dissertation. The student is required to identify a research question or problem and carry out a research project which is either experimentally based or is a case study series. The dissertation should include a thorough literature review, appropriate methodology as well as presentation and interpretation of results.

## PHILOSOPHY

## PHIL 5000

Applied Ethics

- 6 units - semester 2
- Eligibility: Postgraduate coursework students
- Assessment: 8000 word essay

This course is a Masters level introduction to ethics and its application to various controversial issues. Students will be introduced to the major approaches in normative ethics - theories which focus on the consequences of actions, on peoples' rights and duties, or on good moral character - and the main points of difference between them. This will give students some essential
tools with which to tackle issues in applied ethics and provide insight into the influence of normative positions in debates about controversial moral questions.

The course will then apply these normative tools to a series of current issues of significance in applied ethics. Topics will include debates in medical ethics and bioethics (genetic technologies and aspects of health care in Third World countries), media ethics, the ethics of communication and negotiation, and Economic Rationalism. The aim will be to identify what is at stake in these debates, revealing the underlying theoretical issues that must be resolved and helping students to clarify and defend their own ethical views.

The course will be taught by a team bringing together expertise in ethics and relevant professions from a range of disciplines in the three South Australian universities.

## PHIL 5003

## Cognitive Science: Minds, Brains and Computers

- 3 units - semester 1
- Assessment: $2 \times 2500-3000$ word essays $50 \%$ each

This course provides a Masters level introduction to the philosophical foundations of Cognitive Science, which is a relatively new inter-disciplinary field of study that embraces aspects of philosophy, psychology, computer science and neuroscience. Topics to be discussed include: the computer as a model of the mind; classical (digital) and connectionist (analog) computational theories of cognition; the science and philosophy of perception; psychopathology, including delusions and schizophrenia; and the role of the emotions in cognition.

## PHYSICS

## PHYSICS 7002

## Advanced Astrophysics

- 3 units - semester 1 or 2

A survey of the Universe at all scales and wave lengths/energies. Studies of the interstellar medium and magnetic fields. Cosmic ray acceleration and propagation; pulsars, gamma-ray astrophysics; radio and x-ray astronomy.

## PHYSICS 7003

## Advanced Atmospheric and Environmental Physics

- 3 units - semester 1 or 2

A review of radiation and fluid dynamics including the role of waves in planetary atmospheres and ionospheres.

## PHYSICS 7004

## Advanced Electromagnetism

- 3 units - semester 1 or 2

Boundary value problems, with applications to electrostatics and magnetostatics, time varying fields, and radiating systems.

## PHYSICS 7007

## Experimental Methods

- 3 units - semester 1

An introduction to statistical and Fourier techniques, with applications to experimental design and data analysis.

## PHYSICS 7008

## Gauge Theory

- 3 units - semester 2

An introduction to quantised non-Abelian gauge theories, including Feynman diagrams, weak models, and quantum chromodynamics.

## PHYSICS 7009

## General Relativity

- 3 units - semester 1

An outline of differential geometry with applications to General Relativity, including the Schwartzchild solutions, weak fields and gravitational waves

## PHYSICS 7010

## Laser Physics and Non-Linear Optics

- 3 units - semester 1

A review of laser physics and an introduction to non-linear optical phenomena with applications.

## PHYSICS 7011

## Nuclear and Radiation Physics

## - 3 units - semester 1

Production, transmission and measurement of ionising radiation, with medical and environmental applications, taught from experimental viewpoint.

## PHYSICS 7012

## Nuclear Theory and Particle Physics

- 3 units - not offered in 2006

A discussion of local gauge theories and particularly quantum chromodynamics, with applications.

## PHYSICS 7013

Quantum Field Theory

- 3 units - semester 1

Photons and the electromagnetic field, Lagrangian field theory and Klein-Gordon field, the Dirac field and photons: co-variant theory, the S-matrix expansion, Feynman diagrams and rules in OED; OED processes in lowest order, radiative corrections.

## PHYSICS 7014

## Relativistic Quantum Mechanics \& Particle Physics

- 3 units - semester 1

Relativistic wave equations, including Dirac equations, spinors, and introduction to field quantisation.

## PHYSICS 7015

## Statistical Mechanics and Many Body Theory

- 3 units - not offered in 2006

A review of the aims and methods of classical and quantum statistical mechanics, with emphasis on the application of lattice models to phase transitions, and the simulation of quantum field theories.

## PHYSICS 7016

Research Project (M.Sc. Physics)

- 12 units - semester 1 or 2

Supervised research project, usually in the same area as the advanced topic selected for Advanced Topic in Physics (below).

## PHYSICS 7017

## Advanced Topic in Physics

- 6 units - semester 1 or 2

Supervised reading: a review of contemporary developments and research in applied physics, astrophysics, atmospheric physics, optics and lasers or theoretical physics.

## PHYSICS 7024

## Topics in Mathematical Physics A

- 3 units - semester 1

Supervised reading: a review of contemporary developments and research in mathematical physics.

## PHYSICS 7025

## Topics in Mathematical Physics B

- 3 units - semester 2

Supervised reading: a review of contemporary developments and research in mathematical physics.

## PHYSICS 7026

## Computational Physics

- 2 units - semester 1
- 2 lectures per week, 1 hour tutorial per week
- Prerequisite: either PHYSICS 2000A/B Physics II or PHYSICS 2100 Physics IIA or PHYSICS 2004 Introductory Quantum Mechanics \& Applications II and APP MATHS 2000 Differential Equations and Fourier Series
- Assumed Knowledge: APP MTH 1000 Scientific Computing or COMP SCI 1008 Computer Science IA or equivalent
- Assessment: Assignments, exam

This is a hands-on course which provides an introduction to computational methods in solving problems in physics using the package Mathematica. It teaches programming procedures such as logical statements, conditional statements, loops and modules and covers basic mathematical methods such as root finding, integration and solving differential equations, together with methods of linear algebra, both approximately and exactly (i.e. symbolically). These computational methods are applied to problems in physics, including the modelling of classical physical systems and to quantum mechanics, as well as to data analysis such as linear and nonlinear fits to data sets. Applications of high performance computing are included where possible, such as an introduction to parallel computing and also to visualisation techniques.

## PHYSICS 7027

## Electromagnetism and Optics

- 3 units - semester 1
- 3 lectures, approx. 1 tutorial per week
- Prerequisite: PHYSICS 2100 Physics IIA and PHYSICS 2200 Physics IIB
- Assumed Knowledge: APP MTH 2000 Differential Equations and Fourier Series and APP MTH 2002 Vector Analysis and Complex Analysis, PHYSICS 2002 Classical Fields and Mathematical Methods II
- Restriction: PHYSICS 3018 Electromagnetism III, PHYSICS 3019 Physical Optics III

Electrostatics and potential, magnetostatics and vector potential, Maxwell's equation, electromagnetic boundary conditions,
electromagnetic wave equation, waveguides, energy in electromagnetism, Poynting's theorem. Interaction of electromagnetic waves with media, Lorentz electron oscillator, reflection and refraction at interfaces, multi-layer dielectric coatings, polarisation and birefringence. Solutions of wave equation, numerical beam propagation, Fresnel-Kirchhoff integral, Fresnel diffraction, Fraunhofer diffraction, Fourier optics, Array theorem, Abbe's theory of imaging, apodization, amplitude and phase spatial filtering.

## PHYSICS 7028

## Experimental Physics

- 3 units - semester 2
- 8 hours practical work per week
- Prerequisite: either PHYSICS 2000A/B Physics II or PHYSICS 2100 Physics IIA and PHYSICS 2200 Physics IIB
- Assessment: laboratory work, report on selected experiment, open \& closed book tests

Laboratory experiments in selected areas including atomic and nuclear physics, optics and electromagnetism, plus a practical analogue electronics course.

## PHYSICS 7030

## Quantum Mechanics A

- 3 units - semester 1
- 3 lectures, approx. 1 tutorial per week
- Prerequisite: either PHYSICS 2000A/B Physics II or PHYSICS 2100 Physics IIA or PHYSICS 2004 Introductory Quantum Mechanics \& Applications II and APP MATHS 2000 Differential Equations \& Fourier Series
- Assessment: exam, class exercises, tests

This course develops concepts in quantum mechanics such that the microscopic properties of matter can be understood from a fundamental point of view. Topics include: review of the Schrodinger equation, operators, eigenfunctions, compatible observables; Fourier methods and momentum space; Ehrenfest's theorem; one-dimensional scattering and bound states, unitary Smatrix; Periodic systems, energy bands; harmonic oscillator in one and three dimensions; Dirac bra-ket notation, Uncertainty Principle; orbital angular momentum and spin, hydrogen atom, identical particles, atoms; perturbation theory.

## PHYSICS 7032

## Advanced Dynamics and Relativity

- 3 units - semester 2
- 3 lectures, approx. 1 tutorial per week
- Prerequisite: either MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I); PHYSICS 2002 Classical Fields and Mathematical Methods II or PHYSICS 2000A/B in 2002 \& 2003; PHYSICS 2001 Classical Mechanics II
- Assessment: class exercises, exam

Mechanics: Lagrangian mechanics, variational techniques, conservation laws, Noether's theorem, small oscillations, Hamiltonian mechanics, Poisson brackets. Relativity: space-time vectors and tensors, relativistic mechanics, electrodynamics, fieldstrength tensor, Lienard-Wiechert potentials.

## PHYSICS 7035

## Statistical Mechanics

- 2 units - semester 1
- 2 lectures per week, 1 tutorial per fortnight
- Prerequisite: PHYSICS 1000A/B Physics I (Pass Div I) or PHYSICS 1100 Physics IA \& PHYSICS 1200 Physics IB; MATHS 1012 Mathematics IB (Pass Div I) or MATHS 2004 Mathematics IIM (Pass Div I)
- Assumed Knowledge: PHYSICS 2000A/B Physics II or PHYSICS 2100 Physics IIA and PHYSICS 2200 Physics IIB and APP MTH 2000 Differential Equations and Fourier Series
- Assessment: exam, assignments

This course introduces concepts essential for the understanding of both classical and quantum statistical mechanics. Topics covered include the classical laws of thermodynamics and their application, postulates of statistical mechanics, statistical interpretation of thermodynamics, microcanonical, canonical and grand canonical ensembles. The methods of statistical mechanics are then used to develop the statistics for Bose-Einstein, Fermi-Dirac and photon gases. Selected topics from low temperature physics and electrical and thermal properties of matter will be discussed.

## PHYSICS 7040

## Astrophysics

- 2 units - semester 1
- 2 lectures per week, approx. 1 tutorial per fortnight
- Prerequisite: either PHYSICS 2000A/B Physics II or PHYSICS 2100 Physics IIA and PHYSICS 2200 Physics IIB
- Assessment: written exam, marked assignments

A survey of the universe at all scales and wave lengths/energies. Stellar astrophysics and studies of the interstellar medium and magnetic fields. Binary systems, x-ray binaries, active galactic nuclei. Gamma-ray astrophysics; radio and x-ray astronomy. Cosmic ray acceleration and propagation. Introductory cosmology.

## PHYSICS 7041

## Atmospheric \& Environmental Physics

- 2 units - semester 2
- 2 lectures per week, approx. 1 tutorial per fortnight
- Prerequisite: either PHYSICS 2000A/B Physics II or PHYSICS 2100 Physics IIA \& PHYSICS 2200 Physics IIB
- Assessment: written exam, marked assignments

The course is an introduction to the physics of planetary atmospheres, with a focus on the earth's atmosphere including environmental and climate issues. Topics will include radiative transfer in the sun-earth system, thermodynamics of the atmosphere, cloud physics, atmospheric motions and circulation, the role of aerosols and minor constituents, such as water vapour, carbon dioxide and ozone, in determining climate, and the impact on the environment of anthropogenic actions

## PHYSICS 7042

## Electromagnetism

- 2 units - semester 1
- 24 lectures, 4 tutorials
- Prerequisite: either PHYSICS 2000A/B Physics II or PHYSICS 2100 Physics IIA \& PHYSICS 2200 Physics IIB
- Assumed Knowledge: APP MTH 2002 Vector Analysis and Complex Analysis
- Restriction: PHYSICS 7027 Electromagnetism and Optics III, PHYSICS 7044 Physical Optics III
- Assessment: exam, continuous assessment of tutorial work

Electrostatics and potential, magnetostatics and vector potential, Maxwell's equation, electromagnetic boundary conditions, electromagnetic wave equation, waveguides, energy in electromagnetism, Poynting's theorem.

Interaction of electromagnetic waves with media, Lorentz electron oscillator, reflection and refraction at interfaces, multi-layer dielectric coatings, polarisation and birefringence.

## PHYSICS 7043

## Photonics

- 2 units - semester 2
- 2 lectures per week, approx. 1 tutorial per fortnight
- Prerequisite: either PHYSICS 2000A/B Physics II or PHYSICS 2100 Physics IIA \& PHYSICS 2200 Physics IIB; PHYSICS 2009 Photonics II
- Assessment: exam, continuous assessment of tutorial work

Interaction of light with matter, time dependent perturbation theory, stimulated and spontaneous emission and absorption, stability of resonators, mode matching, advanced laser resonators, macroscopic description of the gain medium, rate equations, gain saturation and broadening, hole burning, MOPA's, CW lasers, optimum output coupling, injection-locking, frequency stabilisation, pulsed lasers, gain switching, 0 -switching, injection-seeding, transform limit, pulse chirping, mode-locked lasers, semiconductor lasers, fibre lasers, fibre Bragg gratings, fibre couplers, WDM's. Lasers: ruby, chemical, solid state, dye, excimer, ion, CO2. Laser safety.

## PHYSICS 7044

Physical Optics

- 2 units - semester 1
- 24 lectures, 4 tutorials
- Prerequisite: either PHYSICS 2000A/B Physics II or PHYSICS 2100 Physics IIA \& PHYSICS 2200 Physics IIB
- Assumed Knowledge: PHYSICS 7042 Electromagnetism III, APP MTH 2002 Vector Analysis and Complex Analysis
- Restriction: PHYSICS 7027 Electromagnetism and Optics III, PHYSICS 7042 Electromagnetism III from 2006
- Assessment: exam, continuous assessment of tutorial work Interaction of electromagnetic waves with media, Lorentz electron oscillator, reflection and refraction at interfaces, multi-layer dielectric coatings, polarisation and birefringence.

Solutions of wave equation, numerical beam propagation, FresnelKirchhoff integral, Fresnel diffraction, Fraunhofer diffraction, Fourier optics, Array theorem, Abbe's theory of imaging, apodization, amplitude and phase spatial filtering.

## PHYSICS 7102

## Mathematical Physics Diploma Project A

- 4 units - semester 1 or 2
- Assessment: report \& seminar

Supervised research project in mathematical physics.

## PHYSICS 7200

## Diploma Project (Physics) B

- 6 units - semester 2
- Assessment: research project, report and seminar

Supervised research project in physics.

## PHYSICS 7202

## Mathematical Physics Diploma Project B

- 2 units - semester 1 or 2
- Assessment: research project, report and seminar

Supervised research project in mathematical physics.

## PHYSICS 7207

## Quantum Mechanics B

- 2 units - semester 2
- 2 lectures per week, 1 tutorial per fortnight
- Prerequisite: PHYSICS 7030 Quantum Mechanics IIIA, APP MTH 2000 Differential Equations and Fourier Series and APP MTH 2002 Vector Analysis and Complex Analysis
- Restriction: PHYSICS 7031 Advanced Quantum Mechanics or PHYSICS 7207 Applied Quantum Mechanics III
- Assessment: exam, assignments

This course extends the formalism and applicability of quantum mechanics to include time-dependent phenomena and various approximation methods. Dirac's formulation of quantum mechanics, measurement, Bell's inequality. Symmetry and conservation laws, time reversal, rotations and angular momentum, L-S and $j-j$ coupling in atoms and nuclei. Radiation, external fields. Scattering, partial waves, density matrix, S-matrix.

## PHYSICS 7100

## Diploma Project (Physics) A

- 6 units - semester 1
- Assessment: Report \& seminar

Supervised research project in physics.

## PLANT SCIENCE

## PLANT SC 7004WT

Mineral Nutrition of Plants

- 3 units - semester 2
- 2 lectures, 4 hours practicals a week
- Prerequisite: PLANT SC 2001WT Agricultural Botany, ENV BIOL 2003 Botany II; or APP ECOL 1003RW Biology of Plants and Animals; or equiv
- Assessment: to be advised

An advanced course which takes its brief from the acute deficiency in minerals of most South Australian soils, and the pre-eminent role of nutrition in successful agricultural production in this State. Topics are discussed in a context of both agricultural and horticultural industries, and include factors affecting nutrient acquisition by roots, diagnosis and correction of macro and micronutrient problems, fertiliser strategies, nutritional effects on produce quality, including nutritional quality, nutrition and disease resistance, genetic control of adaptation to nutrient limitations in soils, the role of symbiotic dinitrogen fixation, nutritional aspects of nitrogen fixation. A practical component supplements the lectures by providing hands on experience of the important issues.

## PLANT SC 7005WT

## Introductory Plant Breeding

- 3 units - semester 1
- 2 lectures, 4 hours practicals a week
- Assumed Knowledge: ANIML SC 2029WT Genes and Inheritance or GENETICS 2000A/B Genetics II or APP ECOL 1004RW Cell Biology and Genetics
- Restriction: PLANT SC 3007WT Introductory Plant and Animal Breeding
- Assessment: to be advised

This course provides an introduction to the principles of plant breeding and their application to plant improvement in broadacre agriculture and horticulture. The lectures will cover the various steps in the development of a new cultivar, from the initial stages of defining objectives and breeding strategies to the commercial development of superior germplasm. The fundamental concepts of plant breeding that will be discussed include: genetic diversity and modes of inheritance; strategies for setting objectives and maximising selection and improvement of key traits; breeding methodologies for self and cross pollinated plants and perennials, field evaluation of germplasm, cultivar release and recommendations. Some of the recent trends in plant breeding, such as the applications of new technologies and the growing importance of intellectual property will also be discussed. The course is essential for students wanting to pursue a career in plant
breeding or who will be involved in areas of agriculture and horticulture that involve making recommendations on varieties.

## PLANT SC 7011WT

 Advanced Plant Breeding- 3 units - semester 2
- Prerequisite: PLANT SC 7005WT Introductory Plant Breeding
- Assessment: to be advised

This course builds on the ideas presented in Introductory Plant Breeding. The course aims to provide the necessary theoretical and practical background for students who are interested in pursuing plant breeding as a career or who want to learn about plant breeding in detail. The course covers the following areas: analysis of GxE interactions, breeding for quality characteristics including breeding for improved nutritive value of staple foods, breeding for disease resistance, breeding to address environmental problems such as salinity and the application of molecular markers to breeding. The international nature of plant breeding will be highlighted. There will be a number of field excursions and industry visits during the course to demonstrate the principles discussed in the lectures.

## PLANT SC 7012WT

## Biotechnology in the Food and Wine Industries

- 2 units - semester 1
- Assumed Knowledge: BIOCHEM 2106 Biochemistry II (Biotechnology) or equivalent
- Assessment: practical reports 30\%, presentation $10 \%$, written exam 60\%

Application of biotechnology in the food and wine industry: use of recombinant DNA methods in manipulation of bacteria and yeast cultures; transgenic plants with improved traits and products with better quality, enzyme engineering for efficient food processing and production, non-alcoholic and alcoholic fermentations, food additives. Ethical issues and limitations of the gene manipulation technology will also be discussed.

## PLANT SC 7013WT

## Plant Molecular Biology

- 6 units - semester 2
- 3 lectures, tutorial, 8 hours practicals a week
- Prerequisite: BIOCHEM 2106 Biochemistry II (Biotechnology) A, ANIML SC 2029WT Genes and Inheritance or BIOCHEM 2000A/B Biochemistry II or equivalent
- Assessment: practicals 20\%, tutorial projects 10\%, research plant \& review $20 \%$, final exam $50 \%$

This course provides a current review of our knowledge in plant development, environmental responses and plant-microbe interactions. There is an emphasis on the molecular mechanisms directing plant gene expression under diverse environmental and developmental stimuli. This knowledge is central to our ability to modify plant responses and properties for commercial gains in biotechnology and agriculture. Areas covered in the course include: plant genes and genomes; mechanisms that control plant gene expression; molecular-genetic analysis of important characteristics; signal transduction; molecular biology of plant development, reproduction, and responses to disease and other environmental factors. In the laboratory classes, students will perform some of the techniques currently used to generate plant molecular biology information and undertake a research project related to current research in plant molecular biology and biotechnology.

## PLANT SC 7020WT

## Integrated Pest Management in Practice

- 3 units - summer semester
- 19 hours x 3 weeks (Intensive)
- Eligibility: Grad Cert/Grad Dip/Master of Plant Health; other students by approval of program coordinator
- Assumed Knowledge: PLANT SC 7201WT Foundations of Plant Health
- Assessment: final exam 50\%, tutorials, assignments \& reports 50\%

This course considers some key factors in the development and implementation of integrated pest management practices. It considers key pest management practices including pest identification, sampling and decision-making, pesticide chemistry and application, and the design and evaluation of integrated pest management programs.

## PLANT SC 7120WT

## Molecular Diagnostic Methods in Plant Health

- 3 units - semester 1
- 20 hours x 3 weeks (Intensive)
- Eligibility: Grad Cert/Grad Dip/Masters in Plant Health; other students by approval of program coordinator
- Assumed Knowledge: PLANT SC 7220WT Foundations of Plant Health
- Assessment: final exam 50\%, practical \& site visit protocols, project reports 50\%

Molecular and biochemical diagnostic methods target unique components of plant pathogens. These methods are now critical for the accurate identification of all disease agents. They have the advantages of sensitivity, reliability, efficiency and speed. They currently complement classical diagnostic methods but in some
cases are the only practical way to identify pathogens. They utilise the principles of molecular biology and therefore new techniques are constantly evolving. This course will explain the principles of the use of immunology and pathogen genome nucleotide sequence information in plant pathogen diagnosis. Practical work in immunology will include a range of antibody-based diagnostic tests, and students will be encouraged to compare various methods for relevance to a number of problems. Practical work in nucleic acid based methods will include hybridisation, PCR, sequence comparisons, again with an evaluation of the appropriateness of specific techniques for addressing specific problems in pathogen diagnosis.

## PLANT SC 7121WT

## Biosecurity and Incursion Management

- 3 units - semester 1
- 20 hours x 3 weeks (Intensive)
- Eligibility: Grad Cert/Grad Dip/Master of Plant Health; other students by approval of program coordinator
- Assumed Knowledge: PLANT SC 7220WT Foundations of Plant Health
- Assessment: final exam 50\%, tutorials, assignments, reports 50\%

Natural and agricultural ecosystems are under siege by many harmful species of plants, animals and diseases. This course deals with emergency plant pests and biosecurity issues related to the biological characteristics of invasive species, dis-infection and hygiene in trade, surveillance and detection of exotic organisms, quarantine, risk assessment and risk management, and the containment and eradication of exotic organisms. The students will examine case studies, where invasions threaten biological diversity by causing population declines of native species and agricultural production systems. Particular emphasis is on the fact that the problem is a global one and that the exotic species problem is neither trivial nor transitory. Students will learn how to employ and integrate new methods from a large management tool box: eradication, containment, biocontrol, monitoring, and, most importantly, prevention. Strong emphasis is on mathematical approaches to risk management, decision-making tools and normative and specialised risk analysis. The course will review and discuss existing and emerging legislation and regulatory controls, the role of national and international agencies and the function of networks in extension disaster education.

## PLANT SC 7122WT

Management and Regulation in Plant Health

- 3 units - semester 1
- 6 lectures, 3 class exercises, 1 site visit per week/3 weeks
- Eligibility: Grad Cert/Grad Dip/Master of Plant Health, other students by approval of program coordinator
- Assumed Knowledge: PLANT SC 7220WT Foundations of Plant Health
- Assessment: major project 50\%, tutorials, reports 50\%

This course will consider the legislative and regulatory frameworks that influence plant health in Australia and internationally. This will include Australia's obligations under international treaties and protocols as well as national regulations such as the weed risk assessment process. Students will consider issues surrounding of market access for plant products, including the management of quarantine. The course will also cover risk management for genetically modified crops including protocols used in Australia and other countries. Students will conduct a major project focussed on a current problem of their choice in quarantine, market access or risk management of genetically modified organisms.

## PLANT SC 7123WT

Applications of Plant Biotechnology in Production

- 3 units - semester 1
- 8 hours per week over 6 weeks
- Eligibility: Grad Cert/Grad Dip/Master of Biotechnology (Plant Biotechnology), other students by approval of program coordinator
- Assumed Knowledge: PLANT SC 7225WT Foundations of Plant Biotechnology and PLANT SC 7226WT Molecular Plant Breeding
- Assessment: reports, assignments

In addition to the currently commercial applications of plant biotechnology, such as insecticide synthesis and herbicide resistance, there is a large number of other potential applications of plant biotechnology to enhance plant productivity and quality. In this course, a range of potential applications will be investigated, and the implications of the deployment of this powerful technology discussed. The effects of biotechnology on reducing inputs and increasing or altering outputs will be covered. Yield increase and yield maintenance will be compared, and the influence of biotechnology on quality traits will be studied. Students will look at alterations in disease resistance, abiotic stress tolerance, crops for biofuels, and crops as future factories.

## PLANT SC 7124WT

## Applications of Plant Biotechnology

 in Health \& Nutrition- 3 units - semester 1
- 16 hours per week
- Eligibility: Grad Cert/Grad Dip/Master of Biotechnology (Plant Biotechnology), other students by approval of program coordinator
- Assumed Knowledge: PLANT SC 7225WT Foundations of Plant Biotechnology and PLANT SC 7226WT Molecular Plant Breeding
- Assessment: reports, assignments

Plant biotechnology has an extraordinary capacity to increase the quality of food, both by enabling the exploitation of existing variation more efficiently, and by generating novel variation beyond that available in extant gene pools. The most famous example of this is 'Golden Rice', where enhanced synthesis of beta-carotene in rice endosperm increased the nutritional value of milled rice. In this course, the range of these potential applications will be investigated, and the implications of the deployment of this powerful technology discussed. The effects of biotechnology on increasing micronutrient levels, increasing digestibility, decreasing pathogenicity, carcinogenic properties, diabetes prevalence, etc will be covered. The use of crops for production of pharmaceuticals, vaccines and other medically useful compounds will also be investigated.

## PLANT SC 7125WT

## Management, Commercialisation \& Regulation Plant Biotechnology

- 3 units - semester 1
- 15 hours per week
- Eligibility: Grad Cert/Grad Dip/Master of Biotechnology (Plant Biotechnology), other students by approval of program coordinator
- Assumed Knowledge: PLANT SC 7225WT Foundations of Plant Biotechnology
- Assessment: tutorials, assignments, reports

Plant biotechnology is seen by different groups as a potential source of substantial revenue, as a key tool in maintaining world food production, or as a potential cause of major environmental problems. This course will examine the issues related to revenue capture from plant biotechnology, in particular aspects of the generation and management of intellectual property including patents, plant breeders' rights and germplasm exchange. The risk management and regulation of plant biotechnology both within Australia and overseas will be covered and discussed in conjunction with related regulation on quarantine and food safety. This course will also consider the funding and management of plant biotechnology research and development. This will include funding from public and private sources, related issues of valuation of intellectual property and germplasm, and marketing.

## PLANT SC 7220WT

## Foundations of Plant Health

- 6 units - semester 2
- Lectures - 5hours; Group learning - 8hours; Practical - 6hours per week
- Eligibility: Grad Cert/Grad Dip/Masters Plant Health, other students by approval of program coordinator
- Restriction: PLANT SC 7225WT Foundations of Plant Biotechnology
- Assessment: final exam $30 \%$, mid-course exams $20 \%$, projectbased exercises 50\%

In this course, the interplay between the plant, environmental conditions and other organisms within the plant's environment will be explored with a particular emphasis on what organisms and abiotic stresses cause disease, how they cause disease, why that disease occurs and the economic, environmental and social implications of disease. Students will learn about resistance and tolerance strategies employed by the plants when challenged by biotic and abiotic stress. The subsequent induction of a wide variety of responses will be explored in this course and the use of this information to breed for tolerance and/or resistance to biotic and abiotic stresses will be discussed. The course also provides the biological information and background required to devise strategies to adapt to or avoid potentially crippling environmental stresses as well as to devise pest management strategies. Case studies on specific plant-pathogen interactions, plant-pest interactions, abiotic stresses, herbicide damage and interactions essential to plant health will be presented. The course will include a description of appropriate biometrical methods needed to design, summarise and analyse experiments and an introduction to the different forms of scientific communication available to present results to different target audiences.

## PLANT SC 7221WT

## Classical Diagnostic Methods in Plant Health

- 3 units - semester 2
- 20 hours x 3 weeks (intensive)
- Eligibility: Grad Cert/Grad Dip/Masters of Plant Health, other students by approval of program coordinator
- Assumed Knowledge: PLANT SC 7220WT Foundations of Plant Health
- Assessment: final exam 50\%, tutorials, assignments, reports $50 \%$

Plant health may be compromised by biotic factors, such as pathogens, arthropod pests and weeds, and by abiotic factors, such as nutrient deficiency and herbicide damage. This course focuses on the detection and diagnosis of diseases, arthropod pests and abiotic disorders in crops and natural ecosystems. Students will learn how to recognise symptoms and signs of damage in the field, assess the incidence and severity of the damage and collect appropriate samples for subsequent diagnosis in the laboratory. Laboratory-based diagnosis will involve detailed examination of specimens, including microscopic studies of symptomatic plant material and pests, where appropriate following incubation to induce sporulation of fungal pathogens. Methods for culturing microbial pathogens will be explored, including the use of selective media and the establishment and maintenance of pure cultures. Identification of pathogens and pests on the basis of morphology and, where appropriate, cultural characteristics, will be undertaken. Koch's postulates will be used to prove the
pathogenicity of selected organisms. Students will examine case studies of selected diseased and disorders. Throughout the course, attention will be given to the development of skills in verbal and written communication.

## PLANT SC 7222WT

## Advanced Pest Management Principles

- 3 units - semester 1
- 19 hours x 3 weeks (Intensive)
- Eligibility: Grad Cert/Grad Dip/Master of Plant Health, other students by approval of program coordinator
- Assumed Knowledge: PLANT SC 7220WT Foundations of Plant Health
- Assessment: final exam 50\%, tutorials, assignments, reports 50\%

Integrated pest management is founded on an understanding of the ecological, economic and sociological factors that influence pest populations and the effectiveness of management practices. This course considers fundamental ecological topics that including population dynamics of pest organisms, population modelling, and resistance of plants to pest attach. Non-chemical approaches to pest suppression such as biological controls, resistance plant varieties, cultural practices, mating disruption by pheromones, and sterile insect technique are covered in this course.

## PLANT SC 7223WT

## Extended Research Project (Plant Health)

- 24 units - semester 2
- Eligibility: Master of Biotechnology (Plant Biotechnology), Master of Plant Health
- Prerequisite: qualification for relevant Graduate Diploma
- Assessment: literature review 15\%, scientific manuscript 80\%, seminar presentation 5\%

This course focuses on a research project that is carried out over 10 months. Students also develop advanced communication skills in tutorial sessions. This aspect focusses on written and oral communication as they relate to the plans and results of the project. Each student reports the results of their research in a scientific manuscript for publication.

## PLANT SC 7224WT

## Research Project (Plant Health)

- 12 units - semester 2
- 3 hour tutorial
- Eligibility: Master of Biotechnology (Plant Biotechnology), Master of Plant Health
- Prerequisite: qualification for relevant Graduate Diploma
- Assessment: literature review \& project proposal $15 \%$, scientific manuscript $80 \%$, seminar presentation $5 \%$

This course focuses on a research project that is carried out over five months. Students also develop advanced communication skills in tutorial sessions. This aspect focuses on written and oral communication as they relate to the plans and results of the project. Each student reports the results of their research in a scientific manuscript for publication.

## PLANT SC 7225WT

Foundations of Plant Biotechnology

- 6 units - semester 2
-Lectures - 5 hours; Group Learning - 8 hours; Practical - 6 hours
- Eligibility: Grad Cert/Grad Dip/Masters of Plant Biotechnology, other students by approval of program coordinator
- Restriction: PLANT SC 7220WT Foundations of Plant Health
- Assessment: final exam 50\%, project-based exercises 50\%

In this course, students will explore the basic concepts central to understanding how genotype contributes to phenotype in plants. The emphasis will be on how factors at the cellular level contribute to the expression of genotypes and hence to phenotypic variation, and how plant breeding can be used to exploit genetic variation to develop and/or select genotypes that are superior for specific purposes. The course will provide an introduction to plant physiology, molecular biology, basic genetics and plant breeding. Students will learn how to use biotechnology to study genotypic and phenotypic variation with particular reference to the impact of the environment on resource capture, growth, development and reproduction in plants. Case studies for plant breeding strategies, gene expression/regulation and post-translational modification will be provided. The course will also include a description of appropriate biometrical methods needed to design, summarise and analyse experiments and an introduction to the different forms of scientific communication available to present results to different target audiences.

## PLANT SC 7226WT

## Molecular Plant Breeding

- 3 units - semester 2
- 19 hours
- Eligibility: Grad Cert/Grad Dip/Master of Biotechnology (Plant Biotechnology), other students by approval of program coordinator
- Assumed Knowledge: PLANT SC 7225WT Foundations of Plant Biotechnology
- Assessment: final exam 50\%, tutorials, assignments, reports 50\%

Plant molecular biology can be incorporated into crop improvement programs via plant transformation (gene technology) and/or via the
application of genetic marker information. Plant cell and tissue culture is used in plant transformation and has other applications in plant breeding. This course considers the scientific basis for the application of plant transformation, molecular markers and cell and tissue culture in plant breeding.

## PLANT SC 7227WT

Plant Genomics

- 3 units - semester 2
- 20 hours x 3 weeks intensive
- Eligibility: Master of Biotechnology (Plant Biotechnology), other students with permission of the program coordinator
- Assumed Knowledge: PLANT SC 7225WT Foundations of Plant Biotechnology
- Assessment: final exam 50\%, tutorials, assignments, reports 50\%

Students learn about the tools of genomics and can apply these tools to increase their understanding of plant function. Topics include: Accessing and utilising bioinformatics resources for plant biotechnology; Identification of candidate genes using genetic information (positional cloning), using biochemical and expression analysis (microarray analysis, proteomics, metabolomics); characterisation and functional analysis of candidate genes: transformation, mutant populations, knockout systems, heterologous expression systems, protein analysis.

## PSYCHOLOGY

## PSYCHOL 7002A/B

Research Project in Clinical Psychology

- 9 units - full year
- To be arranged with supervisor
- Prerequisite: 9842 Applied Methodology; first year of Master of Psychology
- Assessment: Dissertation will be examined as specified by Specific Academic Program Rule 3 of the Degree

An empirically-based research project on a topic of relevance to clinical and/or health psychology to be pursued under the control of the Psychology Department and under the guidance of one or more supervisors (at least one of whom shall be a member of the Psychology Department). The project should be structured so that students participate in all of the steps involved in the research including the formulation of the research question(s), the design of the study including the selection of appropriate methodology, the collection and analysis of data, the interpretation of the findings and preparation of the report.

## PSYCHOL 7101

## Adult Clinical Psychology

- 4 units - semester 1
- $2 \times 3$ hour sessions per week, prac. work in student's own time
- Eligibility: M.Psych.(Clin.) students, or permission of Head of Dept
- Assessment: multiple choice exam 30\%, class presentation or assignment 30\%, take-home exam 40\%

This course teaches students to assess adult mental health, diagnose psychological disorders, formulate treatment plans, and evaluate the scientific literature about the efficacy and effectiveness of therapeutic interventions. Students gain an understanding of the assessment and management of a wide range of psychological disorders including those of high and low prevalence.

## PSYCHOL 7102

## Applied Methodology

- 2 units - semester 2
- 7 day Intensive course (9:30am-3:30pm) - 2 days in Nov 2006, 5 days in Feb 2007
- Eligibility: M.Psych.(Clin.) students, or permission of Head of Dept
- Assessment: group presentation $10 \%$, list of research questions $10 \%$, presentation of methods $10 \%$, ethics application $70 \%$

The course is intended to be highly applied and of direct relevance to clinical practice. It has a heavy emphasis on program design and evaluation, and the student is also introduced to the methods for critically appraising the literature, and to the basic skills of writing research proposals. The course will cover descriptive and experimental research methods from both quantitative and qualitative perspectives, as well as other contemporary approaches to research and evaluation, such as audit and case studies.

## PSYCHOL 7103

## Child Clinical Psychology

- 2 units - semester 1
- 3 hours per week
- Eligibility: M.Psych.(Clin) students, or permission of head of department
- Corequisite: PSYCHOL 7101 Adult Clinical Psychology
- Assessment: 2 assignments

This course aims to provide theoretical knowledge and practical experience in child clinical psychology. The focus is on the assessment, treatment and conceptualisation of problems of children and adolescents with particular reference to risk factors in development, effects of the family context on children, behavioural and emotional problems in children, chronic illness and disability, health behaviours and adolescent lifestyle factors.

## PSYCHOL 7104

## Clinical Neuropsychology

- 2 units - semester 1
- 3 hours per week
- Prerequisite: PSYCHOL 7108 Psychological Assessment or equiv
- Assessment: critical review of commonly used neuropsychological test, critical review of neuropsychological disorder

This course will introduce students to the field of clinical neuropsychology with a particular emphasis on assessment. It will examine: the field of interest; the main purposes of neuropsychological assessment; the underlying assumptions in this field; the areas of cognitive functioning that are of interest to neuropsychologists; behavioural neuroanatomy; and the notion of deficit measurement. Moreover, it will introduce students to some of the main methods by which cognitive skills such as orientation, attention, memory, language, construction, reasoning, executive functions and psychomotor skills are assessed. Students will also be introduced to a variety of disorders that are characterised by deficits in these areas of functioning. Case studies will be used to illustrate the deficits associated with these disorders and to develop students' skills in interpreting neuropsychological test data.

## PSYCHOL 7105

## Preparation for Psychological Practice II

- 2 units - semester 2
- 3 hours per week
- Prerequisite: PSYCHOL 7107 Preparation for Psychological Practice I
- Assessment: videotaped demonstrations of clinical skill acquisition, workshop presentation

This course involves intensive training in advanced psychotherapeutic approaches, such as cognitive behavioural therapy. It employs the same model of integrated skills training used in Preparation for Psychological Practice I. Students will be trained to a performance criterion for each specific skill, in a supportive group setting. Students will be required to demonstrate competency in each skill to pass the course. The course also covers issues of relevance to clinical practice, such as supervision during clinical placements, psychotherapeutic interventions for complex cases and ethical dilemmas in professional practice. By the conclusion of the course, students will have acquired a repertoire of individual and group therapeutic techniques, and a knowledge of how to apply these skills in a flexible manner according to the needs of the client.

## PSYCHOL 7106

## Health Psychology

- 2 units - semester 1
- 3 hours per week
- Eligibility: M.Psych. (Clin.) students, or permission of Head of Dept
- Assessment: group-based assignment $50 \%$, written paper $50 \%$

This course examines the relationships of social, behavioural and cognitive variables to health and health care. It covers those aspects of the social environment that influence health and illness outcomes, including the interactions amongst family members and between health care consumers and healthcare providers. Risk factors for health-compromising behaviours are also discussed, including strategies for their modification.

## PSYCHOL 7107

## Preparation for Psychological Practice I

- 2 units - semester 1
- 3 hours per week
- Eligibility: M.Psych.(Clin.) students, or permission of Head of Dept
- Assessment: videotaped demonstrations of clinical skills acquisition, workshop presentation

This course involves intensive training in introductory counselling, interviewing and psychological intervention skills. The teaching model employed consists of intensive workshops with high levels of student participation, and an integrated criterion skills approach. In each workshop, students will observe a therapeutic skill being modeled by experienced Clinical Psychologists. They will then discuss and practice this skill to a criterion of performance. Students will be required to demonstrate competency in each skill to pass the course. The course also gives in depth consideration to other issues of relevance to professional practice, such as professional ethics, the professional responsibilities of psychologists, and professional registration requirements.

## PSYCHOL 7108

## Psychological Assessment

- 2 units - semester 1
- 3 hours per week
- Eligibility: M.Psych.(Clin.) students, or permission of Head of Dept
- Assessment: 2 assignments based on practical exercises

This course aims to introduce students to the principles of assessment by focusing on a number of widely used normreferenced psychological tests.

## PSYCHOL 7109

Clinical Geropsychology

- 2 units - semester 2
- 3 hours per week
- Eligibility: M.Psych.(Clin.) students, or permission of Head of Dept
- Assessment: 2 assignments

This course examines psychological and health aspects of ageing. It covers normal/healthy ageing as well as providing an overview of research, assessment and intervention strategies in a number of areas of concern to clinical practice. Material is presented within a framework that emphasises the interplay between biological, psychological and social factors on aspects of functioning.

## PSYCHOL 7110

## Rehabilitation and Disability

- 2 units - semester 2
- 3 hours per week
- Eligibility: M.Psych.(Clin.) students, or permission of Head of Dept
- Assessment: assessment $\mathcal{\&}$ training exercises, group projects on current issues in a particular type of disability covered in course

This course examines the historical development of concepts relevant to rehabilitation such as normalisation, deinstitutionalisation, least restrictive alternatives and quality of life. Research and current issues in the application of these concepts are discussed. Basic assessment, programming, training, behaviour management and evaluation techniques and procedures are introduced, together with exercises in their use. Similarities and differences between the rehabilitation of different kinds of disabilities are also examined.

## PSYCHOL 7111

## Master of Psychology (Clinical) Placement I

- 4 units - semester 1 or 2
- 18.5 hours per week
- Eligibility: M.Psych. (Clin.) students
- Prerequisite: PSYCHOL 7101 Adult Clinical Psychology, PSYCHOL 7107 Preparation for Psychological Practice I, PSYCHOL 7108 Psychological Assessment or equivalents
- Assessment: contract agreed to by field placement supervisor, student $\&$ university placement supervisor

Placements are arranged within approved agencies in South Australia, which reflect the requirements of the SA Psychological Board and the APS College of Clinical Psychologists. Students will be required to gain a broad experience of clinical psychology in such areas as the psychological assessment and management of children and adults with special needs due to a mental disorder,
intellectual disability, acquired brain injury, or other health-related condition.

## PSYCHOL 7112

## Master of Psychology (Clinical) Placement II

- 4 units - semester 1 or 2
- 18.5 hours per week
- Eligibility: M.Psych. (Clin.) students
- Prerequisite: PSYCHOL 7107 Preparation for Psychological Practice 1, PSYCHOL 7108 Psychological Assessment or equiv
- Assessment: contract agreed to by field placement supervisor, student \& university placement supervisor

Placements are arranged within approved agencies in South Australia which will reflect the requirements of the SA Psychological Board and the APS College of Clinical Psychologists. Students will be required to gain a broad experience of clinical psychology in such areas as the psychological assessment and management of children and adults with special needs due to a mental disorder, intellectual disability, acquired brain injury, or other health-related condition.

## PSYCHOL 7113

Master of Psychology (Clinical) Placement III

- 4 units - semester 1 or 2
- 18.5 hours per week
- Eligibility: Master of Psychology (Clinical) students only
- Prerequisite: PSYCHOL 7107 Preparation for Psychological Practice 1, PSYCHOL 7108 Psychological Assessment or equiv.
- Assessment: contract agreed to by field placement supervisor, student and\& university placement supervisor
Placements are arranged within approved agencies in South Australia which will reflect the requirements of the SA Psychological Board and the APS College of Clinical Psychologists. Students will be required to gain a broad experience of clinical psychology in such areas as the psychological assessment and management of children and adults with special needs due to a mental disorder, intellectual disability, acquired brain injury, or other health-related condition.


## PSYCHOL 7114A/B

## Research Project in Clinical Psychology

- 14 units - full year
- Contact hours to be arranged with supervisor
- Eligibility: M.Psych. (Clin.) students
- Prerequisite: PSYCHOL 7102 Applied Methodology or equiv, first year of M.Psych.(Clin.)
- Assessment: dissertation examined as per Academic Program Rule 3 of degree, students must complete Research Project in Clinical Psychology A/B to fulfil requirements of research project

This is an empirically-based research project on a topic of relevance to clinical psychology to be pursued under the guidance of one or more supervisors (at least one of whom shall be a member of the Psychology Department). The project should be structured so that the students participate in all of the steps involved in the research, including the formulation of the research question(s), the design of the study including the selection of appropriate methodology, the collection and analysis of data, the interpretation of the findings, and the preparation of the report.

## PSYCHOL 7201

## Applied Methodology and Statistics

- 2 units - semester 1
- 3 hours per week
- Eligibility: Master of Psychology (Org'al and Hum. Factors) students, or permission of head of department
- Assessment: 2 written assignments, statistical exercise

This course will provide students with the knowledge to undertake qualitative, survey, quasi-experimental and experimental research in applied settings. Using numerous examples drawn from psychology, economics, and other allied disciplines, the course will provide a comprehensive coverage in survey methods, datacollection strategies, sampling theory, and specific parametric and non-parametric techniques ideal for analysis in human factors research.

## PSYCHOL 7202

## Applied Perceptual and Cognitive Psychology

- 2 units - semester 1
- 3 hours per week
- Eligibility: M.Psych.(Org'al \& Hum. Factors) students, or permission of head of department
- Assessment: 2 assignments

This course aims to examine models of human perception and cognition in their application to a variety of real-world problems. It is concerned with the measurement and understanding of perceptual and cognitive performance, the assessment and interpretation of confidence, and some properties and practical implications of theories of memory, learning and skill retention, problem solving, and human pattern recognition abilities.
Throughout the course, emphasis will be given to applications, such as the measurement of perceptual thresholds, image recognition, target detection, the design of displays for the graphical representation of complex data, and the practical assessment of human cognitive capabilities.

## PSYCHOL 7203

## Consumer Psychology

- 2 units - semester 2
- 3 hours per week
- Eligibility: M.Psych.(Org'al \& Hum. Factors) students, or permission of head of department
- Assessment: 2 written assignments

This course aims to consider the contribution of psychology to the study of economic behaviour. In the first part of the course, students will be introduced to the basic principles of micro-economic theory, including: normative decision-making theory; the laws of demand and supply; axioms of consumer behaviour; consumer surplus; riskaversion and demand elasticities. The second part of the course will provide an overview of basic marketing principles and their applications. These theories and assumptions about human behaviour will be critically evaluated using psychological principles derived from several areas of psychology, including decision theory, learning theory and social psychology.

## PSYCHOL 7204

## Decision Making in Real Environments

- 2 units - semester 2
- 3 hours per week
- Eligibility: M.Psych.(Org'al \& Hum. Factors) students, or permission of head of department
- Assessment: assignment

This course aims to examine models of human decision making in their application to a variety of real-world problems. It will develop an understanding of the way in which people make decisions in a variety of real-world situations. It will describe and critically evaluate a number of competing models of human decision making. Particular emphasis will be given to those models that consider the role that heuristics (rules -of-thumb) play in decision making, and to models that consider the way in which the environment guides decision making. Throughout the course, applications of the decision making models to real-world problems will highlighted, including examples drawn from the domains of firefighting, human-computer interaction, and military decision making.

## PSYCHOL 7206

## Human Factors/Ergonomics

- 2 units - not offered in 2006
- 3 hours per week
- Eligibility: M.Psych.(Org'al \& Hum. Factors) students, or permission of Head of Dept
- Assessment: 2 written assignments

This course aims to provide an understanding of major areas of human factors, such as physical and psychological capabilities and limitations, and how applying human factors can optimise performance in a range of situations. It addresses how technology and instructional and control systems can be shaped to benefit human performance and includes information on how the human body works, and how information is processed. Specific topics include the effects of ambient conditions, stimulus-response compatibility in a range of practical situations, human error, and accidents.

## PSYCHOL 7207

## Human Resource Management

- 2 units - semester 1
- 3 hours per week
- Eligibility: M.Psych.(Org'al \& Hum. Factors) students, or permission of head of department
- Assessment: individual assignment, group assignment

This course examines how an organisation can maximise its returns from its workforce, and employees can maximise their returns from their work. It involves understanding all aspects of the management of people at work, including: planning, job analysis, recruitment and selection, training and development, performance management, remuneration and benefits, career development, and dealing with redundancies and retirement. The course will consider these issues as well as the implications of emerging organisational challenges for human resource management practices. These challenges include: the increasing use of contract staff and outsourcing; harnessing and sustaining organisational commitment; developing organisational cultures that are responsive to change; diversity in the workplace; harnessing innovation and knowledge management; globalisation of industry; and changing workplace practices.

## PSYCHOL 7208

## Individual \& Organisational Change \& Development

- 2 units - not offered in 2006
- 3 hours per week
- Eligibility: M.Psych.(Org'al \& Hum. Factors) students, or permission of head of department
- Assessment: 2 case studies $30 \%$ each, group exercise $40 \%$

This course aims to provide knowledge of, and skills in using, behaviour management, skill training and adult learning techniques in organisations; an historical perspective on, and current issues concerning, change in organisations; knowledge of important factors associated with resistance to, and acceptance of, organisational change; an understanding of models of organisational change and the roles that organisational culture and leadership play in organisational change; and an understanding of organisational change processes, including planning, implementing
and evaluation. Topics will include application of behaviour management and skill training principles in organisations; social skills training principles, practice and application; adult learning principles, practice and application; organisational change; organisational culture; and leadership.

## PSYCHOL 7209

## Organisational Behaviour and Management

- 2 units - semester 2
- 3 hours per week
- Eligibility: M.Psych.(Org'al \& Hum. Factors) students, or permission of head of department
- Assessment: 3 assignments: 2 case studies $30 \%$ each, critical review 40\%

This course aims to provide students with an understanding of the factors that impact upon the behaviour of the individual in the workplace and how these same factors can be used to structure a work environment and work experience that enhances both organisational and individual outcomes. It includes a consideration of values and attitudes, perception, motivation, and personality. It also analyses interpersonal influences that impact upon group behaviour in the work setting. Topics covered include communication, decision-making, constructing work teams, leadership, issues in power and politics, and conflict resolution. In addition, it examines the influence of broader, organisation-wide factors on behaviour in the workplace, with a specific focus on "person-organisation fit". Topics covered in this section will include organisational structure and work design, organisational culture and workplace stress.

## PSYCHOL 7210

## Professional and Ethical Practice

- 2 units - semester 1
- 3 hours per week
- Eligibility: M.Psych.(Org'al \& Hum. Factors) students, or permission of head of department
- Assessment: exercise in communication, exercise in interviewing

This course aims to familiarise students with the requirements of relevant professional and research organisations, and to make students aware of the values and thinking that underlie those requirements. It aims to develop students' sensitivity to ethical issues as these arise in the course of professional practice and research, and to develop appreciation of the complexity of problems that attend the practical application of ethical standards. The course will also briefly cover the topics of communication and interviewing.

## PSYCHOL 7211

## Psychology Assessment: Recruitment \& Personnel Appraisal

- 2 units - semester 1
- 3 hours per week
- Eligibility: M.Psych.(Org'al \& Hum. Factors) students, or permission of head of department
- Assessment: 2 small, 1 large practical exercise

This course aims to introduce students to the principles of assessment by focussing on tests and procedures used in organisational settings. On completion of the course, students will be able to demonstrate an understanding of psychological assessment; an ability to score a test and draw inferences from the results in an hypothesis-generating and hypothesis testing framework appropriate to an organisational setting; and an ability to write a report of professional standard.

## PSYCHOL 7221

## Master of Psychology (Organisational \& Human Factors) Placement I

- 4 units - semester 1 or 2
- Contact hours to be arranged with supervisor
- Eligibility: M.Psych.(Org'al \& Hum. Factors) students
- Prerequisite: PSYCHOL 7210 Professional and Ethical Practice
- Assessment: terms of contract agreed to by field placement supervisor, student \& university placement supervisor

Placements are arranged within approved agencies in South Australia, to reflect the requirements of the SA Psychological Board and the Australian Psychological Society (APS) College of Organisational Psychologists. For further information, see the Program Handbook or the Psychology Department web site.

## PSYCHOL 7222

## Master of Psychology (Organisational \& Human Factors) Placement II

- 4 units - semester 1 or 2
- Contact hours to be arranged with supervisor
- Eligibility: M.Psych.(Org'al \& Hum. Factors) students
- Prerequisite: PSYCHOL 7210 Professional and Ethical Practice
- Assessment: terms of contract agreed to by field placement supervisor, student \& university placement supervisor

Placements are arranged within approved agencies in South Australia, to reflect the requirements of the SA Psychological Board and the Australian Psychological Society (APS) College of

Organisational Psychologists. For further information, see the Program Handbook or the Psychology Department web site.

## PSYCHOL 7223

## Master of Psychology (Organisational \& Human Factors) Placement III

- 4 units - semester 1 or 2
- Contact hours to be arranged with supervisor
- Eligibility: M.Psych.(Org'al \& Hum. Factors) students
- Prerequisite: PSYCHOL 7210 Professional and Ethical Practice
- Assessment: terms of contract agreed to by field placement supervisor, student \& university placement supervisor

Placements are arranged within approved agencies in South Australia, to reflect the requirements of the SA Psychological Board and the Australian Psychological Society (APS) College of Organisational Psychologists. For further information, see the Program Handbook or the Psychology Department web

## PSYCHOL 7225A/B

## Master of Psychology (Organisational \& Human Factors) Research

- 14 units - full year
- Contact hours to be arranged with supervisor
- Eligibility: M.Psych.(Org'al \& Hum. Factors) students
- Prerequisite: PSYCHOL 7201 Applied Methodology and Statistics
- Assessment: dissertation examined as per Academic Program Rule 3 of degree - students must complete Research Project in Organisational \& Human Factors $A / B$ to fulfil requirements of research project

This is an empirically-based research project on a topic of relevance to Organisational Psychology or Human Factors, pursued under the guidance of one or more supervisors (at least one of whom shall be a member of the Psychology Department). The project should be structured so that students participate in all of the steps involved in the research, including the formulation of the research question(s), the design of the study including the selection of appropriate methodology, the collection and analysis of data, the interpretation of the findings, and preparation of the report in the form of a publishable article.

## PUBLIC HEALTH

## PUB HLTH 7031HO

## Occupational Hygiene and Ergonomics

- 3 units - semester 2
- Internal \& external mode
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: written exam, exercises and assignments

This course is an introduction to practical occupational hygiene and ergonomics. There is broad coverage of chemical and physical hazards and of technologies for evaluation and control. Topics include their noise, vibration, thermal stress, shift work, biohazards and toxic chemicals. There will be discussion of exposure standards and the interpretation of hygiene data. There will also be an overview of ergonomics, including consideration of workstation and process design; displays and information systems; biomechanics; anthropometry; and psychological aspects.

## PUB HLTH 7100HO

## Foundations of Public Health

- 3 units - summer semester
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: assignments, group presentation

This course aims to provide students with a basic understanding of the core concepts in public health. It will begin with an exploration of what is meant by health itself, and how the health of a population can be measured. Then the main types and experiences of disease in the Australian population (and elsewhere) will be considered. This will lead to an analysis of the multifactorial causation of ill health and premature death in populations. After that, the implications for health and related services will be investigated, with an emphasis on prevention and community participation. No prior specialist knowledge of public health will be assumed.

## PUB HLTH 7101HO

Introduction to Epidemiology and Biostatistics

- 3 units - semester 1
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: to be advised

This course deals with epidemiological and statistical concepts and terminology, basic analytic techniques and research designs. It does not aim to train specialist epidemiologists or biostatisticians; instead the purpose is to give those interested or working in public health an introduction to these disciplines. Some basic numeracy skills will be required.

By the end of the course, students should grasp basic concepts in epidemiology and statistics; have an understanding of quantitative research strategies; begin to critically assess literature in the public health domain which employs epidemiological and statistical methods; understand the uses that are made of epidemiological information in public health; understand the role of epidemiology in surveillance of the health status of populations; and appreciate the use of statistics in making decisions in the face of uncertainty.

## PUB HLTH 7102HO

## Public Health Policy

- 3 units - semester 1
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: To be advised

This course aims to help students analyse the public health domain with skills formed by the traditions of sociology, politics and economic history. It aims to develop a critical, historically informed attitude toward the acquisition of knowledge and the evaluation of evidence about health institutions and their roles. Attention is also given to the broad social and political context in which health policy is formed and implemented, and to the value assumptions implicit in policy. This analytical approach is applied in a number of case studies of current issues in public health policy.

## PUB HLTH 7103HO

## Aboriginal Health Policy

- 3 units - semester 2
- Intensive
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: to be advised

This course offers students the opportunity to analyse current public policy affecting the health of Aboriginal Australians. It uses historical and political analysis, and comparative studies of other indigenous populations, to provide a context for reflection on current Aboriginal health status and health needs. The subject provides opportunities for students to explore a wide range of Aboriginal health programs and issues, through an intensive and multi-disciplinary teaching program and individual research.

## PUB HLTH 7104HO

Biostatistics

- 3 units - semester 2
- Eligibility: Grad Cert, Grad Dip, MPH students
- Prerequisite: PUB HLTH 7101H0, Introduction to Epidemiology and Biostatistics at credit level or above
- Assessment: to be advised

This course is designed to suit students requiring a high degree of self-sufficiency in the collection, analysis and interpretation of data. The topics will include a selection from: survey sampling methods, non-parametric statistical methods, linear models, analysis of casecontrol studies, generalised linear models and poisson regression, and survival analysis. A central feature of the course will be instruction in the use of statistical packages on computers. Emphasis will be placed on data management and manipulation, practical application of statistical skills to real data sets and interpretation of results.

## PUB HLTH 7105HO

## Diseases of Occupation

- 3 units - semester 1
- Internal \& external mode
- Eligibility: Grad Cert, Grad Dip, MPH students
- Available for Non-Award Study
- Assessment: assignments

This course offers a broad introduction to occupational health and safety. It will address the relationships between work, work processes and work exposures, and the occurrence of disease and injury. The nature, extent and distribution of work-related death, disease and injury will be considered, with special emphasis on the Australian environment. An important aim is to encourage a critical attitude towards health and safety issues, so that students will learn to evaluate problems and formulate appropriate preventive measures on the basis of scientific principles. The elective includes some industrial visits.

## PUB HLTH 7106HO

## Epidemiological Research Methods

- 3 units - semester 2
- Eligibility: Grad Cert, Grad Dip, MPH students
- Prerequisite: 7101 HO Introduction to Epidemiology and Biostatistics at credit level or above
- Assessment: to be advised

This course concentrates on conceptual and practical issues encountered by students in the design of epidemiological research. Theoretical material as it relates to carrying out such research will include the definition and control of bias and confounding in observational studies, interaction, modern interpretations of case control studies, meta-analysis, clinical epidemiology, descriptive epidemiology, modern epidemiology theory and screening. Common pitfalls in epidemiological and statistical reasoning are examined, and attention is paid to research design, proposal writing, data presentation, and critical reading of the research literature. Students are introduced to electronic information
resources in epidemiology (listservs, world wide web sites). The course is designed to present students with an up-to-date view of epidemiological research methods.

## PUB HLTH 7107HO

## Epidemiology of Infectious Diseases

- 3 units - semester 2
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: presentation, production of informative class handout, assignment

The aim of this elective course is to provide a grounding in communicable disease epidemiology of use to students of public health. It assumes no prior specialist knowledge.

An ecosystem approach will be taken to the course. Thus a concentration on sick humans and aspects of their disease is inappropriate. The students will be urged to view infectious disease as a visible manifestation of an ecological problem and to dissect out the agent, host and environmental factors that lead to such phenomena. Such an approach in turn is the basis for the design of feasible public health interventions.

## PUB HLTH 7108HO

## Public Health Ethics

- 3 units - semester 2
- Eligibility: Grad Cert, Grad Dip, MPH students
- Prerequisite: PUB HLTH 7100HO Foundations of Public Health or with approval of the course coordinator
- Assessment: to be advised

This course uses the analytical tools provided by ethics and social philosophy to examine public health research, policy and practice. The course includes both foundational elements - a philosophical analysis of key concepts for public health such as rights, public good, justice, fairness, privacy and risk; traditions and methods in ethics and social philosophy; and the intersection of politics and ethics - and the application of these elements to aspects of: epidemiological and biostatistical research; health promotion; disease prevention and control; public health research and practice in international settings; community based practice and research; and public health policy.

## PUB HLTH 7109HO

## Health Promotion

- 3 units - semester 1
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: to be advised

By focusing on the processes that help communities and individuals maintain and improve wellbeing, this course helps students understand the holistic nature of health promotion, of which disease prevention is but one of several components. The course consists of three sections. The first defines the concept, framework and scope of health promotion. The second discusses theories underpinning the practice of health promotion in the areas of community development, behaviour change, healthy public policy, environmental improvement, and reorientation of health care services. The third illustrates the application of health promotion strategies to specific groups, and points to the relevance of site-specific interventions.

## PUB HLTH 7110HO

## Health Resource Allocation

- 3 units - semester 1
- Eligibility: Grad Cert, Grad Dip, MPH students

This course introduces basic concepts and practical issues faced by decision makers at all levels in the health system in allocating scarce resources between competing programs and between different consumer groups. The focus is on the respective claims of economic efficiency and social justice. There are two strands: firstly, a consideration of how better allocation might be identified and measured; and secondly an examination of models of health system organisation which are claimed to better achieve economic efficiency and social justice. There is an introduction to the techniques of economic appraisal applied to health interventions, with an emphasis on cost-effectiveness and cost-utility analysis; and to the measurement of need and of access. There is also an introduction to the price mechanism in the market, and its strengths and limitations in the production and consumption of health services. Incentives operating variously under market and nonmarket mechanisms in the provision of health care are explored.

## PUB HLTH 7111HO

## Industrial Toxicology

- 3 units - semester 2
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: assignment, exam

This course reviews concepts in chemical toxicology which constitute a rational basis for the setting of chemical exposure standards. It includes an overview of the principles of toxicology; biological processes such as toxicant absorption, distribution, metabolism and excretion; the use of toxicity tests and other data to characterise a chemical's toxic effects with specific emphasis on carcinogenicity, mutagenicity, neurotoxicity and developmental toxicity; and the problem of estimating risk.

## PUB HLTH 7113HO

## Environmental and Occupational Health

- 3 units - semester 1
- Online mode - Internal mode depending on numbers
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: to be advised

This course will introduce the stalwarts of environmental health, namely water quality and its pollution, food quality and air quality. There will also be some consideration of an important contemporary concern in environmental health: the pressures of rising population numbers and the ecological consequences of trying to ensure adequate food supplies. In the context of ambient and occupational exposure, we will examine occupational cancers and radiation. There will be some consideration of how the changes in human ecology influence the emergence of new infectious diseases and the re-emergence of old diseases. Local environmental health issues will be considered as examples of global environmental health problems.

The course will include consideration of occupational diseases. Exposure to some environmental factors causing disease is sometimes most intense in workplaces. For example, asbestos exposure is heaviest in people who mine asbestos, and those who manufacture, use and remove asbestos-containing materials. A study of the relationship between occupational exposure and disease is therefore important in understanding the factors causing disease in the general environment.

## PUB HLTH 7114HO

## National Short Course in Environmental Health

- 3 units - semester 2
- Intensive course - 4 days in December
- Eligibility: Grad Cert, Grad Dip, M.OH \& S students
- Assessment: to be advised

The course will focus primarily on the process of identifying, quantifying, evaluating and managing the health effects of population exposures to various environmental contaminants and other factors. 'Risk' will provide the framework, including hazard identification, risk assessment, risk management and risk communication. To address the potential hazards of ambient environmental exposures, various public health disciplines are needed: epidemiology to help identify hazards and quantify risk; toxicology to provide collaborative quantitative experiment data on biological effects of hazardous agents and understand the toxic process; environmental sciences to measure exposure; and various policy analysis-related disciplines (eg. environmental law, sociology, health economics) to appraise and manage risk. The course will illustrate the role of these disciplines in the investigation and management of environmental health problems. Viewed broadly,
the study of environmental health encompasses urban design, transport noise management, and traditional public health issues in relation to human populations. It also encompasses macro problems such as climate change, ozone depletion and land degradation. These 'macro' topics will be briefly addressed but not systematically developed. As a result of attending this course, students will a) understand selected relationships between the environment and human health and b) be able to apply this information to develop risk assessment and risk management strategies.

## PUB HLTH 7115HO

Public Health Law

- 3 units - not offered in 2006

This course covers the major elements of public health law, the general theories about law and its development in contexts that are important for public health. It provides There will be a detailed analysis of the law relating to the main areas of public health practice, including disease control, environmental health, occupational health, epidemiology, public health litigation and legislation, drug and alcohol controls and health promotion. Current issues in public policy, such as competition policy reform and privatisation are also considered.

## PUB HLTH 7118HO

## Public Health Studies

- 3 units - semester 1 or 2
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: to be advised

This course, which is offered in response to specific requests, enables students to develop an individualised reading course with an academic staff member in a field of significant public interest. It is not a specific preparation for thesis work. The details of the course are arranged by negotiation between individual students and appropriate teachers within the department, although cooperative arrangements may be organised with other departments or public health agencies. A written plan of study will be developed in consultation with a staff member, including the criteria for formal assessment which may include a seminar presentation. This plan should be submitted to the Public Health Curriculum Committee.

## PUB HLTH 7119HO

## MPH Dissertation (Full-Time)

- 12 units - semester 1 or 2
- Eligibility: MPH students
- Prerequisite: completion of MPH coursework
- Assessment: dissertation

The dissertation is the final requirement of the MPH and should therefore reflect what the student has learned from the core and elective course work of the degree program. Unless exempted by the Public Health Curriculum Committee, the dissertation will take the form of a paper suitable for submission to an appropriate peer reviewed journal. The content of this paper must reflect the research topic. The successful completion of this paper fulfils the requirements for a dissertation.

* exemptions will be rare but may be necessary in some circumstances to avoid significant disadvantage to a particular student.


## PUB HLTH 7120H0

## MPH Dissertation (Part-Time)

- 6 units - semester 1 or 2
- Eligibility: MPH students
- Prerequisite: Completion of MPH coursework
- Assessment: dissertation

The dissertation is the final requirement of the MPH and should therefore reflect what the student has learned from the core and elective course work of the degree program. Unless exempted by the Public Health Curriculum Committee, the dissertation will take the form of a paper suitable for submission to an appropriate peer reviewed journal. The content of this paper must reflect the research topic. The successful completion of this paper fulfils the requirements for a dissertation.

* exemptions will be rare but may be necessary in some circumstances to avoid significant disadvantage to a particular student.


## PUB HLTH 7123HO

## Rural Public Health

- 3 units - semester 2
- One week intensive course in Whyalla
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: assignments, tutorial \& workshop participation

This course is taught by a multi-disciplinary team undertaking research on rural and remote health. It builds on the knowledge and skills gained in previous public health subjects to: examine patterns of morbidity and mortality in rural and remote areas, explore and analyse the determinants of health and illness in such settings, understand issues related to service provision and utilisation in rural and remote locations, and analyse how regional health and other service providers apply State and Federal health policy in local settings. Specific topics include: rural health policy, rural health care planning, understanding the strengths and weaknesses of geographical classification systems, examining the concept of 'community' in understanding rural health, primary health care in non-metropolitan settings, Indigenous health, and issues in providing appropriate and accessible services

## PUB HLTH 7124HO

## Population Health for Clinicians A

- 3 units - semester 1
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: to be advised

This course is designed to engage general medical practitioners and other health workers in population health issues and to encourage them to apply population health insights, skills and tools to their clinical practice. The course is currently available through paper-based distance education methods and also by online delivery on the World Wide Web, and may be made available oncampus. Students may select any two modules from: cardiovascular disease, cancer, chronic and complex diseases, diabetes, health promoting medical practices, or mental health.

## PUB HLTH 7125HO

Population Health for Clinicians B

- 3 units - semester 1
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: to be advised

This course has similar aims and modes of delivery to those of Population Health for Clinicians A. Subject to the approval of the program coordinator, students may select a further two modules from the list for that course. Current issues in public policy, such as competition policy reform and privatisation are also considered.

## PUB HLTH 7126HO

## Qualitative Research in Practice

- 3 units - semester 2
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: may include tutorial presentations, group projects, essay, critical review of published research

Qualitative research is central to current public health practice. This applied course will provide students with an introduction to the theory and process of qualitative research methods. Students will develop the skills to recognise and reflect on the strengths and limitations of different research methodologies, understand the links between theory and practice, critically assess research, and address ethical and practical issues. The course takes a step-bystep approach to the design and implementation of qualitative research and includes: formulating a research question; writing research and ethics proposals; conducting interviews, participant observation, focus groups, textual and media analysis; managing data (computer assisted); analysing data; and writing and presenting findings.

## PUB HLTH 7146HO

## An Anthropological Lens on Public Health

- 3 units - semester 2
- Intensive

This course provides an introduction to the unique contribution that anthropology makes to public health issues and debates. It provides students and professionals in population and clinical health fields with an understanding of how culture is fundamentally related to concepts of health and illness, health-seeking behaviour and health promotion. The course adopts a distinctive anthropological approach to exploring and communicating the various impacts of culture on public health problems, policies and programs. Through a series of seminars, lectures and workshops, participants will develop the skills to apply anthropological theories and methods to public health contexts.

## PUB HLTH 7147HO

## Health Technology Assessment

- 3 units - summer semester
- Assumed Knowledge: PUB HLTH 7101HO Introduction to Epidemiology and Biostatistics
- Assessment: participation in tutorials \& practicals, assignments, major assignment - attendance at all sessions a prerequisite for passing this course

This course will take a broad view of the impact of health technologies such as medical procedures, medical devices, pharmaceuticals and public health interventions on population and individual health. Emphasis will be placed on methods for the systematic review of safety, effectiveness and economic efficiency; and on the implementation of the findings of health technology assessment into clinical and public health practice. Attention will also be given to the diffusion of technological innovations within their social, cultural and ethical context; to horizon scanning; to the structure of the international health technology industries; and to the operation of health technology regulatory mechanisms.

## PUB HLTH 7148HO

## Environmental and Occupational Health (CMVH)

- 3 units - semester 2
- Online mode - Internal mode depending on numbers
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: to be advised

This course will introduce the stalwarts of environmental health, namely water quality and its pollution, food quality and air quality. There will also be some consideration of an important contemporary concern in environmental health: the pressures of rising population numbers and the ecological consequences of
trying to ensure adequate food supplies. In the context of ambient and occupational exposure, we will examine occupational cancers and radiation. There will be some consideration of how the changes in human ecology influence the emergence of new infectious diseases and the re-emergence of old diseases. Local environmental health issues will be considered as examples of global environmental health problems.

The course will include consideration of occupational diseases. Exposure to some environmental factors causing disease is sometimes most intense in workplaces. For example, asbestos exposure is heaviest in people who mine asbestos, and those who manufacture, use and remove asbestos-containing materials. A study of the relationship between occupational exposure and disease is therefore important in understanding the factors causing disease in the general environment.

## SOIL AND WATER

## SOIL\&WAT 7002WT

## Soil Management and Conservation

- 3 units - semester 1
- 2 lectures, 4 hours practical work (or equiv.) a week
- Prerequisite: SOIL\&WAT 2005WT Soil Resources or SOIL\&WAT 2012WT Soil \& Water Resources (taken as SOIL\&WAT 7003WT Topics in Soil and Land Systems)
- Assessment: exam, practical reports, other assignments

This course covers topics important to students of agriculture, horticulture, environmental science and natural resource management. Degradative processes which pose the greatest threats to the soil resources of Australia are examined and their avoidance, management and amelioration are discussed. These processes include: erosion of soil by water and wind, water repellence, irrigation and dryland salinity, induced soil acidity, soil structure decline and sodicity. Other issues addressed are soil conservation legislation and land capability. Practical work will consist of laboratory exercises, field excursions and other exercises related to the above topics.

## SOIL\&WAT 7003WT

## Topics in Soil and Land Systems

- 3 units - semester 1 or 2
- 24 lectures or equiv, associated practical work
- Prerequisite: appropriate degree in Science, Agricultural Science or Environmental Science
- Assessment: to be advised

This course may be offered from time to time as a means of examining current topics in soil science, soil management and land
evaluation that are related to the research and teaching interests of staff and visiting scientists. Candidates should consult the Head of the Discipline for topics currently available.

## SOIL\&WAT 7005WT

## Environmental Toxicology and Remediation

- 3 units - summer semester
- Prerequisite: credit or higher in PLANT SC 1001RW or a Pass in CHEM 1000A/B or CHEM 1001A/B or equiv
- Restriction: SOIL\&WAT 3004WT Environmental Toxicology
- Assessment: theory, practicals/assignments

The goals of this course are to provide students with an understanding of the monitoring, fate and risk assessment of contaminants in environmental and biological systems. Classes of contaminants discussed include heavy metals, pesticides, and other water-, soil- and food-borne toxicants. The properties of contaminants which influence their environmental distribution and transformations and the characteristics of the environment which influence contaminant toxicity to organisms are discussed. Students are introduced to the principles of toxicology necessary for an understanding of the environmental consequences of contaminants.

## SOIL\&WAT 7007WT

## GIS for Environmental Management

- 3 units - summer semester
- 10 days during summer vacation
- Assumed Knowledge: basic computing skills in Windows
- Restriction: SOIL\&WAT 3014WT GIS for Agricultural Sciences
- Assessment: practical exercises, case study, written exam

The course deals with concepts and theory of geographic information systems and their use for environmental mapping, spatial modelling and analysis. Topics covered include the relationship of GIS models to real world perception and map representation, vector and raster systems; spatial modelling; translation of problems into GIS procedures; attribute manipulation and recoding, operations including arithmetic and Boolean overlay, reclassification, proximity and neighbourhood analyses; input of data to GIS; database structures; interpolation of surfaces form point and vector data; applications and case studies. Practical work uses PC-based software to teach basic skills in GIS data entry, analysis and output, emphasising a problem-solving approach through environmental and agricultural GIS case studies.

## SOIL\&WAT 7008WT

## Remote Sensing for Environmental \& Agricultural Sciences

- 3 units - not offered in 2006
- 10 days during summer vacation
- Assumed Knowledge: basic computing skills in Windows
- Restriction: GEOLOGY 3010 Remote Sensing (S)
- Assessment: practical exercises, written exam

The course deals with use of satellite and airborne imagery for environmental and agricultural applications such as land mapping, site evaluation and monitoring degradation and change. Topics include the interaction of electromagnetic radiation with the earth's surface, spectral characteristics of earth surface materials, the nature of imagery collected by a variety of current earth-observation sensors, the use of this imagery for detecting, mapping and monitoring environmental features, collection of field data to interpret imagery, integration of remote sensing and geographic information systems (GIS) for environmental monitoring and modelling, and specialised forms of imagery such as radar, thermal, airborne video and digital photography. Practicals use computer-based image analysis software to enhance and interpret digital images, produce thematic maps, analyse change over time and combine images and map data. Field-based practicals include the use of spectroradiometers for collecting reflectance data about land cover.

## SOIL\&WAT 7020WT

## Soil Water Management

- 3 units - semester 2
- 2 lectures, 4 hours practical work (or equivalent) per week
- Prerequisite: SOIL\&WAT 2005WT Soil Resources
- Assessment: exam, tutorials, practical reports

This course covers the theory and practice of measuring and managing soil water using commercially available technology. Topics include soil water content and potential, water availability to plants, water movement in unsaturated and saturated soils, soil structure and salt-affected soils. Computers will be used to model infiltration, storage and movement of soil water, and to solve problems. Practical classes will demonstrate important techniques in soil survey for managing soil water in dryland and irrigated situations.

## SOIL\&WAT 7024WT

## Soil Ecology and Nutrient Cycling

- 3 units - semester 1
- 2 lectures, 4 hours practical work (or equiv) a week
- Prerequisite: SOIL\&WAT 2005WT Soil Resources or SOIL\&WAT 1000RW Soils, and Land Management Systems II
- Assessment: exam, practical reports, presentation of case studies

The course will provide students with a comprehensive view of ecological interactions in soils. It deals with the interactions between plants, soil and soil organisms, the roles played by soil organisms in decomposition of organic material, nutrient cycling ( $C$, $\mathrm{N}, \mathrm{P}$ ) and stability of agricultural and natural ecosystems. Other topics include food webs, the importance of soil organisms for soil fertility, mycorrhizas and their effects on plant productivity and plant communities, bio-control and bioremediation, root growth and the biology of the rhizosphere.

## SOIL\&WAT 7025WT

## GIS for Agricultural Sciences

- 3 units - semester 2
- Assumed Knowledge: basic computing skills in the Windows
- Restriction: SOIL\&WAT 3007WT GIS for Environmental Management; SOIL\&WAT 3014WT GIS for Agricultural Sciences
- Assessment: case study, practical assessments, written exam Geographic information systems have become an important tool far beyond the geographic disciplines. Applications in the agricultural sciences range from simple cartographic tools to precision fertiliser applications and growth models. This course gives an overview of the history and the rapid recent development of this technology and gives examples of commercially available state-of-the-art equipment. Hands on computer exercises involve data capture, processing and presentation of results. Special emphasis is placed on precision agriculture and the optimal and timely treatment of spatial variability in agricultural production systems. Students will learn what can be seen from space and airborne remote sensing and how this information can be combined with other sources of information in order to minimise effort and optimise production.


## SPATIAL INFORMATION SYSTEMS

## GISC 5011

## Research Project in Spatial Information Science

- 6 units - semester 1 or 2
- 10 hours workshops
- Eligibility: Postgraduate Spatial Information Science students
- Assessment: seminar $20 \%$, project $80 \%$

The Research Project within the Graduate Diploma or Masters in Spatial Information Science provides students with the opportunity to investigate, for one semester half time, a specific application of spatial information science. The Research Project offers students research experience and an opportunity to delve more deeply into a research area of their choice. Topics may be chosen from a range
of possible projects nominated by GISCA staff, Government or private agencies, or the student.

## GISC 5015

## Special Topic in Spatial Data Models

- 3 units - semester 1 or 2

Topic to be determined in consultation with the Program Convenor.

## GISC 5017

Special Topic in Spatial Data Visualisation

- 3 units - semester 1 or 2

Topic to be determined in consultation with the Program Convenor.

## GISC 5018

## Special Topic in Spatial Information Systems

- 3 units - semester 1 or 2

Topic to be determined in consultation with the Program Convenor.

## GISC 5501

## Dissertation in Spatial Information Science F/T

- 12 units - semester 1 or 2
- 10 hours workshops
- Eligibility: Master of Spatial Information Science students
- Assessment: seminar $20 \%$, thesis $80 \%$

The Dissertation in SIS subjects within the Masters degree in Spatial Information Science provide students with the opportunity to investigate, for one semester full time (or equivalent), a specific application of spatial information science. Topics may be chosen from a range of possible projects nominated by GISCA staff, Government or private agencies, or the student.

## GISC 5502A/B

## Dissertation Spatial Information Science P/T

- 12 units - full year
- 10 hours workshops
- Eligibility: Master of Spatial Information Science students
- Assessment: seminar 20\%, thesis $80 \%$

The Dissertation in SIS subjects within the Masters degree in Spatial Information Science provide students with the opportunity to investigate, for two semesters, a specific application of spatial information science. Topics may be chosen from a range of possible projects nominated by GISCA staff, Government or private agencies, or the student.

## STATISTICS

## STATS 6001

## Statistical Modelling III

- 3 units - semester 1
- 5 lectures, 1 hour tutorial or practical every 2 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I); One of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: statistical background as in any Level II Statistics course
- Assessment: 3 hour exam, class exercises, practicals

This course aims to provide students with further fundamental work on modelling in statistics. The linear model. Least squares estimation: geometry of least squares, orthogonal projection, properties of estimators. Regression. Large sample approximation. Transformations, model selection, diagnostics, nonlinear regression. Introduction to generalised linear models; loglinear models.

## STATS 6002

## Introduction to Mathematical Statistics II

- 2 units - semester 1
- 2 lectures per week, I tutorial per fortnight
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I)
- Corequisite: or MATHS 2004 Mathematics IIM
- Assessment: 2 hour exam, assignments
- There is a textbook for this course

This course provides the mathematical foundations of modern statistical inference and its applications. Topics include probability, sample spaces, events, equally likely outcomes; chance odds and odds ratios; relative frequency and Bayesian interpretations of probability; conditional probability and independence; sequences of events; Bayes' Rule and Bayes' Odds. Discrete random variables: expected values, expectations of functions of random variables; the Bernoulli and geometric distributions; the binomial and hypergeometric distributions; normal approximation to the binomial; the Poisson distribution; moment generating functions; Markov's Inequality and Tchebyshev's Inequality. Continuous random variables: the cumulative distribution and probability density functions; the uniform, normal and Cauchy distributions; the exponential distribution, hazard and survival functions; Poisson processes; Gamma and chi-square distributions. Bivariate and multivariate distributions for discrete and continuous random variables; marginal and conditional distributions; independence; covariance and correlation; moments for linear combinations of
random variables; the multinomial distribution. Three different methods for finding the distribution of a function of random variables: distribution functions, transformations, and moment generating functions.

## STATS 6003

## Statistical Practice II

- 2 units - semester 1
- 2 lectures, 1 hour tutorial or practical per week
- Available for Non-Award Study
- Prerequisite: One of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: MATHS 1007A/B or MATHS 1000A/B or MATHS 1001
- Assessment: 2 hour exam, assignments, project work

This course is an extension of Statistical Practice I, providing a broader and deeper understanding of the application of statistical methods to data. Topics covered include randomisation, blocking and the design and analysis of experiments; analysis of variance; elementary factorial designs; linear and multiple regression, regression diagnostics, the analysis of residuals; the design and analysis of surveys, methods of sampling, the analysis of frequency data; power; elementary distribution-free methods such as the sign test and rank tests.

* In exceptional circumstances, on approval of the Faculty and Course Coordinator, 9101 Business Data Analysis will be accepted


## STATS 6005

## Time Series III

- 3 units - semester 2
- 2 lectures, 1 hour tutorial or practical, per week
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I), one of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: Statistical background such as in any Level II Statistics course
- Assessment: 3 hour exam, assignments

This course provides an introduction to time series analysis and topics covered include descriptive methods of analysis: plots, smoothing, differencing, the autocorrelation function, the correlogram and the variogram; the periodogram; estimation and elimination of trend and seasonal components. Stationary processes, modelling and forecasting with autoregressive moving average (ARMA) models. Spectral analysis: the fast Fourier transform, periodogram averages and other smooth estimates of the spectrum;
time-invariant linear filters. Nonstationary and seasonal time series models; ARIMA processes: identification, estimation and diagnostic checking; forecasting, including extrapolation of polynomial trends, exponential smoothing, and the Box-Jenkins approach.

## STATS 6006

## Mathematical Statistics III

- 3 units - semester 1
- 5 lectures, 1 tutorial every 2 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I). One of STATS 1000 (Pass Div I), STATS 1004 [Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 Pass)
- Assumed Knowledge: STATS 2011 Statistical Modelling II
- Assessment: 3 hour exam, class exercises

This course aims to provide students with fundamental distribution theory together with the underlying basics in statistical inference. It forms the basis upon which the remaining courses are built. Calculus of distributions. Moments and cumulants. Moment generating functions. Multivariate distributions: Marginal and conditional distributions, Conditional expectation and variance operators, Change of variable, multivariate normal distribution, Exact distributions arising in Statistics. Convergence results: weak convergence, convergence in distribution, Central Limit Theorem. Statistical Inference. Likelihood, score and information. Estimation and properties of estimators: sufficiency, efficiency, consistency, maximum likelihood estimators, large sample properties. Tests of hypotheses: likelihood ratio, score and Wald tests, large sample properties.

## STATS 6008

## Biostatistics III

- 3 units - semester 2
- 2 lectures, 1 hour tutorial or practical, per week
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I). One of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: statistical background in any Level II Statistics course
- Assessment: 3 hour exam, assignments

This course provides students with fundamental knowledge of the design and analysis of clinical trials and epidemiological studies, and important methods for the analysis of biostatistical data. Topics covered include the role of randomisation and ethical considerations; Phase I to Phase IV trials; the Data and Safety Monitoring Board; methods of randomisation: unrestricted and
restricted randomization, random permuted blocks, biased coin designs, stratification, minimisation; trial size: fixed, sequential and group sequential trials; factorial trials, crossover trials and equivalence trials. Epidemiology: cohort, case-control and related epidemiological studies; models for disease association: relative risk, odds ratio, attributable risk. Diagnostic tests and screening; meta-analysis; survival analysis.

## STATS 6010

## Experimental Design III

- 3 units - not offered in 2006
- 2 lectures per week, 1 tutorial, 1 hour practical every 2 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I). One of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: statistical background as in any 2 Level II Statistics course
- Assessment: 3 hour exam, class exercises, practicals

Principles of experimental design, including randomisation, replication and blocking. Factorial experiments, confounding and fractional replication. Split plot designs, other multi-stratum experiments and their analysis. Incomplete block designs, canonical efficiencies and analysis by generalised sweeps. There will be an emphasis on practical aspects of the course. R will be used throughout.

## STATS 6010

## Experimental Design III

- 3 units - not offered in 2006
- 2 lectures per week, 1 tutorial,1 hour practical every 2 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I). One of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: statistical background as in any 2 Level II Statistics course
- Assessment: 3 hour exam, class exercises, practicals

Principles of experimental design, including randomisation, replication and blocking. Factorial experiments, confounding and fractional replication. Split plot designs, other multi-stratum experiments and their analysis. Incomplete block designs, canonical efficiencies and analysis by generalised sweeps. There will be an emphasis on practical aspects of the course. R will be used throughout.

## STATS 6011

## Statistical Modelling II

- 2 units - semester 2
- 2 lectures, 1 hour tutorial or practical per week
- Check with School for Non-Award Study
- Prerequisite: MATHS 1012 or MATHS 2004. One of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: STATS 2002 Introduction to Mathematical Statistics II
- Assessment: 2 hour exam, class exercises, practicals

Estimation. Properties of estimators: unbiasedness, consistency, efficiency, sufficiency. Method of moments. Maximum likelihood: score, information, large sample properties. Minimum variance bound. Tests of hypotheses. Type I, II errors, significance level, power. Likelihood ratio, and other large-sample equivalents. Interval estimation. Confidence intervals. An introduction to linear models, and Analysis of Variance. An introduction to, and examples using $R$, will be included.

## STATS 6014

## Sampling Theory and Practice III

- 3 units - semester 2
- 2 lectures, 1 tutorial, 1 hour practical per week
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 Pass Div I). One of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass),STATS 2001 (Pass)
- Assumed Knowledge: statistical background as in any 2 Level II Statistics course
- Assessment: 3 hour exam, class exercises, practicals

Introduction: experiments and surveys; steps in planning a survey. Statistical characterisations of finite populations; total, mean, variance, mean square. Randomisation approach to sampling and estimation; sampling distribution of estimator; expected values, variances; generalisation of probability sampling. Prediction approach; inadequacies of approach; decomposition of population total; concomitant variables. Models: regression through the origin; estimation by least squares; ratio estimator; variance formulas. Balance and robustness; best fit sample. Stratified sampling; estimation; allocation; construction of strata; stratification on size variables; post-stratification. Two stage sampling; estimation; allocation. Cluster sampling.

## STATS 6016

## Industrial Statistics III

- 2 units - semester 1
- 2 lectures per week, 1 tutorial, 1 hour practical every 3 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I). one of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assessment: 2 hour exam, class exercises, practicals, project work

The Deming philosophy of quality; design and use of control charts for attributes and variables; process capability; CUSUM charts; the 7 tools of Total Quality Control; industrial experiments, particularly fractional factorial and response surface designs; Taguchi methods; signal/noise ratios; components of variance; measurement error.

## STATS 6017A/B

## Statistics Project

- 6 units - full year

Further advanced work in Statistics as determined by the Head of Statistics.

## STATS 6018

## Bioinformatics III

- 3 units - not offered in 2006
- 2 lectures, 1 hour tutorial or practical, per week
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I); one of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: statistical background such as in any Level II Statistics course
- Assessment: 3 hour exam, assignments

This course provides students with knowledge and skills in statistical bioinformatics. Topics covered include basic notions and terminology from biology and genetics; gene expression analysis; two-colour microarrays: image processing, data pre-processing and normalisation; empirical and graphical methods for 'low-level' analysis of microarray data; density smoothing and lowess curves. Hypothesis testing: non-parametric and permutation tests; bootstrap estimation and testing; the multiple-testing problem: step-down methods, computer-intensive methods, false discovery rates; the Bayesian approach to hypothesis testing and estimation. Discriminant analysis and cluster analysis. Biological sequence analysis; Poisson processes and Markov chains; the analysis of one DNA sequence; the analysis of multiple DNA or protein sequences; random walks and sequential analysis theory leading to BLAST; Hidden Markov Models (HMM) and applications.

## STATS 7004

## Statistics Topic A

- 3 units - semester 1 or 2

Further advanced work in Statistics as determined by the Head of Statistics.

## STATS 7008

## Statistics Topic D

- 3 units - semester 1 or 2

Further advanced work in Statistics as determined by the Head of Statistics.

## STATS 7014

## Statistics Topic B

- 3 units - semester 1 or 2

Further advanced work in Statistics as determined by the Head of Statistics.

## STATS 7016

## Statistics Topic C

- 3 units - semester 1 or 2

Further advanced work in Statistics as determined by the Head of Statistics.

## STATS 7021

## Reliability and Quality Control

- 2 units - semester 1
- 28 hours lectures and tutorials or equivalent
- Available for Non-Award Study
- Assumed Knowledge: STATS 2004 Laplace Transforms and Probability and Statistical Methods
- Assessment: assignments, exam

Reliability; definitions, types of failure, confidence levels, mtbf concepts, predication of reliability from life test data. Quality control and assurance: definition of quality, data presentation, quality control methods. Total quality management: measurement and audit methods. Quality improvement.

## STATS 7053

## Statistics in Engineering

- 3 units - semester 2
- 3 hours per week, including 2 hours lectures
- Available for Non-Award Study
- Prerequisite: Level I Mathematics or equivalent, introductory statistics course or equivalent background reading
- Assessment: assignments $15 \%$, mini-project $25 \%$, open book exam 60\%

This course will provide an introduction to the theory and practice of probability and statistics in the context of engineering, with an emphasis on modelling. To provide student's with the experience of using Excel, SAS, Splus and Matlab for statistical analysis.

Revision - probability, descriptive statistics, binomial, uniform, Gaussian (normal) distributions, and expectation. Covariance, correlation, linear combinations of random variables, sampling distribution of the mean, confidence intervals for means and proportions. Further probability - Bayes' theorem, decision trees, Poisson processes and the Poisson and exponential distributions, Markov chains, Markov processes. Further distributions - Moment generating functions. Transformation of variables. Weibull in the context of reliability, Gumbel and generalised extreme value distributions in the context of flood prediction. Random number generation. Multivariate distributions - Bivariate distributions, marginal and conditional distributions. Approximate mean and variance of functions of random variables. Bivariate normal distribution, multivariate normal distribution, bivariate Gumbel distribution, Gibbs sampler. SPC - Shewhart and CUSUM charts. Regression - of response on a single predictor. Log-regression. Multiple regression. Logistic regression. Design of Experiments Simple designed experiments-paired and unpaired comparison of means, approximate comparison of standard deviations and proportions. Factorial experiments and half factorial designs. Central composite designs. Response surface analysis. Taguchi's contribution to experimental design. Time series - Identification of trend and seasonal effects. Correlogram. Autoregressive processes of order 1 and 2 . Forecasting and simulation.

## STATS 7054

## Statistical Modelling

- 3 units - semester 1
- 5 lectures, 1 hour tutorial or practical every 2 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I); One of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: statistical background as in any of Level II Statistics courses
- Assessment: 3 hour exam, class exercises, practicals

This course aims to provide students with further fundamental work on modelling in statistics. The linear model. Least squares estimation: geometry of least squares, orthogonal projection, properties of estimators. Regression. Large sample approximation. Transformations, model selection, diagnostics, nonlinear
regression. Introduction to generalised linear models; Ioglinear models.

## STATS 7055

## Bioinformatics

- 3 units - not offered in 2006
- 3 lectures, 1 hour tutorial or practical, every week
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I); one of STATS 1000 (Pass Div I), STATS 1004 (Pass Div I), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass).
- Assumed Knowledge: statistical background such as in any of the Level II courses
- Assessment: 3 hour exam, assignments

This course provides students with knowledge and skills in statistical bioinformatics. Topics covered include basic notions and terminology from biology and genetics; gene expression analysis; two-colour microarrays: image processing, data pre-processing and normalisation; empirical and graphical methods for 'low-level' analysis of microarray data; density smoothing and lowess curves. Hypothesis testing: non-parametric and permutation tests; bootstrap estimation and testing; the multiple-testing problem: step-down methods, computer-intensive methods, false discovery rates; the Bayesian approach to hypothesis testing and estimation. Discriminant analysis and cluster analysis. Biological sequence analysis; Poisson processes and Markov chains; the analysis of one DNA sequence; the analysis of multiple DNA or protein sequences; random walks and sequential analysis theory leading to BLAST; Hidden Markov Models (HMM) and applications.

## STATS 7056

## Biostatistics

- 3 units - semester 2
- 2 lectures, 1 hour tutorial or practical, every week
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I). One of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: statistical background such as in any 2 of the Level II Statistics courses
- Assessment: 3 hour exam, assignment

This course provides students with fundamental knowledge of the design and analysis of clinical trials and epidemiological studies, and important methods for the analysis of biostatistical data. Topics covered include the role of randomisation and ethical considerations; Phase I to Phase IV trials; the Data and Safety Monitoring Board; methods of randomisation: unrestricted and
restricted randomisation, random permuted blocks, biased coin designs, stratification, minimisation; trial size: fixed, sequential and group sequential trials; factorial trials, crossover trials and equivalence trials. Epidemiology: cohort, case-control and related epidemiological studies; models for disease association: relative risk, odds ratio, attributable risk. Diagnostic tests and screening; meta-analysis; survival analysis.

## STATS 7057

## Sampling Theory \& Practice

- 3 units - semester 2
- 2 lectures, 1 hour tutorial or practical, every week
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I). One of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: statistical background such as in any 2 of the Level II Statistics courses
- Assessment: 3 hour exam, class exercises, practicals, project work Introduction: experiments and surveys; steps in planning a survey. Statistical characterisations of finite populations; total, mean, variance, mean square. Randomisation approach to sampling and estimation; sampling distribution of estimator; expected values, variances; generalisation of probability sampling. Prediction approach; inadequacies of approach; decomposition of population total; concomitant variables. Models: regression through the origin; estimation by least squares; ratio estimator; variance formulas. Balance and robustness; best fit sample. Stratified sampling; estimation; allocation; construction of strata; stratification on size variables; post-stratification. Two stage sampling; estimation; allocation. Cluster sampling.


## STATS 7058

## Time Series

- 3 units - semester 2
- 2 lectures per week, 1 tutorial and 1 hour practical every 3 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I). One of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: statistical background such as in any 2 of the Level II Statistics courses
- Assessment: 3 hour exam, assignments

This course provides an introduction to time series analysis and topics covered include descriptive methods of analysis: plots, smoothing, differencing, the autocorrelation function, the correlogram and the variogram; the periodogram; estimation and
elimination of trend and seasonal components. Stationary processes, modelling and forecasting with autoregressive moving average (ARMA) models. Spectral analysis: the fast Fourier transform, periodogram averages and other smooth estimates of the spectrum; time-invariant linear filters. Nonstationary and seasonal time series models; ARIMA processes: identification, estimation and diagnostic checking; forecasting, including extrapolation of polynomial trends, exponential smoothing, and the Box-Jenkins approach.

## STATS 7059

## Mathematical Statistics

- 3 units - semester 1
- 5 lectures, 1 hour tutorial every two weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I), one of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assumed Knowledge: STATS 2011 Statistical Theory and Modelling II
- Assessment: 3 hour exam, class exercises, practicals, project work

This course aims to provide students with fundamental distribution theory together with the underlying basics in statistical inference. It forms the basis upon which the remaining courses are built. Calculus of distributions. Moments and cumulants. Moment generating functions. Multivariate distributions: Marginal and conditional distributions, Conditional expectation and variance operators, Change of variable, multivariate normal distribution, Exact distributions arising in Statistics. Convergence results: weak convergence, convergence in distribution, Central Limit Theorem. Statistical Inference. Likelihood, score and information. Estimation and properties of estimators: sufficiency, efficiency, consistency, maximum likelihood estimators, large sample properties. Tests of hypotheses: likelihood ratio, score and Wald tests, large sample properties.

## STATS 7060

## Industrial Statistics

- 3 units - semester 1
- 2 lectures per week, 1 hour tutorial every 2 weeks
- Available for Non-Award Study
- Prerequisite: MATHS 1012 (Pass Div I) or MATHS 2004 (Pass Div I), one of STATS 1000 (Pass Div I), STATS 1004 (Pass Div 1), STATS 2004 (Pass), APP MTH 2009 (Pass), STATS 2001 (Pass)
- Assessment: 3 hour exam, class exercises, practicals, project work

The Deming philosophy of quality; design and use of control charts for attributes and variables; process capability; CUSUM charts; the

7 tools of Total Quality Control; industrial experiments, particularly fractional factorial and response surface designs; Taguchi methods; signal/noise ratios; components of variance; measurement error.

## STATS 7061

## Statistical Analysis

- 3 units - semester 1 or 2
- 22 lectures, 5 tutorials, 5 practicals
- Available for Non-Award Study
- Prerequisite: Master of Geostatistics entry requirements
- Assumed Knowledge: elementary statistics (mean, variance, histogram)
- Assessment: formal written exam 50\%, coursework 50\%

General introductory course on mathematical statistics. Summary statistics and statistical inference. Histograms and sample statistics. Probability and probability distributions. Detailed coverage of Gaussian (normal) distribution and the lognormal distribution. Sampling distributions and tests of significance. Analysis of variance. Multiple variables with emphasis on the bivariate case. Correlation and regression. Bayes' theorem and introduction to Bayesian statistics. Gy's sampling theory for the sampling of particulate materials.

## STATS 7062

## Multivariate Geostatistics

- 3 units - semester 2
- 22 lectures, 5 tutorials, 5 practicals
- Available for Non-Award Study
- Prerequisite: Linear Geostatistics, Statistical Analysis
- Assumed Knowledge: detailed understanding of linear geostatistics
- Assessment: coursework 50\%, formal, written exam 50\%

Review of matrix algebra, eigenvalues and eigenvectors. Principal Components Analysis. Multivariate regression. Kriging spatial components; filtering spatial components. Multivariate geostatistical models. Co-kriging and co-kriging variances. Comparison of co-kriging and kriging. Kriging with an external drift. Collocated kriging. Factorial co-kriging.

## URBAN HABITAT MANAGEMENT

## URBH 7000A/B

## Research Methodology and Dissertation F/T

- 12 units - full year
- 2 hour seminar
- Eligibility: Master of Urban Habitat Management students only
- Prerequisite: 24 units of Urban Habitat Management courses
- Assessment: 15,000-20,000 word dissertation

This course will introduce students to the methodology of Urban Habitat Management research and assist them to acquire the skills necessary to plan, undertake and present successfully the results of research in this field. To complete the course, students must attend and participate in all the required methodology seminars, meet regularly with their dissertation supervisor, submit a satisfactory proposal for a research topic and a satisfactory research plan early in the course, provide a satisfactory account of progress made with the research topic midway through the course, and submit a satisfactory dissertation on the methodology and results of the research by the end of the course.

## URBH 7001A/B

## Research Methodology \& Dissertation P/T

- 24 units - full year
- 2 hour seminar
- Eligibility: Master of Urban Habitat Management students only
- Prerequisite: 24 units of Urban Habitat Management courses
- Assessment: 15,000-20,000 word dissertation

This course will introduce students to the methodology of Urban Habitat Management research and assist them to acquire the skills necessary to plan, undertake and present successfully the results of research in this field. To complete the course, students must attend and participate in all the required methodology seminars, meet regularly with their dissertation supervisor, submit a satisfactory proposal for a research topic and a satisfactory research plan early in the course, provide a satisfactory account of progress made with the research topic midway through the course, and submit a satisfactory dissertation on the methodology and results of the research by the end of the course.

## URBH 7002

## Research Project F/T

- 12 units
- 2 hour seminar
- Eligibility: Master of Urban Habitat Management students only
- Prerequisite: 12 units of Urban Habitat Management courses
- Assessment: seminar presentation 20\%, approx. 15,000 word research project report 80\%

This course will provide students with the opportunity to spend a semester conducting a research project under the direction of a University of Adelaide supervisor and a BioCity partner. The research project will contribute to the policy development, planning, management or research activity being undertaken by BioCity partner. The role of the University supervisor will be to assist students to acquire any skills necessary to undertake the research project and to prepare the research project paper.

## URBH 7003A/B

Research Project P/T

- 12 units - full year
- 2 hour seminar
- Eligibility: Master of Urban Habitat Management students only
- Prerequisite: 12 units of Urban Habitat Management courses
- Assessment: seminar presentation 20\%, approx. 15,000 word research project report 80\%

This course will provide students with the opportunity to spend a semester conducting a research project under the direction of a University of Adelaide supervisor and a BioCity partner. The research project will contribute to the policy development, planning, management or research activity being undertaken by BioCity partner. The role of the University supervisor will be to assist students to acquire any skills necessary to undertake the research project and to prepare the research project paper.

## URBH 7100

## Designing Urban Habitats for Biodiversity

- 6 units - semester 1
- Up to 18 hours lectures/tutorials/workshops/fieldwork; contact hours vary week to week
- Eligibility: postgraduate Urban Habitat Management students only
- Restriction: LARCH 4012 Landscape Architecture Studio IB
- Assessment: practical \& project work totaling 5000 words or equivalent - may include written, verbal, graphic communication

This course will involve a project based enquiry into urban habitat management themes that integrate biodiversity conservation and restoration, landscape construction and design, and urban ecological systems. The purpose is to consider and devise innovative design ideas that advance creative approaches to enhancing urban habitats

## URBH 7101

## Urban Habitats: the Ecology of Cities

- 6 units - semester 1
- 3 contact hours per week, 5 days fieldwork
- Eligibility: postgraduate Urban Habitat Management students only
- Assessment: practical exercises 4000 words or equivalent 40\%, 5000 word project report 60\%

This course will involve lectures, practical exercises and fieldwork focusing on the ecology and management of the wide range of plant and animal habitats (from semi-natural to largely artificial) typically found in Australian cities. The course will review the biophysical and social processes responsible for the development of these urban habitats and will examine their structure, function and dynamics from a landscape ecology perspective. A major theme of the course will be the need for management strategies that integrate urban habitat conservation and restoration into wider landscape management frameworks through the development of urban greening plans. Guest lectures by urban habitat managers from a range of organisations affiliated with BioCity, practical exercises and fieldwork will be used to illustrate concepts presented in the lectures and demonstrate techniques of urban habitat inventory, classification, and management. Among these latter techniques, the course will consider both ecological and social dimensions of urban habitat management. Given the dominant influence of human activities on the viability of urban habitats, managers who focus on the ecological product of planning while neglecting the social process of planning are unlikely to see their urban greening plans in action.

## URBH 7102

## Internship in Urban Habitat Management

- 6 units - semester 1
- 1 hour seminar, 4 hours project work
- Eligibility: Grad.Dip. \& Master of Urban Habitat Management students only
- Prerequisite: 12 units of Urban Habitat Management courses
- Assessment: seminar presentation 20\%, approx 8000 word project report 80\%

This course will provide students with the opportunity to spend a semester as a professional 'intern' working either within a government, community-based, business or industry organisation or with a University of Adelaide researcher, while completing supervised project work in the field of Urban Habitat Management. Student placements will depend on the availability of internship opportunities. The seminars during the first part of the course will be used to prepare students for their internships, while those during the second part will be used to monitor the progress of the internships and assist students to prepare their project reports.

## URBH 7200

## Managing Wildlife in Urban Habitats

- 6 units - semester 2
- 2 hours lectures, 3 hours practicals, 5 days fieldwork
- Eligibility: Prof.Cert/Grad.Cert/Grad.Dip/M.Urb.Hab.Mgt. students
- Assessment: practical \& field exercises 4000 words or equivalent $40 \%, 5000$ word project report $60 \%$

This course will involve lectures, practical exercises and fieldwork focusing on the biology, ecology, management, health, and economic consideration involving urban animals. The lectures will be organised into weekly presentations of material relating to a particular group of animals, (for example birds, amphibians, snakes, freshwater fish, mammals, colonial invertebrates, etc). This material will examine the basic biology of the group, why they do well (or not) in urban environments, community perceptions, long and short-term management, educational value, legal and health aspects, and economic value (such as tourism, fishing etc). In addition, there will be a series of guest lectures on special topics or specific animals that raise particular issues (eg Koalas, Pigeons, Cockroaches etc). Invited experts from a range of organisations affiliated with BioCity will give these lectures. These guest lectures will be matched with the group of animals being considered in a given week. A practical session or field trip will also be matched to the weekly theme to demonstrate material presented in the lectures. Finally, students will undertake projects, designed in concert with BioCity partners, to investigate issues associated with urban wildlife management.

## URBH 7201

## Managing Urban Vegetation

- 6 units - semester 2
- 2 hours lectures, 3 hours practicals, 5 days fieldwork
- Eligibility: Prof.Cert/Grad.Cert/Grad.Dip/M.Urb.Hab.Mgt. students
- Assessment: practical \& field exercises 4000 words or equivalent $40 \%, 5000$ word project report $60 \%$

This course will involve lectures, practicals and fieldwork focusing on the management of urban vegetation, particularly the native vegetation remnants found in cities and the native flora that occurs in other urban vegetation types. The course will consider the ecological impacts of urbanisation on the native vegetation and the ecological processes that characterise native vegetation remnants isolated within a human-dominated landscape (fragmentation, isolation, successional disturbance, disease and invasion). The course will review the results of current research on these ecological processes and its relevance to the conservation and restoration of native vegetation remnants. Guest lectures by urban habitat managers from a range of organisations affiliated with BioCity, practical exercises and fieldwork will be used to illustrate concepts presented in the lectures and demonstrate techniques of urban vegetation research and management

## URBH 7202

## Internship in Urban Habitat Management

- 6 units - semester 2

This course will provide students with the opportunity to spend a semester as a professional 'intern' working either within a government, community-based, business or industry organisation or with a University of Adelaide researcher, while completing supervised project work in the field of Urban Habitat Management. Student placements will depend on the availability of internship opportunities. The seminars during the first part of the course will be used to prepare students for their internships, while those during the second part will be used to monitor the progress of the internships and assist students to prepare their project reports.

## VITICULTURE

## VITICULT 7001WT

## Advances in Viticultural Science

- 3 units - semester 1
- 3 lectures/tutorials per week (or equiv.) in research seminars, discussion groups, industry visits
- Eligibility: PG, Honours students only
- Assessment: research paper critiques $50 \%$, essay $25 \%$, student talks $25 \%$

Current research in viticultural science will be examined through tutorial-based discussion of seminal research papers and attendance at research seminars. Current problems and challenges in viticulture will be focused upon, which includes water use efficiency, canopy management, irrigation techniques, salinity, flavour development, nutrient use efficiency, and manipulation of vines for fruit quality.

## VITICULT 7002WT

## Viticultural Science

- 3 units - semester 1
- Up to 7 hours per week including lectures, practicals
- Assessment: final exam $45 \%$, mid-term $15 \%$, practical reports $25 \%$, practical exam $15 \%$

Viticultural Science covers the entire life cycle of the cultivated grapevine with an emphasis on fruit production for wine making. The practical component of the course takes advantage of the vine growth phases that occur from flowering and fruit-set leading up to harvest. Topics covered include: The growth cycle of the grapevine and the biology that underpins the different phenological stages. Grapevine physiology as it is relevant to growth and vine form, flowering, water use, mineral nutrition, berry development and ripening. Grapevine anatomy of the vegetative and
reproductive parts. Techniques to monitor berry maturity development, and yield potential. Taxonomy of grapevines, characteristics of fruiting varieties and variety identification. Tutorial and practical sessions will focus in more depth on the following topics: vine and bud anatomy, shoot and fruit based variety identification, and yield estimation, canopy measurements, maturity sampling and grapevine mineral nutrition.

Approximately half the lectures will be provided from Botany II these lectures will cover topics relating to the general principles of plant biology including structure and function, systematics, floral biology and the physiology of growth and development. The lectures are intended to complement the Viticulture based lecture material with topics of whole plant biology that are common amongst most plant systems.

## VITICULT 7008WT

## Grape Industry Practice, Policy and Communication

- 2 units - semester 1
- 7 hours lectures/seminars/tastings per week
- Assessment: written assignments, seminar participation, presentation

The aims of the course are the development of a mature understanding of wine in society, the refinement of students abilities in written and spoken communication and the provision of a forum for the exchange of information between students and wine industry professionals. Invited speakers explore important issues including occupational health and safety, alcohol awareness and current practices in Australia and the world. Emphasis is placed on student participation in questions, discussions and sensory sessions.

## VITICULT 7021WT

## Viticultural Production

- 3 units - semester 2
- 4 hours of lectures per week
- Assumed Knowledge: VITICULT 2002WT Viticultural Science
- Restriction: VITICULT 3004WT, VITICULT 3018WT,VITICULT 3017WT, VITICULT 3002WT, VITICULT 3021WT, VITICULT 7007WT
- Assessment: exam, assignments

Principles behind the establishment of a viticultural enterprise comprising site selection, choice of planting material and the design and establishment of the vineyard. Trellising design, pruning principles, practices and mechanisation. The relationship between production aspects and the physiology of the vine including phenology and shoot development, effect of node position on fruitfulness, interaction with climate response to pruning, trellising and canopy management. Vineyard management practices including: pests and diseases of grapevines; their recognition and
control; propagation; soil management comprising weed control by chemical and non-chemical methods; the response of grapevines to irrigation; principles of irrigation scheduling and strategic irrigation practices; harvesting and handling methods used for winegrapes; cultural practices employed to produce winegrapes of particular end-use specification.

## VITICULT 7024WT

Table and Drying Grape Production

- 2 units - semester 1
- Up to 6 hours per week including field trips, lectures, group oral presentations
- Assessment: assignments, written exam, oral presentation

Table grape production: varieties; genetic improvement; vineyard design; techniques to improve table grape quality particularly crop load adjustment and growth regulators; harvesting and handling including maturity standards, harvest methods, packing, postharvest handling, marketing. Dried grape production: climatic requirements, principles of grape drying; treatments to enhance drying; dried grape product types; preparation for harvest; harvesting and handling of fresh grapes for drying and trellis dried fruit; finish drying and dehydration; classing, processing and marketing.

## VITICULT 7038WT

Viticultural Methods and Procedures

- 3 units - semester 2
- Up to 6 hours per week (including lecture, tutorial, practical)
- Assumed Knowledge: VITICULT 2002WT Viticultural Science

The practices associated with the development and operation of a viticultural enterprise. This includes training in the monitoring of pests and diseases, soil and plant water and nutritional status; yield estimation; experimentation. Lecture topics include: biotechnology in viticulture, organic viticulture, advanced propagation techniques, use of growth regulators in viticulture, control of bird pests. Tutorial/practical sessions include: climatic assessment for vineyard site selection; principles and practices of vineyard operations including spray equipment calibration and spray application; pruning, training, trellis erection and repair, propagation, canopy management and other activities, vineyard monitoring - phonological stages, bud fruitfulness, physiological pruning, yield estimation, pests and diseases, soil and plant water status; computer-aided decision-making systems such as VineLogic and precision viticulture. This course includes visits to commercial vineyards and equipment suppliers.

## VITICULT 7230WT

Viticultural Practice

- 3 units - semester 2
- 2 tutorials in semester preceding field work., student seminar presentations, fieldwork completed in summer break
- Assumed Knowledge: VITICULT 2002WT/7002WT Viticultural Science, VITICULT 3044WT/7038WT Viticultural Methods and Procedures,VITICULT 3021WT/7021WT Viticultural Production
- Assessment: Logbook, research \& other projects, employers report

Students will complete 10 weeks of work in a large commercial vineyard providing an opportunity to experience, observe and report on the major activities undertaken in a typical vineyard operation.

## WATER RESOURCES MANAGEMENT

## WRM 7000

## Global Water Systems I - Natural Water Cycle

- 3 units - semester 1 or 2
- 24 hours lectures, 12 hours tutorials
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Math. Studies or equiv
- Assessment: exam 50\%, 2 review reports each $25 \%$

This course is designed to provide better understanding of global water issues as well as interaction between the water cycle and the aquatic ecosystem. The course also provides insights into the challenges of water usage for health and well being, protecting ecosystems, competing needs in urban, rural, and agricultural environment.

## WRM 7002

## Global Water Systems II - Engineered Water Cycle

- 3 units - semester 1 or 2
- 24 hours lectures, 12 hours tutorials
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Math. Studies or equiv
- Assessment: exam 50\%, project work 50\%

To provide an understanding of how the natural water cycle is influenced by human activities. To understand how engineering activities control the flow and quality of water for urban, industrial, commercial and agricultural use. To understand how stormwater and wastewater are treated and managed.

## WRM 7003

## Water Resources and Society

- 3 units - semester 1 or 2
- 24 hours lectures, 12 hours tutorials
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Math. Studies or equiv
- Assessment: exam 50\%, 2 review reports each 25\%

Topics to be covered include: history of global water resource development; dependencies between human users and water resources; geopolitics and hydro-politics of water; water and society; the market in water: water ownership and water trading; sustainability in water management.

## WRM 7004

## Water Resources Planning and Management

- 3 units - semester 1 or 2
- 24 hours lectures, 12 hours tutorials
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Math. Studies or equiv
- Assessment: exam 50\%, project work 50\%

To provide an understanding of issues associated with the planning and management of water resources taking into account sustainability, economic, environmental and social issues. To provide techniques to assist in the rational planning and management of these resources.

## WRM 7005

## Minor Industry Project

- 6 units - semester 1 or 2
- 72 hours
- Assumed Knowledge: WRM 7000 Global Water Systems I Natural Water Cycle, WRM 7002 Global Water Systems II Engineered Water Cycle, WRM 7003 Water Resources \& Society, WRM 7004 Water Resources Planning \& Management
- Assessment: project

The process and purpose of professional reflection and journal keeping. Participate in one or more commercially relevant projects in a manner like an employee of the company in which the placement is conducted. Reflect on the experience of working in the company where the placement is conducted and learn effective and appropriate personal and professional strategies for working in the area of water resources management.

## WRM 7006

Major Industry Project

- 12 units - semester 1 or 2
- 144 hours
- Assumed Knowledge: WRM 7000 Global Water Systems I Natural Water Cycle, WRM 7002 Global Water Systems II Engineered Water Cycle, WRM 7003 Water Resources \& Society, WRM 7004 Water Resources Planning \& Management
- Assessment: project

The process and purpose of professional reflection and journal keeping. Participate in one or more commercially relevant projects in a manner like an employee of the company in which the placement is conducted. Reflect on the experience of working in the company where the placement is conducted and learn effective and appropriate personal and professional strategies for working in the area of water resources management.

## WRM 7007

## Research Methodology

- 3 units - semester 1 or 2
- 24 hours lectures, 12 hours tutorials
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Math. Studies or equiv
- Assessment: assignments

An introduction to research methodology particularly applied to water resources management.

## WRM 7008

## Research Project

- 12 units - semester 1 or 2
- 144 hours
- Assumed Knowledge: WRM 7000 Global Water Systems I Natural Water Cycle, WRM 7002 Global Water Systems II Engineered Water Cycle, WRM 7003 Water Resources \& Society, WRM 7004 Water Resources Planning \& Management
- Assessment: project

A minor research project in water resources management involving the equivalent of one semester's work

## WRM 7009

## Specialised Studies I

- 3 units - semester 1 or 2
- 24 hours lectures, 12 hours tutorials
- Available for Non-Award Study
- Assumed Knowledge: SACE Stage 2 Math. Studies or equiv
- Assessment: exam, assignments

This course provides for specialised study in a particular aspect of water resources management. It may contain a component of guided reading and assignments instead of lectures and tutorials.

## WRM 7010

## Wastewater Engineering and Design

- 3 units - semester 1
- 36 hours lectures, tutorials, project work
- Available for Non-Award Study
- Assessment: projects \& exam

Characteristics of wastewater; primary, secondary and tertiary treatment methods; sludge disposal; project: design of wastewater treatment plant; includes Masters level project.

## WRM 7011

## Environmental Modelling, Management and Design

- 3 units - semester 1
- 36 hours lectures, tutorials, design; directed study
- Available for Non-Award Study
- Assessment: to be advised

The course addresses the major steps in the development of engineering models, and how they are used for decision-making, with a particular emphasis on water quality. Topics to be covered include one or more of the following: model specification (environmental processes, model complexity, model application), model calibration (gradient methods, genetic algorithms, ant colony optimisation) model validation and stochastic modelling (types of uncertainty, random variables, risk-based performance measures and reliability analysis, including Monte Carlo simulation and the first-order reliability method); artificial neural network modelling, environmental decision-making. Includes Masters level project.

## WRM 7012

## Water Resources Optimisation and Modelling

- 3 units - not offered in 2006
- 36 hours lectures, tutorials, directed study
- Available for Non-Award Study
- Assessment: projects, assignments \& exam

Topics selection from: Optimisation and computer simulation techniques applied to the planning and operations of water resources systems; multiobjective planning; assessment of risk, uncertainty and reliability; design project. Includes Masters project.

## WRM 7013

## Water Distribution Systems and Design

- 3 units - not offered in 2006
- 36 hours lectures, tutorials, directed study
- Available for Non-Award Study
- Assessment: projects \& exam

Water distribution systems analysis. Steady state analysis of pipe networks. Alternative formulations of equations for pipe networks. Computer solution techniques. Optimisation of pipe networks using genetic algorithms. Water hammer analysis. Pump transients. Water hammer in hydro-electric plants. Water hammer control methods. Includes Masters level project.

## WRM 7014

## Coastal Engineering \& Design

- 3 units - semester 2
- 36 hours lectures, tutorials, project work
- Available for Non-Award Study
- Assessment: exam 60\%, design 30\%, tutorials $10 \%$

The course is based on waves and wave theories, tides, sediment transport, nearshore coastal processes, wave generation, ocean outfalls, coastal management; includes Masters level project.

## WRM 7015

## Epidemiology of Infectious Diseases

- 3 units - semester 2
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: presentation, production of informative class handout, assignment

The aim of this elective course is to provide a grounding in communicable disease epidemiology of use to students of public health. It assumes no prior specialist knowledge.

An ecosystem approach will be taken to the course. Thus a concentration on sick humans and aspects of their disease is inappropriate. The students will be urged to view infectious disease as a visible manifestation of an ecological problem and to dissect out the agent, host and environmental factors that lead to such phenomena. Such an approach in turn is the basis for the design of feasible public health interventions.

## WRM 7016

## Introduction to Epidemiology and Biostatistics

- 3 units - semester 1
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: to be advised

This course deals with epidemiological and statistical concepts and terminology, basic analytic techniques and research designs. It does not aim to train specialist epidemiologists or biostatisticians; instead the purpose is to give those interested or working in public health an introduction to these disciplines. Some basic numeracy skills will be required.

By the end of the course, students should grasp basic concepts in epidemiology and statistics; have an understanding of quantitative research strategies; begin to critically assess literature in the public health domain which employs epidemiological and statistical methods; understand the uses that are made of epidemiological information in public health; understand the role of epidemiology in surveillance of the health status of populations; and appreciate the use of statistics in making decisions in the face of uncertainty.

## WRM 7017

## Biostatistics

- 3 units - semester 2
- Eligibility: Grad Cert, Grad Dip, MPH students
- Prerequisite: PUB HLTH 7101HO, Introduction to Epidemiology and Biostatistics at credit level or above
- Assessment: to be advised

This course is designed to suit students requiring a high degree of self-sufficiency in the collection, analysis and interpretation of data. The topics will include a selection from: survey sampling methods, non-parametric statistical methods, linear models, analysis of casecontrol studies, generalised linear models and poisson regression, and survival analysis. A central feature of the course will be instruction in the use of statistical packages on computers. Emphasis will be placed on data management and manipulation, practical application of statistical skills to real data sets and interpretation of results.

## WRM 7018

## Epidemiological Research Methods

- 3 units - semester 2
- Eligibility: Grad Cert, Grad Dip, MPH students
- Prerequisite: 7101 HO Introduction to Epidemiology and Biostatistics at credit level or above
- Assessment: to be advised

This course concentrates on conceptual and practical issues encountered by students in the design of epidemiological research. Theoretical material as it relates to carrying out such research will include the definition and control of bias and confounding in observational studies, interaction, modern interpretations of case control studies, meta-analysis, clinical epidemiology, descriptive epidemiology, modern epidemiology theory and screening. Common pitfalls in epidemiological and statistical reasoning are examined, and attention is paid to research design, proposal writing, data presentation, and critical reading of the research literature. Students are introduced to electronic information resources in epidemiology (listservs, world wide web sites). The course is designed to present students with an up-to-date view of epidemiological research methods.

## WRM 7019

## Foundations of Public Health

- 3 units - summer semester
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: assignments, group presentation

This course aims to provide students with a basic understanding of the core concepts in public health. It will begin with an exploration of what is meant by health itself, and how the health of a population can be measured. Then the main types and experiences of disease in the Australian population (and elsewhere) will be considered. This will lead to an analysis of the multifactorial causation of ill health and premature death in populations. After that, the implications for health and related services will be investigated, with an emphasis on prevention and community participation. No prior specialist knowledge of public health will be assumed.

## WRM 7020

## Industrial Toxicology

- 3 units - semester 2
- Eligibility: Grad Cert, Grad Dip, MPH students
- Assessment: assignment, exam

This course reviews concepts in chemical toxicology which constitute a rational basis for the setting of chemical exposure standards. It includes an overview of the principles of toxicology; biological processes such as toxicant absorption, distribution, metabolism and excretion; the use of toxicity tests and other data to characterise a chemical's toxic effects with specific emphasis on carcinogenicity, mutagenicity, neurotoxicity and developmental toxicity; and the problem of estimating risk.

## WRM 7021

## GIS for Environmental Management

- 3 units - summer semester
- 10 days during summer vacation
- Assumed Knowledge: basic computing skills in Windows
- Restriction: SOIL\&WAT 3014WT GIS for Agricultural Sciences
- Assessment: practical exercises, case study, written exam

The course deals with concepts and theory of geographic information systems and their use for environmental mapping, spatial modelling and analysis. Topics covered include the relationship of GIS models to real world perception and map representation, vector and raster systems; spatial modelling; translation of problems into GIS procedures; attribute manipulation and recoding, operations including arithmetic and Boolean overlay, reclassification, proximity and neighbourhood analyses; input of data to GIS; database structures; interpolation of surfaces form point and vector data; applications and case studies. Practical work uses PC-based software to teach basic skills in GIS data entry, analysis and output, emphasising a problem-solving approach through environmental and agricultural GIS case studies.

## WINE MARKETING

## WINEMKTG 7003EX

## WINEMKTG 7003WT

## Advertising and Promotion

- 3 units
- External; Internal - up to 3 hours per week (incl. lectures, tutorials)
- Assumed Knowledge: WINEMKTG 7055WT/7055EX Wine and Food Marketing Principles
- Assessment: to be advised

This course will provide the student with an overview of the Integrated Marketing Communications process. Students will learn to manage the formal communications process in the context of wine and agricultural businesses. Attention will be paid to developing communication plans and understanding strategic applications of advertising, sales promotion and public relations tools. Students should expect to gain knowledge of communications theory as well as practical application through study of texts and real world cases.

## WINEMKTG 7005EX

## Wine \& Food Tourism and Festivals

- 3 units - semester 2
- External
- Eligibility: PG students only
- Assumed Knowledge: WINEMKTG 7055WT/7055EX Wine and Food Marketing Principles
- Assessment: to be advised

This course explores the basics of tourism and the structure of the tourism industry as it relates to both wine and food. It addresses the basics concepts of wine tourism and hospitality, wine and food festivals in the broad context of tourism and hospitality, and wine tourism as a vehicle to build a brand image for the wine(ry) business and/or wine region. Specific focus areas include wine tourism visitor (consumer) behaviour, the role of the winery cellardoor in wine marketing/distribution, the functions of wine routes/roads, wine region brand building, and wine and/or food festival event fundamentals and management.

## WINEMKTG 7006EX

## WINEMKTG 7006WT

## Wine Retail and Distribution Management

- 3 units - semester 2
- External; Internal - up to 3 hours per week (lectures, tutorials)
- Prerequisite: WINEMKTG 7055WT/7055EX Wine and Food Marketing Principles
- Assessment: assignments, exam

This course focuses on the principles of establishing and managing a retail concern. It will expose the student to the theoretical and practical aspects of selling and retail practices. Some of the areas this course will cover include: distribution and information systems, selling and marketing technology and trends, retail and wholesale operations, negotiation skills. The course can involve some fieldwork and practical case studies.

## WINEMKTG 7026EX

## Microeconomic Principles

- 3 units - semester 1
- External only
- Assessment: assessment: assignments, final exam

The course provides an introduction to the essential elements of microeconomics, with emphasis on demonstrating how the understanding of microeconomic principles can lead to better analysis of management and marketing of wine and food products, and government microeconomic policies. Broadly, the course covers how production and consumption decisions of individual
economic units are made and coordinated. Specific topics include fundamentals of supply and demand analysis, production economics, analysis of short and long-run costs of production, market structure, pricing policies and methods, market failure, welfare and public policy issues and the markets for factors of production.

## WINEMKTG 7030EX

WINEMKTG 7030WT

## Wine and Society

- 3 units
- External; Internal - up to 3 hours per week (lectures, tutorials)
- Assumed Knowledge: WINEMKTG 7055WT/7055EX Wine and Food Marketing Principles
- Assessment: to be advised

The student will be exposed to studies that cover the history and future of the Australian wine industry, presented in the wider context of European and other New World wine industries. Topics covered include: the origins of grape and wine production, the religious and cultural symbolism of wine, the development of an international wine trade in the 20th century, the role of fashion in wine markets, and examination of wine and other forms of alcohol and health issues. Also covered are alcohol and wine consumption habits and attitudes, education and awareness programs, communication of wine information, food and wine complementarity, labelling and product laws.

## WINEMKTG 7031WT

## Topics in Agricultural Business B

- 3 units - semester 2
- Up to 3 hours per week
- Prerequisite: approval of Wine Business program coordinator
- Assessment: written assignments \& oral presentations

The course will offer the opportunity to the student to cover a range of topics in Agricultural Business (including wine and food) as it relates to the students study program and the teaching and research interests of staff and visiting academics.

## WINEMKTG 7033WT

## Research Methodology and Methods

- 3 units - semester 1 or 2
- Up to 3 hours seminars per week
- Prerequisite: approval of Wine Business program coordinator
- Assessment: written assignments, seminar presentations

This course familiarises the student with the methodology of scientific research in wine business, ie. the system of rules and
procedures on which wine business research is based and against which claims for knowledge are appraised; and the methods or techniques commonly used in wine business research, including quantitative techniques and computer techniques. Coverage of techniques emphasises the types of problems each technique is suitable for, and the strengths and limitations of each technique. The first half of the course concentrate on methodology, the second half on methods. Concepts required for writing a research proposal are presented in the first half of the semester. The methods are presented during the second half of the semester. During the second half of the semester, a student completes and successively refines his/her proposal to be presented at the end of the semester.

## WINEMKTG 7034EX

## WINEMKTG 7034WT

## Winery Business Management

- 3 units - semester 2
- External; Internal - Up to 3 hours per week (incl. lectures, tutorials)
- Eligibility: PG Wine Business students only
- Prerequisite: WINEMKTG 7053WT/7053EX Introduction to Managerial and Financial Accounting and WINEMKTG 7055WT/7055EX Wine and Food Marketing Principles
- Assessment: assignments, winery business plan project

This capstone course integrates all of the interfacing elements between wine and business management as these relate to the 'real-world' side of the wine industry of today. In the process wine marketing (with a strong emphasis on brand building to differentiate the wine(ry) business), winery cost and management accounting and financial management, strategic winery business management, and organisation development are all examined as these relate to actual wineries. Key focus areas are wine(ry) brand building and management, understanding costs of production, and financing growth strategies for a wine(ry) business. The key activity performed in this course is the analysis and application of decision-making to winery operations and their application to an actual (operating) winery. The primary course outcome is the development of a realistic and fully-integrated business plan for this operating winery.

## WINEMKTG 7035EX

## WINEMKTG 7035WT

## International Wine Law

- 3 units - semester 1
- External; Internal - Up to 3 hours per week (incl. lectures, tutorials)
- Eligibility: PG students only
- Assumed Knowledge: WINEMKTG 7054EX Legal Issues in Wine Marketing
- Assessment: to be advised

The course will cover import and export licensing, labelling and standards requirements, appellation and place names requirements and restrictions, contracts for international sale and financing of sale and for transport, conflict of laws, the role of the OIV and other international agencies, treaties and trade agreements, and tax laws as related to the international wine trade.

## WINEMKTG 7039EX

## WINEMKTG 7039WT

## Applied Marketing Research

- 3 units - semester 2
- External; Internal - Up to 3 hours per week (incl. lectures, tutorials)
- Assumed Knowledge: WINEMKTG 7055WT/7055EX Wine and Food Marketing Principles
- Assessment: to be advised

The aim of this course is to study quantitative and qualitative marketing research for pro-active and reactive marketing intelligence systems as it applies to wine and food marketers. Topics included are problem analysis, types of data collection systems, steps in research projects, controls of a research project, questionnaire design, statistical methodology for data reduction, sampling theory and the industry and operative organisations. Dealing with a market research organisation will be a significant aspect of the course which is not aimed at producing researchers but clients who understand the intricacies of the process - and the limitations. The focus will be the application of the theory for use in new wine or food evaluation, advertising measurement, corporate/ product/range analysis, attitudinal research, as primary sources. Secondary sources such as trade, governmental or syndicated data will be explored and assessed.

## WINEMKTG 7041WT

## Topics in Agricultural Business A

- 3 units - semester 1
- Up to 3 hours per week
- Prerequisite: approval of Wine Business program coordinator
- Assessment: written assignments, oral presentation

The course will offer the opportunity to the student to cover a range of topics in Agricultural Business (including wine and food) as it relates to the student's study program and the teaching and research interests of staff and visiting academics.

## WINEMKTG 7046WT

## Problems in Agricultural Business A

- 3 units
- Up to 3 hours per week
- Prerequisite: Approval of Wine Business program coordinator
- Assessment: written assignments, oral presentations

This course will offer the student the opportunity to investigate a problem in the agricultural business area (including wine and food). The problem will relate to the student's study program and the teaching and research interests of staff and visiting academics.

## WINEMKTG 7047WT

## Problems in Agricultural Business B

- 3 units
- Up to 3 hours per week
- Prerequisite: Approval of Wine Business program coordinator
- Assessment: written assignments, oral presentations

This course will offer the student the opportunity to investigate a problem in the agricultural business area (including wine and food). The problem will relate to the students study program and the teaching and research interests of staff and visiting academics.

## WINEMKTG 7049EX

## Global Market for Wine

- 3 units - semester 1
- External; Internal - up to 3 hours per week (incl. lectures, tutorials)
- Eligibility: PG Wine Business students only
- Corequisite: WINEMKTG 7055WT/7055EX Wine and Food Marketing Principles
- Assessment: to be advised

This course provides students with insights into the structure, mechanisms, regulatory agencies, and complexities of the world wine marketing. It uses a typology of open, government-regulated and emerging wine markets as the frame work within which to present this. In addition, it examines key drivers in the world wine marketing and their impact on wine marketing dynamics and characteristics. Throughout there is an emphasis on wine consumer behavioural aspects and successful marketing strategies employed in the major wine consuming markets.

## WINEMKTG 7052WT

## Applied Management Science

- 3 units - semester 1
- Up to 4 hours per week (including lectures, tutorials, practicals)
- Assessment: theory, practical exams, case studies, other assignments

The aim of this course is to introduce a collection of management science techniques that helps business managers make better decisions and to foster a logical, consistent and systematic approach to problem formulation, problem solving and decision making. Emphasis is placed on model formulation and interpretation rather than algorithms. Topics to be covered include mathematical programming, network modelling, Monte Carlo simulation, decision analysis under risk, and time series forecasting.

## WINEMKTG 7053EX

## WINEMKTG 7053WT

## Introduction to Managerial \& Financial Accounting

- 3 units - semester 1 or 2
- External; Internal - up to 3 hours per week (incl. lectures, tutorials)
- Eligibility: PG students only
- Assessment: assignments 50\%, final open book exams 50\%

This course provides an introduction to the principles of accounting appropriate to the wine industry. The course deals with those accounting principles from the perspective of a winery business manager. The course does not seek to teach the detailed techniques of accounting, but rather to equip students with sufficient knowledge and skills of accounting to be better managers in the wine industry. The first half of the course deals with financial accounting matters, with a special emphasis on equipping students to be able to analyse financial statements, and to understand the techniques of managing cash flows in wine businesses. In the second half of the course, management accounting techniques such as product costing, budgeting, cost-volume-profit analysis and project evaluation are covered. At the end of the course, students will be able to deal with financial statements, management reports, and be able to make more effective decisions where financial implications are involved.

## WINEMKTG 7054EX

## Legal Issues in Wine Marketing

- 3 units - semester 2
- External
- Assessment: exam 50\%, assignments 50\%

This course provides a general introduction to the Australian legal system and institutions, and to Australian commercial law. Emphasis will be placed on those parts of the law that have particular relevance to marketing, such as contract, sale of goods, consumer protection, trace practices and intellectual property law. The legal principles discussed have general commercial applicability, but where possible will be illustrated by topical examples drawn from wine and food marketing.

## WINEMKTG 7055EX

## WINEMKTG 7055WT

## Wine and Food Marketing Principles

- 3 units - semester 1
- External; Internal - up to 3 hours per week (incl. lectures, tutorials)
- Assessment: to be advised

The aim of this course is to give students an understanding of the role of the marketing manager through an introduction to the basic concepts and practices in marketing with particular emphasis on wine and food products. The topics covered include the marketing environment and marketing strategy formulation. There will be particular examination of product, price, place and promotion strategies.

## WINEMKTG 7056EX

## WINEMKTG 7056WT

## Internet Marketing and E-Commerce

- 3 units - semester 1
- External; Internal - up to 4 hours per week (incl. lectures, tutorials)
- Eligibility: postgraduate students only
- Corequisite: 7055WT/7055EX Wine and Food Marketing Principles
- Assessment: To be advised

The course examines issues concerning the process, development and impact of e-commerce, and the use of Internet marketing in wine and food business from a managerial viewpoint, and within the context of creating consumer value. Topics include the underlying technology of e-commerce, conceptual foundations of marketing in an electronic environment; e-commerce business models; consumer attitudes and behaviour on the Internet; Internet marketing research; e-commerce and supply chain management, and advertising and promotional strategies in e-commerce. Coverage also includes issues associated with developing strategy, planning, designing, implementing, out-sourcing, securing and managing e-commerce systems and technologies. Emphasis will be on establishing a framework to keep abreast of the technology in a relatively new but fast moving field.

## WINEMKTG 7057EX <br> WINEMKTG 7057WT

## Food Marketing

- 3 units - semester 1
- External; Internal - up to 3 hours per week (incl. lectures. tutorials)
- Prerequisite: WINEMKTG 7055WT/7055EX Wine and Food Marketing Principles
- Assessment: to be advised

This course examines key issues in the development and marketing of primary and processed food and beverages products. Emphasis is placed on such areas as supply chain management, managing product development, exporting Australian food and beverage products, market research, packaging and labelling, consumer food consumption trends, food marketing strategies, and value-adding in Australian food and beverage industries.

## WINEMKTG 7058EX

## WINEMKTG 7058WT

## International Marketing of Wine and Agricultural Products

- 3 units - semester 2
- External; Internal - up to 3 hours per week (incl. lectures. tutorials)
- Assumed Knowledge: WINEMKTG 7055WT/7055EX Wine and Food Marketing Principles
- Assessment: To be advised

This course aims to provide a comprehensive review of the theory and practice of international marketing in relation to wine and agricultural products. Topics include: environmental factors affecting global wine marketing, especially the socio-cultural implications of international trade and wine export, strategic planning and organising for international marketing, market research for wine and agricultural products, decisions on segmentation, wine product policy, pricing, channels of distribution, international wine advertising, and coordinating and controlling global wine marketing operations.

## WINEMKTG 7059EX

## WINEMKTG 7059WT

## Strategic Marketing Management

- 3 units - semester 2
- External; Internal - up to 3 hours per week (incl. lectures. tutorials)
- Prerequisite: WINEMKTG 7055WT/7055EX Wine and Food Marketing Principles
- Assessment: to be advised

The critical role of strategic marketing in meeting the challenges facing organisations in complex markets will be the primary focus of this course, and will seek to explore how formulating and implementing unique strategic marketing moves serve not only to ensure survival, but also to yield significant and sustainable competitive advantage.

Drawing on current and emerging perspectives on strategic marketing, the material covered will be structured in terms of a basic strategic marketing model, which deals with company, competition, customer, environment, strengths and weaknesses, objectives and goals, strategy formulations and implementation.

In order to contextualise this material students will be encouraged to develop an understanding of the practical necessity for interdependency and synergy between an organisation's corporate, business, and functional levels of strategy.

## WINEMKTG 7060EX

## Consumer Behavioural Analysis

- 3 units - semester 1
- External only
- Prerequisite: WINEMKTG 7055WT/7055EX Wine and Food Marketing Principles
- Assessment: to be advised

The aim of this course is to alert students to the many variables that impact upon the purchase and consumption of goods and services, especially wine. Within this multi-disciplinary course are the studies of perception, attitudes, human motivation, consumer information processing and decision making, the sociology of people, cultural and sub-cultural variables, group influences and the segmentation of consumers into manageable communicable target groups for wine markets. Knowledge of consumer behaviour provides direction and the basis for wine marketing efforts such as advertising, promotion, public relations, wine packaging, pricing, distribution and the nature of the wine product.

## WINEMKTG 7063EX

## Macroeconomic Essentials for Wine \& Food Business

- 3 units - semester 2
- External
- Assessment: assignments, final exam

This course develops understanding of the macroeconomic environment in which wine and food businesses operate; and the ability to analyse the implications of specific macroeconomic events (eg, change in the interest rate, tax cut, or increasing unemployment) to success and profitability, and marketing strategies of wine and food businesses. Emphasis is on applications and policies, not formal economic theory. Coverage include: measurements of national income, cost of living, and
unemployment; productivity and economic growth; the monetary system; the causes and effects of inflation and unemployment; impacts of monetary and fiscal policies; factors influencing the international flows of goods and capital; and current debates over macroeconomic policies.

## WINEMKTG 7064EX

## WINEMKTG 7064WT

## Advanced Wine Marketing

- 3 units - semester 1
- External; Internal - up to 3 hours per week (incl. lectures. tutorials)
- Eligibility: Master of Wine Business students only
- Prerequisite: WINEMKTG 7049WT/7049EX Global Market for Wine and WINEMKTG 7034WT/7034EX Winery Business Management
- Assessment: assignments, major project

This course integrates a multi-disciplinary approach with fundamental wine industry practicalities to address key issues as these relate to today's wine marketing coalface. Drawing on current and emerging perspectives on the marketing mix elements as these relate specifically to the wine market, the emphasis is on areas of wine marketing application such as new wine product development, strategic wine brand building and management, wine market segmentation approaches and methodologies, wine distribution channel issues, pricing strategies, and advertising and promotion issues. Within this wine marketing framework, there is also specific focus throughout on various consumer behavioural aspects, competitiveness issues and the important role of the winery cellar-door. In order to contextualise the course materials, students will be encouraged to develop an in-depth understanding at an advanced level of how grounded marketing theory principles relate and apply to the wine marketplace and its various issues. Students will be conducting primary wine market research in their major research project that will test their ability to apply these wine marketing concepts.

## WINEMKTG 7065EX

## WINEMKTG 7065WT

## Database Marketing for Food and Wine Business

- 3 units - semester 2
- External; Internal - up to 4 hours per week (incl. lectures. practicals, tutorials)
- Eligibility: Postgraduate students only
- Prerequisite: WINEMKTG 7055WT/7055EX Principles of Food and Wine Marketing
- Assessment: assignments, final exam

This course presents the evolving field of database marketing,
broadly defined as the use of customer databases and information technology to promote one-to-one relationships with customers and to create precisely targeted marketing strategies; and its uses in food and wine businesses, especially for small to medium sized firms. Coverage includes the theories and practices of customer database design, implementation and maintenance; customer relationship management, and acquisition, retention and win-back strategies; applying customer lifetime value techniques; customer segmentation; and database marketing communication. More complex database marketing concepts including geodemographic applications, automatic cluster detection, and market basket analysis will be introduced.

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[^0]:    * No further intakes into this program

[^1]:    Graduate Certificate in Wine Business

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[^2]:    - 3 units - semester 2
    - 2 lectures, 4 hours practical work per week, 1 tutorial per fortnight
    - Available for Non-Award Study

[^3]:    \# No further intakes into this program

    + Not offered in 2006
    * No intake into these programs in 2006

