Postgraduate Calendar

POSTGRADUATE CALENDAR
1996
# Calendar of Dates

## Session Dates

### Summer Session

**4 December 1995 - 11 February 1996**

<table>
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<tr>
<td>Lectures Commence</td>
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<td>Christmas Recess</td>
<td>18 December - 30 December</td>
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<td>3-10 February</td>
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## Important Dates

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<td>HECS Census Dates and Internationals Student Audit Dates</td>
<td>18 December 1995</td>
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<td>Enrolment of New Undergraduates</td>
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<tr>
<td>Last day for late Re-enrolments</td>
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<td>Enrolment of New Undergraduates</td>
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<td>of Re-enrolling Students</td>
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## Subject Withdrawal

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<td>Double Session (Code B) Subjects</td>
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The principal elements incorporated in the arms of the University are the blue of the sea, the gold of the sand and the red of the Illawarra flame tree. The open book often used for educational institutions has also been included.

The blazon is “Azure a book expanded Argent bound and clasped Or on a Chief of the last three Cinquefoils pierced Gules”.

The University of Wollongong occupies a large site at the foot of Mt Keira. It is about three kilometres from the centre of Wollongong and 80 kilometres south of Sydney.

The University had its foundation in 1951 when the New South Wales University of Technology established a division at Wollongong. In 1961 the division became a College of the University of New South Wales. In 1975, by Act of New South Wales Parliament, the University became an autonomous institution. In 1982 it was amalgamated, again by Act of New South Wales Parliament, with the adjoining Wollongong Institute of Education. This latter institution had its origin as the Wollongong Teachers’ College which was founded in 1962.

The University provides courses and undertakes research and other activities of accepted university standard.

The total student enrolment now exceeds 11,000. The student body is diverse and stimulating, yet small enough to retain a friendly and relaxed atmosphere.

Students and intending students are advised to contact the Student Enquiries Office at the University for any further information they may require.

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University of Wollongong Calendar

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- General Information Calendar
- University of Wollongong Undergraduate Calendar 1996
- University of Wollongong Postgraduate Calendar 1996

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Wollongong, NSW 2522
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Facsimile: (042) 213477
All enquiries should be addressed to the Vice-Principal (Administration).

Office Hours:

Switchboard: Monday to Friday 8.30 am - 5.00 pm
Student Enquiries: (Tel: 213927) Monday to Friday 9.00 am - 5.00 pm
Cashier: Monday to Friday 9.30 am - 4.30 pm

The University attempts to ensure that the information contained in this publication is up to date at the time of printing but sections may be amended without notice by the University in response to changing circumstances or for any other reasons. Classes in any subject may be cancelled if enrolments do not reach the levels approved for the effective presentation of the topic area. Students should check with the University at the time of application/enrolment whether any later information is available in respect of any material contained in this Calendar.

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THE FACULTIES

ARTS

Department of English
Department of History and Politics
Department of Modern Languages
Department of Philosophy
Department of Science and Technology Studies
Department of Sociology
Centre for Multicultural Studies

COMMERCCE

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Department of Business Systems
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Graduate School of Health and Medical Sciences

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FACULTY OF ARTS
Faculty of Arts

FACULTY OFFICE

Dean: Professor James Wieland
Sub Dean: Dr Graham C Barwell
Executive Officer: Mr Warren Mahoney (042) 213395
Administrative Assistant: Ms Marie Ferri (042) 213369

MEMBER UNITS

The Faculty of Arts is made up of the following Units

English
History and Politics
Modern Languages
Multicultural Studies
Philosophy
Science and Technology Studies
Sociology

RESEARCH COURSES AVAILABLE

The Faculty offers Honours Master of Arts and Doctor of Philosophy degrees by research.

POSTGRADUATE PROGRAMS

Postgraduate programs are available in the Faculty in the following areas:

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James M Wieland, BA WA, MA PhD Qu

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Administrative Assistant
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The Hon Robert Tickner, MP, Minister for Aboriginal & Torres Strait Islander Affairs
Dr Ron Wise, Chairman, Cape Range Ltd
CULTURAL STUDIES

COURSES OFFERED
The following postgraduate courses are available:

1. Honours Master of Arts
2. Master of Arts

POSTGRADUATE PROGRAM

Cultural Studies

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN CULTURAL STUDIES
leading to the Master of Arts or Honours Master of Arts

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<td>ENGL936</td>
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(ii) Honours Master of Arts

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| and either: | ENGL925  | Writing the Gendered Body  | 8 |
| or: | ENGL925  | Writing the Gendered Body  | 8 |
| Electives: | ENGL912  | Cross-Cultural Perspectives. Experiences of Asia  | 8 |
| | ENGL918  | Directed Study either Session 1 or 2  | 8 |
| | ENGL925  | Writing the Gendered Body  | 8 |
| | ENGL936  | Sexuality and Representation  | 8 |
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| | SOC921  | Special Topic in Sociological Studies  | 8 |
| | SOC942  | Advanced Race & Ethnic Studies  | 8 |
| | SOC946  | Practical Communication and Communications Theory  | 8 |
| | SOC950  | Advanced Studies of the Individual in Society  | 8 |
| | SOC959  | Advanced Studies in Gender & Society  | 8 |
| | STS915  | Master Narratives, Myth & Symbolic Politics in Science  | 8 |

For further details, see Course Requirements below.

* Not on offer in 1996.

COURSE REQUIREMENTS

1. HONOURS MASTER OF ARTS
2. MASTER OF ARTS

(Administered jointly by the Departments of English, Sociology and Science and Technology Studies.)

The objectives of this program are to provide students with the ability to analyse and decode cultural phenomena and to examine communication practices within contemporary society. The Masters program is an interdisciplinary course — taught mainly by English and Sociology staff and supported by other Departments within the Faculty of Arts. The course prepares graduates to enter business, government, academic and media fields, and related professions.

Pass degree entry
Pass graduates or equivalent may undertake a 48 credit point Master of Arts course, choosing 6 subjects (which in normal circumstances will include the four
prescribed subjects) from the Schedule, excluding the minor thesis. The degree will run over one year full-time or two years for part-time students.

Honours degree entry
(i) Honours graduates with a grade of at least Class II, Division 2 or its equivalent in an appropriate area (as assessed by a course panel) may enter this coursework MA with a notional accreditation of 48 credit points. Candidates will undertake each of the prescribed topics and choose two of the Optional Topics from the schedule above. (One year full-time, two years part-time.)
(ii) Pass graduates or equivalent with a credit average or better may undertake a 96 credit point Honours MA coursework program. The initial 48 credit point part of the program will be considered a qualifying course, with subjects at the appropriate level being chosen from offerings in the English and Sociology schedules in consultation with the course co-ordinator. The subsequent 48 credit points will be undertaken according to the rubric applying to the MA Honours course. See (ii) below. (Two years full-time, three years part-time.)

Description
This program brings together teaching and research from the Departments of English, Sociology and Science and Technology Studies, and the Centre for Multicultural Studies.

The program aims to:
(i) introduce students to the central theoretical and critical issues (both historical and contemporary) in Cultural Studies;
(ii) develop in students the ability to analyse cultural context and communicate accurately within it, and to lead students to consider historical changes (and to develop innovative approaches) to communication practices. The development of new kinds of communication practice has become crucial for organisation and productivity in both government and commerce;
(iii) provide students with conditions in which they can employ practical analyses of cultural conditions;
(iv) develop a critical awareness of analytic skills and the underlying cultural dimensions which make communication effective.

SUBJECT DESCRIPTIONS

ENGL912 Cross-cultural Perspectives: Experiences of Asia
Spring session; 8 credit points (3 hr lecture/screening per wk).
Assessment: 3 essays 33.3% each.
A survey of the various kinds of texts concerned with representing other cultures (travel writing, ethnography, colonial fiction, etc.): analysis of the interaction of language and culture, literary conventions, models of textual production, socio-cultural perceptions and critical reactions; theorising on constructions of culture as essence and interchange.

Textbooks:
Desai, A, Bye Bye Blackbird, Orient.
Ekoedl, N, Selected Poems, OUP.
Forster, E M, A Passage to India, Penguin.
Harre, S (ed), Kamala Das, CRNLE.
Jhabvala, R P, A Backward Place, Penguin.
Kipling, R, Kim, Oxford.
Koch, C J, Across the Sea Wall, Angus & Robertson.
Newbey, E, A Short Walk in the Hindu Kush, Picador.
Rao, R, The Serpent and the Rope, Orient/VIKAS.
Rushdie, S, Shame, Picador.
Said, E, Orientalism.
Selected critical readings will be available in class.
Co-ordinator: Dr P Sharrad.

ENGL918 Directed Study
Autumn or Spring session; 8 credit points (3 hr seminar).
Assessment: 4 written assignments 25% each. Directed reading, research and other investigative activities leading to the production of a major essay/report in the field of study selected by the student in consultation with the Co-ordinator of Postgraduate Studies in English and the Head of Department.
Textbooks: to be advised.
Co-ordinator: Dr P Sharrad.

ENGL920 Theories of Text, Discourse, Subjectivity and Culture
Autumn session; (3 credit points per wk).
Assessment: 1 major essay 50%; 1 seminar paper 25%; 1 textual analysis exercise 25%.
This subject aims to provide an introduction to contemporary critical theories of text, discourse, subjectivity and culture. Students will be introduced to a range theoretical approaches and methodologies which question fundamental assumptions about culture, knowledge and relations of power. The assessment work is designed to establish connections between the theoretical methodologies and the student's own research interests.
Textbook:
Reader available from the English Department office.
Co-ordinator: Dr J Pugliese.

ENGL925 Writing the Gendered Body
Spring session; (2 hr seminar per wk).
Assessment: 2 essays 33.3% each, and 1 seminar project 33.3%.
A study of a series of texts with special reference to their representation of the human body as socially and culturally constructed through race, social class and gender, with particular emphasis on the latter. At the same time the subject will examine the part literary texts themselves play in bodily construction.
Textbooks:
Atwood, M, Bodily Harm, Virago, 1985.
Jolly, E, The Sugar Mother, Penguin.
Kafka, F, Metamorphosis and other Stories.
Winterstter, J, Written on the Body.
Woolf, V, Orlando.
Woolf, V, A Room of One's Own.

Note: The program for the subject will specify further “readings” for each week:
(i) primary material poems, short fiction;
(ii) critical/theoretical articles and chapters.
Co-ordinator: Associate Professor D Jones.

ENGL936 Sexuality and Representation
Autumn session; (2 hr seminar per wk).
Assessment: two essays 50% each.
This subject will introduce students to the study of representations of sex and sexualities. The second section will analyse three contemporary texts which explicitly problematise the relationship between culture, representation, sexuality and sexual difference. The third section will examine the discourses of “camp” as an exemplary instance of the complex relationships between cultural, historical, theoretical-between gender and textual production.
Textbooks:
Lawrence, D, H, Lady Chatterley's Lover, Penguin.
Forster, E M, Maurice, Edward Arnold.
Radclyffe Hall, The Well of Loneliness, Virago.
Jacqueline Susann, Valley of the Dolls.
Other materials will be supplied.
Co-ordinator: Dr M Hardie.

ENGL938 Australian Screen
Spring session; 6 credit points (3 hr lecture/screening; 1hr seminar per week).
Assessment: 1 major essay/video project 40%, 2 minor essays 30% each.
This subject covers the history of the Australian film industry, from the silent period, through the decline of the 1950s and 1960s and the government-assisted revival in the 1970s, to the present day. Arguments for and against a national cinema are considered, and the cooperation between Australian television and cinema in the production of a national image is explored. In addition, we will look at the critical role played by non-mainstream and avant-garde filmmakers in challenging the dominant myths of the Australian screen.
Students who successfully complete this subject will be conversant with the industrial and social history of Australian cinema, and will be able to position this history within a discussion of the silent period of world cinema. They will be able to hold policy initiatives in cultural nationalism to economic and political imperatives, and will have explored the potential of such efforts in the era of global media ownership.
Textbooks:
Moran, A and O'Regan, T (eds), An Australian Film Reader, Currency, Sydney, 1985.
Co-ordinator: Ms K Bowles.
SOC918 Advanced Sociology of Development
Autumn session; 8 credit points (2 hrs seminar).
Assessment: 2 seminar papers, one major essay.

This subject examines the interaction of various explanations for the emergence of international disparities of wealth. In particular, it will focus on the Pacific region, and theoretical explanations for the emergence of inter-regional disparities. Emphasis will be placed on suitable and level to be offered as a SOC subject. This will be a reading course offered under the direct supervision of a member of staff. For details of topics covered, students should consult the Head of Department.

Co-ordinator: Dr A Cornish.

SOC921 Special Topic in Sociological Studies
Autumn/Spring session; 8 credit points (variable combination of individual supervision and seminars).
Assessment: one essay of approximately 4,000 words plus tutorial assignments.
Topics for this subject may be chosen from any area of Sociology which the Head of the Department deems to be of suitable substance and level to be offered as a SOC subject. This will be a reading course offered under the direct supervision of a member of staff. For details of topics offered, students should consult the Head of Department.

Co-ordinator: Refer to Head of Department.

SOC942 Advanced Race and Ethnic Studies
Spring session; 8 credit points (3 hrs lectures/seminars).
Assessment: 2 seminars and long essay.
This subject introduces students to theories of ethnicity, 'race' and racism, in relation to other dimensions of social structure, in particular class and gender relations. Within an analysis of the Australian context the significance of culture and ideology is explored. This includes an analysis of the subjective and structural dimensions of racial oppression and liberation movements, as well as an analysis of the broader theoretical and substantive relationship between culture, identity and resistance. These theories and issues will relate to the situation of ethnic minorities in Australia, and international and historical comparisons will be made.

Co-ordinator: Professor S Castles.

SOC946 Practical Communication and Communications Theory
Autumn session; 8 credit points (3 hrs lectures/seminars).
Assessment: major sessional essay, seminar paper and participation.
This subject aims to link professional communication skills and understanding by relating practical issues to theoretical models, concepts, and ideas. It does this by exploring various debates, and theoretical constructs which help relate individuals to society. Practical work includes: interviewing, participant observation, role-play, ng, analysing visual and phenomenological material. The theoretical traverse examines various accounts, models and theories of communication and aims to raise students' ability to encode and decode communication issues.

Co-ordinator: Dr T Jagtenberg.

SOC947 Cultural Theory
Spring session; 8 credit points (2 hrs seminar/week).
Assessment: major essay/research paper, seminar project and participation.
This subject aims to introduce students to the work of leading cultural theorists. A number of perspectives are covered ranging from structuralism to feminism and phenomenology, through to feminism and post-modernism. Key concepts to be explored include cultural production, transmission, and reception of cultural forms: hegemony, the notions of "high" and "popular" culture discourse in cultural contexts; forms and modes of cultural production within the Media; the relationship between 'race'/ethnicity and culture; gendered cultures; the relationship between feminism and culture; the technological mediation of culture; cultural production as social/political intervention, visual culture, culture and the environment, and post-modernism. Students will examine the implications, value and impact of particular cultural theories and will be encouraged to construct their own interventions.

Co-ordinator: Dr A Jagtenberg & Dr E Vasta.

SOC950 Advanced Studies of the Individual in Society
Spring session; 8 credit points (3 hrs lecture/seminar/workshop).
Assessment: major essay, seminar project, and participation.
This subject examines fundamental aspects of human identity and explores the extent to which an individual is 'socially constructed'. The individual is located in the historical, cultural, and institutional context of "modern"/"post-modern" times through a consideration of contemporary myths, ideologies and practices which provide structure and meaning to daily life (eg. love, gender, truth). The course broadly addresses the question of how personal identity is achieved in the context of change and uncertainty. These issues involve cross-cultural exploration of different models of self, identity and relationship. Students will have the opportunity to explore a range of perspectives including interactionist, structuralist, post-structuralist and post-modern approaches to questions of identity. This also involves some consideration of 'non-western' traditions and questions about the ecological status of human identity.

Co-ordinator: Dr T Jagtenberg.

SOC959 Advanced Studies in Gender in Society
Autumn session; 8 credit points (3 hrs lecture/seminar).
Assessment: Participation, seminar papers and long essay: maximum of 7000 words.
This subject takes as its focus current debates about the constitution of humans as gendered subjects. Through the reading of key texts students will explore the debates within contemporary sociological thought on the complex inter-relation of social structures, social institutions and social practices in the constitution of femininity and masculinity. The debates to be addressed include those about the sexual division of labour, the contradictory position of women in relation to the family and the state, and the nature and role of sexuality in the constitution of femininity and masculinity. Each year the subject concentrates on a particular aspect of gender relations in Australia. The focus will be on the interaction of the state and other social institutions of gender division.

Examples will be drawn from current literature.
Please Note: Students with little or no background in the study of gender relations must consult the lecturer for preliminary reading.

Co-ordinator: Ms R Albury.

SOC990/ENGL990 Minor Thesis
24 credit points.
Students will be required to engage in an extensive program of study - reading, research and fieldwork that will seek in depth and detail one issue (or a set of issues) that arises from or is related to the concepts and material dealt with in coursework subjects. This program will result in the submission of 15,000 words, or a fieldwork report of 15,000 words (or equivalent taking into account diagrams, tables and other graphics) or some other equivalent body of work, as arranged with the thesis panel. Whilst the dissertation can be nominated by the student, they will require the approval of the Management Committee six weeks into the course and this has to be validated by the sixth week when a formal supervisor will be allocated. The dissertation will be examined by one internal and one external examiner.

Co-ordinator: Refer to Head of Department.

STS915 Master Narratives, Myth and Symbolic Politics in Science
Spring session; 8 credit points (3 hrs per wk).
Assessment: 1 essay 4,000 words; 1 seminar 1,500 words, 2 oral seminar commentaries.
This past generation has witnessed the demise, in some quarters, of virtually the entire corpus of traditional frameworks of cultural meaning about the history and nature of science, elaborated over the past 350 years. What previously counted as master narratives of, and signposts to, the essence of scientific progress and rationality have come to be seen as problematic, historically contingent discursive weapons and strategies for the defense (or sectional co-optation) of the institution of science by practitioners and their cultural allies. Accordingly, the previously received cultural meanings of science have become objects of study in the newer critical history and sociology of science. This subject surveys the previously received wisdom - including some of its internal conflicts - and examines the grounds of its deconstruction and collapse, as seen from within recent critical theoretical developments in the history, philosophy and sociology of science.

Topics will include:
(1) Traditional master narratives of the history of science - idealist/ Marxist/ functionalist - and their deconstruction from Bachelard through Kuhn to Kuhnian history and sociology of science; the common 'whiggish' discursive 'deep structure' of formally opposed 'internalist' and 'externalist' narratives of science.
(2) The lingering cult and symbolism of method: the discursive dynamics and rhetorical functions of method.
Faculty of Arts

discourse (Feyerabend/Schuster): the abortive careers of 'born-again' method narratives from Popper to Lakatos and Laudan.

(3) Science as inscription: scientific discoveries, facts and tests as textual and rhetorical accomplishments; the textuality and historicity of scientific hardware.

(4) The possibility and desirability of new master narratives for old in the 17th century rise of modern science and the 18th century emergence of experimental fields.

(5) Myth, symbol and master narrative in current science policy discourse and the wider public politics of science.

Textbooks:
Various books and articles will be used.

Co-ordinator: Associate Professor J Schuster.
ENGLISH

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Arts by Research
3. Honours Master of Arts (Cultural Studies)
4. Master of Arts (Cultural Studies)
5. Honours Master of Arts by Research (Post-Colonial Literatures)
6. Honours Master of Arts by Coursework (Post-Colonial Literatures)
7. Master of Arts (Post-Colonial Literatures)
8. Master of Arts (English Studies)
9. Graduate Certificate in Textual Studies, Media and Linguistics
10. Master of Arts (Women's Studies)

POSTGRADUATE PROGRAMS

Post-Colonial Literatures
English Studies
Textual Studies, Media and Linguistics
Cultural Studies (See Cultural Studies section of this Calendar)
Women's Studies (See Women's Studies section of this Calendar)

CURRENT RESEARCH AREAS

The following areas of research are available to candidates for the degrees of Honours Master of Arts and Doctor of Philosophy. Areas currently available to candidates for the MA in Post-Colonial Literatures are italicised.

Alternative and community theatre/drama
Aboriginal writing
Australian literature
Australian screen studies
Australasian theatre
Canadian literature
Canon formation and literary history
Caribbean literature
Cinema studies
Communication studies
Contemporary screen theory
Cross cultural literature
Cultural theory and literature
Dramaturgy
Early seventeenth-century literature and culture
Early women writers
Eighteenth-century literature
Elizabetan literature
Fantasy and utopian writing
Gender and genre
The Gothic
Hypertexts and computer-produced multimedia
Indian writing in English
Middle English language and literature
Modern European theatre
Modern poetry and fiction
New literatures in English (Commonwealth/Post-Colonial literatures)
New Zealand literature
Nineteenth-century literature
Nineteenth and twentieth century popular theatre
Old English language and literature
Old Icelandic language and literature
Pacific literature
Popular media and popular culture
Popular literature
Post-colonial theory
Post-colonial Women’s Writing
Radical, alternative and independent cinema
Screen theory, practice and criticism
Sexuality and representation
Shakespeare
Systemic functional linguistics
Text-to-performance studies in theatre
Textual criticism and computer-generated editions
Theories of the modern stage
Victorian cultural studies
### POSTGRADUATE PROGRAMS IN POST-COLONIAL LITERATURES

leading to the Master of Arts or Honours Master of Arts.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tr>
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<tr>
<td>ENGL908</td>
<td>Literature from Colonised Societies*</td>
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<tr>
<td>ENGL909</td>
<td>Deconstructing Australia</td>
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<tr>
<td>ENGL910</td>
<td>Twentieth Century Women Writers</td>
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<tr>
<td>ENGL912</td>
<td>Cross-Cultural Perspectives: Experiences of Asia</td>
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<td>ENGL915</td>
<td>Drama and Theatre in other Cultures*</td>
<td>8</td>
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<td>ENGL916</td>
<td>United States Literature of the Nineteenth and Early Twentieth Centuries*</td>
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<td>ENGL918</td>
<td>Directed Study</td>
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<td>ENGL921</td>
<td>Turning Points: Selected Post-Colonial Fiction</td>
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<tr>
<td>ENGL922</td>
<td>Research Methods</td>
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<td>ENGL923</td>
<td>Indigenous Literature in Canada, Australia and New Zealand</td>
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<td>ENGL931</td>
<td>Contemporary Australian Drama</td>
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<tr>
<td>ENGL934</td>
<td>Africa and the New World*</td>
<td>8</td>
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<td>ENGL935</td>
<td>Pacific Literature</td>
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<td>ENGL937</td>
<td>New Zealand Literature*</td>
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<td>ENGL938</td>
<td>Australian Screen</td>
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<td>HIST933</td>
<td>Culture and Politics in Indonesia, 1865-1988</td>
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</table>

For further details, see Course Requirements below.

### POSTGRADUATE PROGRAM IN ENGLISH STUDIES

leading to the degree of Master of Arts or the Graduate Certificate in Textual Studies, Media and Linguistics.

<table>
<thead>
<tr>
<th>Number</th>
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<tr>
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<td>Theories of Text, Discourse, Subjectivity and Culture</td>
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<tr>
<td>ENGL927</td>
<td>Media Studies: Analysing Mass Media</td>
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<td>ENGL928</td>
<td>Introduction to Language in a Social Context</td>
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<td>ENGL915</td>
<td>Drama and Theatre in other Cultures*</td>
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<td>ENGL916</td>
<td>United States Literature of the Nineteenth and Early Twentieth Centuries*</td>
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<td>Directed Study</td>
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<td>ENGL921</td>
<td>Turning Points: An Introduction to Post-Colonial Fiction</td>
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<td>ENGL922</td>
<td>Research Methods</td>
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<td>ENGL923</td>
<td>Indigenous Literatures in Canada, New Zealand and Australia</td>
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<td>ENGL925</td>
<td>Writing the Gendered Body</td>
<td>8</td>
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<tr>
<td>ENGL926</td>
<td>Technologies of the Alien</td>
<td>8</td>
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<tr>
<td>ENGL929</td>
<td>Reason, Revolution and Reform: Themes in Eighteenth and Nineteenth Century Writing*</td>
<td>8</td>
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<tr>
<td>ENGL930</td>
<td>History and Romance in Early Modern Britain</td>
<td>8</td>
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<tr>
<td>ENGL931</td>
<td>Contemporary Australian Drama</td>
<td>8</td>
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<tr>
<td>ENGL932</td>
<td>Introduction to Publishing Studies*</td>
<td>8</td>
</tr>
<tr>
<td>ENGL933</td>
<td>Early Women Writers</td>
<td>8</td>
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*Not on offer in 1996.
POSTGRADUATE PROGRAM IN ENGLISH STUDIES (cont’d).
leading to the degree of Master of Arts or the Graduate Certificate in Textual Studies, Media and Linguistics.

<table>
<thead>
<tr>
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<td>Australian Screen</td>
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<td>EDGA973</td>
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<tr>
<td>EDGA975</td>
<td>Educational Linguistics</td>
<td>8</td>
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</tbody>
</table>

(ii) Graduate Certificate in Textual Studies, Media and Linguistics

Core subjects: Students must take all three core subjects

ENGL920 Theories of Text, Discourse, Subjectivity and Culture
ENGL927 Media Studies: analysing Mass Media
ENGL928 Introduction to Language in a Social Context

For further details see Course Description below.
(Optional subjects are offered subject to the availability of staff.)

*Not on offer in 1996.

OTHER POSTGRADUATE SUBJECT

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
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<tr>
<td>ENGL999</td>
<td>Major thesis</td>
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</tbody>
</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Time Limits
A full-time candidate shall complete the Doctoral Dissertation in not less than four (4) consecutive sessions, not including Summer sessions and not more than eight (8) consecutive sessions, not including Summer sessions, from the date of registration.

A part-time candidate shall complete the Doctoral Dissertation in not less than six (6) consecutive sessions, not including Summer sessions and not more than twelve (12) consecutive sessions, not including Summer sessions, from the date of registration.

Length of Dissertation
The Doctoral Dissertation shall be a minimum of 80,000 words in length.

Candidates for the PhD degree enrol in ENGL999.

2. HONOURS MASTER OF ARTS BY RESEARCH

Entry to the Degree
Entry to the degree is normally from the BA Honours. Students having a degree with Class II division ii or higher will normally be accepted into the Masters Honours programme.

Qualification Requirements
Students who do not have an Honours degree in an appropriate area may be admitted to the Masters Honours program by completing a 'Master of Arts (Preliminary)'.

Master of Arts Preliminary
Students enrolling in the Master of Arts (Preliminary) will normally be required to take six (6) subjects chosen from the subjects on offer in ENGL400 (English Honours) and Postgraduate coursework subjects. Students who do not have a background in literary theory should include ENGL920 Theories of Text, Discourse, Subjectivity and Culture, in their programs.

Time Limits
A full-time candidate shall complete the Honours Masters Dissertation in not less than two (2) consecutive sessions, not including Summer sessions, from the date of registration.

A part-time candidate shall complete the Honours Masters Dissertation in not less than three (3) consecutive sessions, not including Summer sessions and not more than eight (8) consecutive sessions, not including Summer sessions, from the date of registration.

Length of Dissertation
The Honours Masters Dissertation shall be approximately 50,000 words in length.

Candidates for the Master of Arts (Honours) degree enrol in ENGL999.

3. HONOURS MASTER OF ARTS (CULTURAL STUDIES)

4. MASTER OF ARTS (CULTURAL STUDIES)

For details of these courses, please refer to the “CULTURAL STUDIES” entry in the Faculty of Arts section.

5. HONOURS MASTER OF ARTS BY RESEARCH (POST COLONIAL LITERATURES)

6. HONOURS MASTER OF ARTS BY COURSEWORK (POST-COLONIAL LITERATURES)

7. MASTER OF ARTS BY COURSEWORK (POST COLONIAL LITERATURES)

Pass degree entry
Entry will normally be from the BA, or equivalent qualification. Students will undertake a 48 credit point Master of Arts course. Students will take ENGL903, Post-colonial Literary Issues (8cp), and five optional subjects from the Schedule (40 cp), excluding the minor thesis. The degree will run over two sessions (excluding Summer Session) full-time or four sessions for part-time students.

Honours (Coursework and Research) degree entry
Coursework degree: BA (or equivalent) Honours graduates with a grade of at least Class II, Division ii in an appropriate area may undertake a 48 credit point course. They will take one prescribed subject ENGL903, Post-colonial Literary Issues (8cp), and two optional subjects from the Schedule (16 cp), and will complete a 20,000-word dissertation on a topic agreed on with a supervisor (24 cp). The duration of the course will be two sessions (full-time) not including Summer Session, or four sessions for part-time students.

Research degree: BA (or equivalent) Honours graduates with a grade of at least Class II, Division ii in an appropriate area may undertake a 48 credit point point course made up of the prescribed subject ENGL903, Post-colonial Literary Issues (8cp), one optional subject from the Schedule (8cp) and a 30,000-word dissertation (32cp). The duration of the course will be two sessions (full-time) not including Summer Session, or four sessions for part-time students.

Description
The area of focus for studies will be critical approaches to the literature in English appearing from a history of colonial presence in various nations, mostly (but not entirely) belonging to the British Commonwealth.

Once regarded as peripheral and culturally derivative, this writing has produced some of the modern greats of English literature - VS. Naipaul, Margaret Atwood, Patrick White, Salman Rushdie, Nadine Gordimer, Derek Walcott and, of course, writers from that other former colony, the United States. The course will consider those complex interactions of culture, politics and
8. MASTER OF ARTS (ENGLISH STUDIES)

The discipline of English has undergone considerable change over the last fifteen years. The traditional 'canon' of predominantly English/British literature is being questioned, new readings are being produced, and Universities are admitting an ever-widening range of texts to the 'English' curriculum. Australian Literature and Postcolonial studies are now major fields of study. Films and television programs are now recognized texts for study. At the same time, theoretical studies in textual analysis and linguistics have developed rapidly, to the point that it is crucial to have an academic training in English which includes theoretical studies.

Entry to the degree:
Students possessing a BA or equivalent qualification will take a total of 48 credit points in course work subjects: 24 of these will be from three 'core' subjects:

ENGL920 Theories of Text, Discourse, Subjectivity and Culture
ENGL927 Media Studies: analysing Mass Media
ENGL928 Introduction to Language in a Social Context.

The remaining 24 credit points will be made up of 3 subjects chosen from the options section of the schedule.

Description
The aims of this course are:
1. to satisfy the need in a student group for an upgrading in their level of knowledge about the discipline of English Studies;
2. by structuring the core to include subjects dealing with textual theory, language theory and media, the aim of this degree is to offer students a systematic training in new developments;
3. by providing options outside the core, the course aims to allow students to develop areas of their own interest, applying the theoretical concepts encountered in the core of the course.

9. GRADUATE CERTIFICATE IN TEXTUAL STUDIES, MEDIA AND LINGUISTICS

Theoretical studies in textual analysis, media and linguistics have developed rapidly in the discipline of English, to the point where it is crucial for English graduates to have an academic training which includes theoretical studies. The Graduate Certificate represents a response to a demand for a systematic training in recent developments in the discipline of English studies: in textual studies, media and linguistics. It provides an opportunity for graduates to upgrade their skills and to increase their present level of knowledge in the areas.

Candidates for the Certificate will be required to take a total of 24 credit points in the following three subjects:
ENGL920 Theories of Text, Discourse, Subjectivity and Culture
ENGL927 Media Studies: analysing Mass Media
ENGL928 Introduction to Language in a Social Context.

The course will run over one year full-time, or two years for part-time students.

10. MASTER OF ARTS (WOMEN'S STUDIES)

For full details of this course, please refer to the "WOMEN'S STUDIES" entry in the Faculty of Arts section.

SUBJECT DESCRIPTIONS

ENGL902 Dissertation
Double session; 24 credit points (coursework degree); 32 credit points (Research Degree).
Assessment: students undertaking the degree must submit a dissertation of 20,000 words (coursework degree) or 30,000 words (research degree) on a research topic to be determined in consultation with the supervisor.

ENGL903 Post-Colonial Literary Issues
Autumn session; 8 credit points (3 hrs per wk seminar).
Assessment: 3 written assignments 33.3% each.
A survey of relationships between culture, politics and literary constructions; the connection between British and other literatures in English; the question of 'universal' standards; nationalism and aesthetics; the formation of a field of study. Discussion will be based on selected fiction and critical readings.

Textbooks:
Ashcroft, Griffith and Tiffin (eds), The Empire Writes Back, Methuen.
Buchan, J, Prestler John, Penguin.
Harris, W, The Palace of the Peacock, Faber.
Williams, P, and Chrisman, L (eds), Colonial Discourse and Postcolonial Theory, Harvester Wheatshead.

Co-ordinator: Dr P Sharrad.

ENGL904 Twentieth Century Post-Colonial Writers*
8 credit points (3 hrs per wk seminar).
Assessment: 4 written assignments 25% each.
A Study of the poetry of a group of modern writers.

Textbooks:
Atwood, M, Selected Poems (The Journals of Susanna Moodie).
Ezekiel, N, Selected Poems, OUP.
Walcott, D, Another Life, Three Continents Press, 1982.
Wieland, J M, The Enshrining Mind, Three Continents Press.

Co-ordinator: Professor J Wieland.

* Not on offer in 1996.

ENGL908 Literature from Colonised Societies*
8 credit points (3 hrs per wk seminar).
Assessment: 3 written assignments 33.3% each.
The subject provides a survey of writing emerging from experiences of colonialism and post-colonial modes of colonisation. It aims to promote an understanding of socio-cultural dynamics and their representation in literary themes, forms and styles common to the field. There will also be a discussion of recurrent problems in the criticism of this literature.

Textbooks:
Fuentes, C, Distant Relations, Arena.
Grace, P, Potiki, Penguin, NZ.
Harrell and O'Sullivan, (eds) Kamala Das, CRNLE.
Joaquín, N, Tropical Gothic.
Moore & Beier (eds), Modern Poetry from Africa, Penguin.
Ogali, O, Veronica My Daughter, Three Continents.
Rushdie, S, Shame, Picador.
Soyinka, W, Ake, Arrow.

Co-ordinator: Dr P Sharrad.

ENGL909 Deconstructing Australia
Autumn session (2 hr seminar per wk).
Assessment: one seminar paper 20%, two essays 40% each.

Drawing upon poststructuralist, feminist and postcolonial theories, this subject will focus upon a range of texts which, in the context of Australian culture, raise questions concerning the construction of nation, the politics of identity, ethnicities, gender, sexualities and history.

Textbooks:
Fiction/Poetry
Bonotto, O, A Migrant's Story, UQP.
Derrida, J, Positions, University of Chicago Press.
Langley, E, The Pea-Pickers, Sirius.
Tsiolkas, C, Loaded, Vintage.
Narigon, M, Doin' Wildcat, Hyland House.
Stow, R, Visitants, Minerva.
Walwicz, A, Boat, UQP.
Short Films
Moffat, T, Night Cries.
Pavic, K, The Killing of Angelo Tasok, Picador.
Pellizzari, M, Rabbit on the Moon.
Teck Tan, Silk Dreams.
Thomas, S, Blackman's Houses.

Co-ordinator: Dr J Pugliese.

ENGL910 Twentieth Century Women Writers
Spring session; 8 credit points (3 hrs per wk seminar).
Assessment: 4 written assignments 25% each.
This subject examines poetry, short stories and novels by a number of twentieth century women writers from a variety of countries: Australia, USA, Southern Africa, New Zealand, Canada, and gives particular emphasis to the theme of the woman as artist.

Textbooks:
Frame, J, Living in the Maniototo, London,
ENGL912 Cross-cultural Perspectives: Experiences of Asia Spring session; 8 credit points (3 hr seminar per wk).
Assessment: 3 essays 33.3% each.
A survey of the various kinds of texts concerned with representing other cultures (travel writing, ethnography, colonial fiction, etc); analysis of the interaction of language and culture, literary conventions, modes of textual production, socio-cultural perceptions and critical reactions; theorising on constructions of culture as essence and interchange.
Textbooks:
- Desai, A, Bye Bye Blackbird, Orient.
- Ezekiel, N, Selected Poems, OUP.
- Forster, E M, A Passage to India, Penguin.
- Harrex, S C, Kamala Das, CRNLE.
- Jhabvala, R P, A Backward Place, Penguin.
- Koch, C J, Across the Sea Wall, A&R.
- Newby, E, A Short Walk in the Hindu Kush, Picador.
- Rushdie, S, Shame, Picador.
- Said, E, Orientalism, Penguin.
Assorted critical readings will be available in class.
Co-ordinator: Dr P Sharrad.

ENGL915 Drama and Theatre in Other Cultures*
8 credit points (3 hr seminar/workshop per wk).
Assessment: 4 written assignments 25% each.
An examination of examples of drama and theatre from cultural traditions other than the 'western'. The examples used each time the course is presented will be drawn from: Asian Drama (Japanese Noh and Kabuki; Indonesian Wayang and its modern developments); Traditional; forms from tribal cultures (Australian Aboriginal, Melanesian, Oceanic, African, New Zealand); new drama by indigenous peoples in post-colonial cultures (Black Theatre in Australia, plus examples from Africa, the Pacific, the Caribbean, India, Canada). (Note: At each presentation of this subject there will be a pre-announced emphasis on specific topics and sub-topics, eg Aboriginal drama and other examples of Post-Colonial 'indigenous' drama in Commonwealth countries.)
Textbooks:
- Davis, J, No Sugar, Currency.
- Davis, J, et al, Plays from Black Australia, Currency.
- Merritt, R, The Cake Man, publication details to be advised.
Co-ordinator: Mr M Scott.

ENGL916 United States Literature of the Nineteenth and Early Twentieth Centuries
8 credit points (3 hrs per wk lecture and seminar).
Assessment: 3 essays 35%, 35% and 30%.
This subject studies the development of a national literature in the United States during the 19th century and the first two decades of the 20th century. What makes American literature distinctively American? How did America shake off the cultural domination of Britain? What conditions exist in a post-colonial society, and what conditions are needed to stimulate the growth of an independent literature?
Textbooks:
- Dickinson, E, Selected Poems.
- James, H, Daisy Miller, Penguin.
- Dreiser, T, Sister Carrie, Signet.
- Melville, H, Moby-Dick, Signet.
- Whittman, W, Selected Poems.
Co-ordinator: Dr R Harland.

ENGL918 Directed Study
Spring or Autumn session; 8 credit points (3 hr seminar per wk).
Entry to this subject depends on the availability of staff.
Assessment: 4 written assignments 25% each.
Directed reading, research and other investigative activities at an advanced level in a field of study selected by the student in consultation with the Co-ordinator of Postgraduate Studies in English and approved by the Head of Department.
Co-ordinator: Dr P Sharrad.

ENGL920 Theories of Text, Discourse, Subjectivity and Culture
Autumn session (3 hrs seminar per wk).
Assessment: 1 major essay 50%, 1 seminar paper 25%, 1 textual analysis exercise 25%.
This subject aims to provide an introduction to contemporary critical theories of text, discourse, subjectivity and culture. Students will be introduced to a range of theoretical approaches and methodologies which question fundamental assumptions about culture, knowledge and relations of power. The assessment work is designed to establish connections between the theoretical methodologies and the student's own research interests.

Textbooks:
- Co-ordinator: Dr J Pugliese.

ENGL921 Turning Points: Selected Post-Colonial Fiction
Autumn session; 8 credit points (3 hr seminar per wk).
Assessment: 3 essays 33.3% each.
A survey of major fiction texts of post-colonial writing in English, especially 'first' novels from emerging nations and fiction that has, by virtue of critical attention or popular regard, become seminal in creating the literary corpus of post-colonial studies. Texts will be placed in cultural and historical context. Attention will be paid to the interaction between colonial experience and literary form and technique, and critical responses surveyed for various constructions of a post-colonial 'tradition'. Students will also undertake a special area study with texts to be arranged.
Textbooks:
- Achebe, C, Things Fall Apart.
- Cooper, J, The Last of the Mohicans.
- Edgeworth, M, Castle Rackrent.
- Schreiner, O, The Story of an African Farm.
- Rao, R, Kathanapura.
- Lamming, C, In the Castle of my Skin.
- Ilhamaer, W, Povunamu, Povunamu.
- Atwood, M, Surfacing.
Co-ordinator: Dr P Sharrad.

ENGL922 Research Methods
Autumn session; 8 credit points (3 hr seminar per wk).
Assessment: 1 essay 30%, class exercises 70%.
This subject is concerned with the practicalities of research at postgraduate level: development of a research topic, appropriate research models and techniques, planning and writing the dissertation, advanced bibliographic and textual study skills, computer skills, and editing. A theoretical component will examine the relationship between critical theory and research method in English studies.
Part-time students are advised to take this subject in the year in which they intend to submit the dissertation.
Textbooks:
- Kellehear, A, The Unobtrusive Researcher.
- Readings from the Department.
Co-ordinator: Dr KM Newey.

ENGL923 Indigenous Literature in Canada, New Zealand and Australia
Spring session; 8 credit points (3 hr seminar per wk).
Assessment: 4 assignments 25% each.
In recent years attention has turned towards the questions which teaching indigenous writing in the academy raises. Who can teach the literature of Aborigines, Maoris, Inuits and Native Indians? Who has the right to speak for them? Is there a common voice for all indigenous cultures? How do we approach the literature as outsiders?
without appropriating the right of indigenous peoples to speak for themselves? These critical questions will be addressed in insights which can be achieved through a comparative process - specifically, on the Canadian indigenous critics and artists. The experiences of Australian, New Zealand and Canadian indigenous critics and artists. The impact of Afro-American literary and politics.

ENGL925 Writing the Gendered Body
Spring session (2 hr seminar per wk).
Assessment: 2 essays 33.3% each, 1 seminar project 33.3%.
A study of a series of texts with special reference to their representation of the human body as socially and culturally constructed through race, social class and gender. The predominant emphasis on the latter. At the same time the subject will examine the part literary texts themselves play in bodily construction.

Textbooks:
Atwood, M, Bodily Harm, Virago, 1983.
Winterstern, J, Seeing the Cherry, Virago, 1989.
Woollf, V, Orlando.
Woollf, V, A Room of One's Own.
Winterstern, J, Written on the Body.

ENGL926 Technologies of the Alien: Representations of the 'other' in Science Fiction Film
Autumn session; one 2hr seminar per week.
Assessment: 1 essay 60%, 1 seminar paper 40%.
This subject will focus on Science Fiction film as an exploration of definitions of 'otherness'. It will examine the ways in which Science Fiction, as a genre, has been used to explore social issues and conflicts such as the relationship between technological development and social responsibility, the bodily inscription of gender, the Cold War, and the construction of the postmodern subject. It will also analyse the effectiveness of the Science Fiction film in the 20th century in dramatising these explorations.

FILM: Attack of the 50ft Woman, Forbidden Planet (1956).
Star Wars (1977).
Blade Runner (1982).

Project: 1 essay, 40%, 2 seminar papers, 30% each.
(1) Students who have successfully completed EDGA976 Test and Context, may not enrol in this subject.

This subject explores language as a resource for making meaning. It provides an introduction to a functional model of language. It will outline the functions which language serves, the grammatical choices associated with these functions, and how these choices are influenced by the context. Reference will be made to teaching implications in the primary and secondary context.

Textbooks:

Co-ordinator: Dr L. Ravelli.

ENGL929 Reason, Revolution and Reform: Themes in Eighteenth and Nineteenth Century Writing*
2 hr seminar per wk.
Assessment: 1 major essay 60%, 1 seminar paper 40%.
The subject consists of three segments, looking at representative texts from the Age of Reason, the Romantics, and Victorian reformist writing. The subject incorporates a significant amount of poetry, and introduces non-fictional prose as material for analysis and interpretation from the viewpoint of the Augustan and the Romantic traditions.

Textbooks:
Carlyle, T, Signs of the Times.
Dickens, C, A Tale of Two Cities.
Gaskell, E, North and South.
Johnson, S, The Vanity of Human Wishes.
Swift, J, A Modest Proposal.

Co-ordinator: Dr K Newley.

ENGL930 History and Romance in Early Modern Britain
Autumn session (2 hr seminar per wk).
Assessment: 1 long essay 60% and 1 short essay 40%.
This subject will focus on texts which deal with history and romance in late Tudor and Stuart Britain and will look particularly at the ways in which such texts deliberately lend themselves to varying readings, while there is actually significant convergence between the popular entertainment film and reportage (the newspaper story, the current affairs program on television, the documentary novel). The subject will investigate this central concept of narrative, how it operates in media texts, and the ideological implications of its structure.

Textbooks:
Atwood, M, Bodily Harm, Virago, 1983.
Winterstern, J, Seeing the Cherry, Virago, 1989.
Woollf, V, Orlando.
Woollf, V, A Room of One's Own.
Winterstern, J, Written on the Body.
Note: The program for the subject will specify further 'readings' for each week: (i) primary material poems, short fiction; (ii) critical/theoretical articles and chapters.

Co-ordinator: Associate Professor DLM Jones.

ENGL927 Media Studies: Analysing Mass Media
Spring session (one 3 hr lecture/seminar per wk).
Assessment: 3 written assignments, 30%, 30% and 40%.
This subject is concerned with the construction and reception of the wide range of media texts which are produced by the communication industries, and it will focus on key theoretical areas which open these texts up for analysis. While there will be a necessary emphasis on the domestic forms, the audio-visual texts of television and film, other significant media texts will be covered. The popular film and documentary text appear completely different, but they are demonstrably similar. It may seem as though there is no common ground while there is actually significant convergence between the popular entertainment film and reportage (the newspaper story, the current affairs program on television, the documentary novel) in the area of narrative. The subject will investigate this central concept of narrative, how it operates in media texts, and the ideological implications of its structure. The second focus of the subject will be on the related concept of realism, which will also be investigated across a representative number of media texts. Critical judgements are constantly being made about the realism of popular films, and whether or not there is a faithful representation in documentaries and news reports, but can the concept have meaningful applications? The subject will study this problem from the ways it has been interpreted in the past and how it is viewed today.

Textbooks:
Other texts to be advised.

Co-ordinator: Mr M Scott.

ENGL928 Introduction to Language in a Social Context
Autumn session; one 3 hr lecture/seminar per wk.
Assessment: 1 essay, 40%, 2 seminar papers, 30% each.
(Note: students who have successfully completed
ENGL931 Contemporary Australian Drama

Autumn session (3 hr seminar per wk).
Assessment: 1 5,000 word essay 40%; 1 seminar paper 2,000 words 30%; practical project 30%.
This subject examines the central issues in Australian drama and theatre from 1970. The emphasis of the subject is on the theatrical, social and literary contexts of contemporary Australian drama, and will include reference to the current production and performance practices and conditions of the theatrical profession in Australia. To this end, texts for discussion will include (when available) first and second draft manuscripts in pre-production preparation, rehearsal texts and published plays, and class work will emphasize the discussion of the performance text as well as the literary text.

Texts:
Balodies, J, Too Young for Ghosts.
Brown, Paul, Aftershocks.
Chi, Jimmy and Kuckles, Aftershocks.
Nowra, L, Summer of the Aliens.
Morris, Mary / Morris Gleitzman, Two Weeks with the Queen.
Rayson, H, Hotel Sorrento.
Sewell, S, Hate.
Thomson, K, Diving For Pearls.
White, P, Signal Driver.
Williamson, D, Dead White Males.
Co-ordinator: Dr J Senczuk.

ENGL932 Introduction to Publishing Studies*
8 credit points (1 hr lecture, 2 hr seminar/ workshop per wk).
Assessment: 1 tutorial paper 20%, 1 sessional essay 40%, 1 publication exercise 40%.
A study of the organisations, practices and products of contemporary publishing, with the emphasis on the acquisition by students of the knowledge and skills required for effective operation in the publishing industry, including the processes involved in achieving the publication of their own work. It is planned to have a number of seminar/workshops conducted by visiting professionals in the various field of specialisation.

Areas to be treated include:
- Why publish?
- A brief history of the publishing process and its industry.
- The organisation and commercial practices of the contemporary publishing industry.
- The legal aspects of publishing.
- The editorial function.
- Production - print design, layout, graphics, book production.
- Journal publication - newspapers, magazines, pamphlets.
- Desktop publishing.

Textbooks:
Clarke, G, Inside Book Publishing.
Williamson, H, Methods of Book Design.
Co-ordinator: Mr M Scott.

ENGL933 Early Women Writers

Spring session; (3 hr lecture/seminar per wk).
Assessment: 1 long essay 60%, 1 seminar paper 40%.
This subject looks at the works of selected women writers from the mid-fifteenth century to the early eighteenth century. The texts represent a variety of different types of writing: fiction, poetry, diaries, letters and autobiographical writings. The subject will examine the establishment of the female writing self within the appropriate cultural structure and historical context, and the engagement of that self with the social and literary conventions of the time.

Students who complete this subject successfully will be able to:
- Select a number of early women's writings and examine its relationship to the social and cultural context.
- Understand the concept of the female writing self in relation to the works studied. They will be able to analyze the strategies the chosen writers used to engage with conventional forms like poetry and novel, which have been largely appropriated by men, and will be able to evaluate the use these writers made of the different forms of writing - journals, diaries, autobiography.

Textbooks:
Behn, A, Oroonoko.
Graham, Hinds,elivery, Wilcox (eds), Her Own Life: Autobiographical Writings by Seventeenth Century English Women.
Greer, Hastings, Medoff and Sansone, Kissing the Rod: An Anthology of Seventeenth Century Women's Verse.
Kempe, M, The Book of Margery Kempe.
Selected writings in handout form.
Co-ordinator: Dr A Llear.

ENGL934 Africa and the New World*
8 credit points; (3 hrs seminar per wk).
Assessment: 3 essays 33.3% each.
A survey of major texts of African, Caribbean and Afro-American writing in English. Texts will be placed in cultural and historical context. Attention will be paid to the interaction between slave and colonial experience and literary form and technique, to regional differences in constructing identity, to critical strategies for the construction of a "Black aesthetic" and literary tradition.

Common Texts:
Jacobs, H, Incidents in the Life of a Slave Girl.
Morrison, T, Beloved.
Armah, A K, The Beautiful Ones Are Not Yet Born.
Soyinka, W, Aké.
Moore, G, Beast of No Nation.
Beier, U (eds), The Penguin Book of Modern African Poetry, The Harder They Come. (Film)
Mordecia, P, Her True-True Name.
Philips, C, Cambridge.
Plus selected material in handout form.
Texts for special subject.
(Students choose one area)

ENGL935 Pacific Literature

Spring session; 6 credit points (1 hr lecture, 2 hrs seminar per wk).
Assessment: 2 essays 70%, 1 historical/cultural test 15%, 1 take-home commentary on a poem 15%.
An introduction to leading works of Pacific Literature from a representative range of genres and geographical sources. The subject will focus on themes and literary techniques common to the region as well as specific qualities related to the societies from which these works emerge.

Textbooks:
Ballantine, R M, The Coral Island, OUP.
Campbell, A, The Trigate Bird, Heinemann Reed.
Darsey, H, Te Rautaua.
Wendt, A, Nuuma, Auckland UP.
Wendt, A, Ola, Penguin.
Reference:
Sharrad, P (ed), Readings in Pacific Literature, NLRC.

Other poems, stories and plays will be supplied, and films will be shown as the subject progresses.
Co-ordinator: Dr P Sharrad.

ENGL936 Sexuality and Representation

Autumn session (3 hr seminar per wk).
Assessment: 2 essays 30% each.
This subject will introduce students to the analysis of cultural production through theories of gender and sexuality. It is divided into three sections. The first will introduce students to current models of sexuality and the relationship between sexuality and representation. It will investigate the relationship between theories of sexuality, culture and history. The second section will analyse three contemporaneous texts which explicitly problematise the relationship between culture, representation, sexuality and sexual difference. The third section will examine the discourse of "camp" as an exemplary instance of the complex relationship-cultural, historical, theoretical-between sexuality and textual production.

On successfully completing this subject, students will be able to analyse major theoretical models of representation and of sexuality. They will have gained historical, cultural and generic understandings of the ways in which theories of representation and theories of sexuality operate. They will have developed their skills in the sustained analysis of theoretical paradigms.
ENGL937 New Zealand Literature

8 credit points (one 3 hr seminar per wk).
Assessment: 3 essays, 33.3% each.
A survey of major texts of Maori and Pakeha writing in English. Texts will be placed in cultural and historical context. The texts have been chosen to allow consideration of issues such as identity, (national, racial, sexual), relationship to the land, and the role of conventions and the development of stereotypes. The texts will be supplemented by films where possible and the course is designed to supplement those already offered in Australian and other post-colonial writing.

Textbooks:
Baxter, J K, Selected Poems, OUP.
Davis & Haley (eds), Contemporary New Zealand Short Stories, Penguin.
Frame, J, An Angel at my Table, Random.
Gee, M, Plumb, Angus & Robertson.
Grace, P, Cousins, Women's Press.
Grace, P, Potiki, Penguin.
Hulme, K, The Bone People, Picador.
Hyde, R, The Godwits Fly, Auckland UP.
Ihimaera, W, Dear Miss Mansfield, Viking.
Mason, B, The End of the Golden Weather, Victoria U.P. 93T N.
Ruby and Rata (FILM).
Sargerson, F, Sargerson, Penguin.
Wedde, I and McQueen, H (eds), The Penguin Book of New Zealand Verse, Penguin.
Co-ordinators: Associate Professor D Jones and Dr G Barwell.

ENGL938 Australian Screen

Spring session; 8 credit points (3hr lecture/screening; 1hr seminar per week).
Assessment: 1 major essay/video project 40%, 3 initiatives in cultural nationalism to be conversant with the industrial and social myths of the Australian screen. Students filmmakers in challenging the dominant Australian television and cinema in the economic and political imperatives, and will history of Australian cinema, and will be who successfully complete this subject will production of a national image is explored.

This subject covers the history of the Australian film industry, from the silent era of global media ownership. This Earth of Mankind. The subject begins with the Javanese background of the novel, particularly aspects of Javanese culture, starting with the late nineteenth century. It will then discuss, at an advanced level, aspects of nationalism and the Indonesian Revolution, the politics of culture in post-Revolution Indonesia, particularly the role of Communism, and finally the way history and culture are viewed in New Order Indonesia.

Textbook:

HIST933 Culture & Politics in Indonesia, 1865 - 1988

Autumn session; 12 credit points (3 hrs per wk).
Assessment: 2 tutorial papers of 2000 words each, 1 research essay of 5000 words.
The subject is designed around the issue of becoming modern, focussing on the upheaval and violence of Indonesia's transition into the modern world and the politics of culture in Indonesia. This course will look at Indonesian cultural history through Pramoedya Ananta Toer's novel This Earth of Mankind. The subject begins with the Javanese background of the novel, particularly aspects of Javanese culture, starting with the late nineteenth century. It will then discuss, at an advanced level, aspects of nationalism and the Indonesian Revolution, the politics of culture in post-Revolution Indonesia, particularly the role of Communism, and finally the way history and culture are viewed in New Order Indonesia.

Textbook:

EDGA973 Language, Ideology and Culture

Autumn or Spring session; 8 credit points (3 hr lecture/seminar per wk).
Pre- or co-requisite: MA students please note: this prerequisite applies only to MEd students EDGA970 for students specialising in the Language and Literacy Program.
Assessment: seminar 25%, text analysis 30%, project 45%.
This subject will draw on current writing in sociology, cultural studies, semiotics and linguistics to study the relationship between language, ideology and culture. Students will examine the contribution of language to the (re)production of cultural values and social meanings through an analysis of written and spoken texts such as curriculum documents, journal articles, school text books and other resource materials, teacher/student talk and interaction in other educational settings. It has particular relevance to those teaching in literacy and/or literature contexts but with a more general relevance to those examining policy or curriculum documents and other written and spoken texts. Topics to be covered include: theories of ideology; the relationship between discourse(s) and ideology; subjectivity and language; power and language; the operation of ideology through texts and developing a critical reading position.

Textbook:

EDGA975 Educational Linguistics

Autumn or Spring session; 8 credit points (1 hr lecture, 2 hr tutorial per wk).
Pre- or co-requisite: MA students please note: this prerequisite applies only to MEd students EDGA970 and EDGA976 for students specialising in the Language and Literacy Program.
Assessment: assignments 50%, text analyses 50%.
This subject will extend the understandings about language introduced in EDGA976 Text and Context through a more detailed study of language and how it works. It will draw principally on a functional model of language which focuses on the effective use of language in order to understand the world and to interact socially. This knowledge will be applied to classroom contexts and deal with issues such as programming with a language focus, assessing students' language and evaluating teaching materials. It will also be applied to research, particularly with a view to developing analytic techniques which can be used in studies where texts and language are the data base.

Textbooks: no set text.
Co-ordinator: Dr B Winser.
COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Arts by Research
3. Master of Arts
4. Graduate Certificate in History Education

POSTGRADUATE PROGRAMS

History
History and Education

CURRENT RESEARCH AREAS

Areas of research available to candidates undertaking the Honours Master of Arts degree by research and the Doctor of Philosophy degree include the following:

- Australian history, with emphasis on labour, feminist, regional, military, social and political themes
- Modern South East Asian history
- 19th and 20th century British social and political history, and relations with the USA
- French history from 1650
- Historiography, including labour, Marxist and communist
- 20th Century Russian History

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN HISTORY
leading to the Master of Arts.

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<td>HIST904</td>
<td>Reading Course on Themes in Australian History</td>
<td>12</td>
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<td>HIST912</td>
<td>Australian Labour Historiography</td>
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<td>HIST913</td>
<td>The Making of the Modern Australian Woman</td>
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<td>HIST914</td>
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<td>HIST933</td>
<td>Culture &amp; Politics in Indonesia, 1865-1988</td>
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<td>HIST934</td>
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For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN HISTORY AND EDUCATION
leading to the Graduate Certificate in History Education.

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For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECT

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<td>Major Thesis</td>
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COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

The Doctoral Dissertation shall be not less than 80,000 words and not more than 100,000 words in length. For this degree, candidates enrol in the subject HIST973.

2. MASTER OF ARTS

Pass degree entry

Pass graduates or equivalent with a major in History may undertake a 48 credit point Master of Arts course, choosing subjects from the Schedule (excluding the minor and major thesis).

Honours degree entry

The Honours Master of Arts degree is offered either as a research degree, consisting of a major thesis, or as a research and coursework degree consisting of a minor thesis and coursework.

The maximum length of a major thesis shall be 40,000 words and the minimum length of a minor thesis shall be 20,000 words.

Students enrolling in the Honours Master of Arts by research will be BA Honours graduates with a grade of at least Class II, Division 2 or its equivalent in History, or those who have completed the MA coursework requirements at credit level or better. For this degree, candidates enrol in the subject HIST973. Those who enter the Honours Master with a BA (Hons) enter with a notional accreditation of 48 credit points.

Those who have completed 48 credit points of a Pass Masters degree at credit level or
better may proceed to an Honours Masters by coursework and minor thesis only. Their subsequent 48 credit points shall include 24 credit points of course work from the schedule above (one of which shall be HIST951, Philosophy of History unless they have already undertaken HIST325, Theory and Method, at the undergraduate level) and the minor thesis.

In special cases the Department Head may vary the entry requirements, if satisfied that an applicant's qualifications have prepared him or her for advanced historical study.

4. GRADUATE CERTIFICATE IN HISTORY EDUCATION

Candidates should have completed at least a minor sequence in History, or its equivalent, and be practising teachers. The course consists of two subjects as set out in the relevant schedule shown above. Successful students will receive a Graduate Certificate of History Education. This will stand as half credit towards either a Master of Arts or a Master of Education Degree—the former for students who wish to pursue studies in content further, the latter for those who wish to extend their studies in method.

Contact hours for the first subject are 3 hours per week, timetabled in the late afternoon. At some stage in the course it will be necessary for the students to attend for six hours per week.

The Department of School Education has recognised the course for official inservice training purposes.

SUBJECT DESCRIPTIONS

EDGA822 New Technologies and Approaches to Learning
Refer to entry under Faculty of Education.

HIST904 Reading Course on Themes in Australian History
Autumn or Spring session; 12 credit points (one hr supervision per wk).
Assessment: 2 x 4,000 word essays each 40%, 1 x 1,000 word paper 20%.
This subject is designed to enable students to undertake a sustained reading program in selected themes in Australian History under close supervision. Enrolment, selection of appropriate themes and readings are subject to the approval of the Head of the Department.
Textbooks: to be advised.
Co-ordinator: Professor J Hagan.

HIST912 Australian Labour History
Spring session; 12 credit points (3 hrs of lectures/tutorials).
Assessment: 9,000 words in essays/tutorial papers.
This subject is an advanced appreciation of the contemporary debates in Australian Labour Historiography. An understanding of these debates requires an analysis of trade unions and political parties representing the labour movement, the labour process, the industrial relations and arbitration system, and the industrial and political environment faced by the labour movement. The subject also considers domestic labour, and the tactics and dominant ideologies of the labour movement. The intellectual sources of Australian labour historiography are also critically evaluated. A comparison of Australian with British and American labour historiography is also undertaken.
Co-ordinator: Dr A Wells.

HIST913 The Making of the Modern Australian Woman
Autumn session; 12 credit points (2 hr seminar per wk).
Assessment: 9,000 words in essays/tutorial papers.
This subject looks at those elements in Australian social history from the 1890s to the present that had particular significance in forming the experiences of present day Australian women. It covers the demographic transition and migration patterns, economic changes, political changes, ideologies of population and consumerism and the rise of professionals as social managers.
On successfully completing this subject students will be able to evaluate the main forces which have altered the lives of Australian women in the twentieth century. They will be able to describe the economic and demographic factors which have interacted to produce these changes.
They will be able to distinguish between first and second wave feminism and to trace the intellectual underpinnings of each. They will be familiar with the historiographical debate on women's history and the way in which this subject has achieved a place in the University curriculum. Finally they will have acquired more sophisticated skills in historical analysis and essay writing.
Preliminary Reading:
Matthews, J, Good and Mad Women, Allen and Unwin, 1983.
Co-ordinator: Ms J Castle.

HIST914 Regional History
Autumn session; 12 credit points (2 hrs seminar per wk).
Assessment: 1 x 3,500 word essay 40%, 1 x 3,500 word research exercise 40%, 1 x 2,000 literature review 20%.
Using methods developed by regional specialists, this subject examines the impact of national political and social forces in history at the local and regional level. Extensive use is made of case studies and students are expected to apply regional methodology in a research project of their own. Australia and North America form the focus of this subject.
Textbooks: to be advised.
Co-ordinator: Dr J McQuilton.

HIST915 Comparative Settler Capitalism
Autumn session; 12 credit points (3 hrs lecture/seminar per wk).
Not on offer in 1996.

HIST932 The Vietnam Wars
Spring session; 12 credit points (3 hrs of lectures/seminars).
Assessment: 9,000 words in essays/tutorial papers.
The French conquest of Indochina in the late nineteenth century, the economic changes wrought by colonialism up to 1940 and the accompanying cultural reapproprials in Vietnamese intellectual circles, establish the background to the First, Second and Third Indochina Wars, 1945-89. The Japanese occupation, the 1945 August Revolution in Vietnam, the French attempt to recolonise and the similarly-fated US intervention of 1955-1975 are studied closely along with Vietnamese responses and the historical method and the employment of primary source material to undertake sustained research. Considerable attention will be placed on the impact of European imperialism, its effects on indigenous people and the class dynamics of settler capitalist societies.
While the central example will be Australia, considerable attention will be directed towards comparisons with South Africa, New Zealand and Argentina.
Textbooks:
Co-ordinator: Dr A Wells.

HIST933 Culture, History and Politics in Southeast Asia: Indonesia and Other Case Studies
Autumn session; 12 credit points (3 hrs per wk).
Assessment: 9,000 words in essays/tutorial papers.
The subject examines the politics of identity in Southeast Asia using a number of case studies, particularly the Indonesia issues explored include the relationship between nationalism, modernity and politics, the ways history and culture are viewed by present governments, the role of minority groups, the importance of Islam, and relationships between military rule and democracy.
Textbooks: to be advised.
Co-ordinator: Dr A Vickers.

HIST934 The Re-making of Australian History
Autumn session; 12 credit points (3 hrs lecture/seminar per wk).
Assessment: essay 60%, tutorial papers 30%.

This subject examines the formation and evolution of white settler societies between 1750-1945. It involves an advanced appreciation of the use of comparative historical method and the employment of primary source material to undertake sustained research. Considerable attention will be placed on the impact of European imperialism, its effects on indigenous people and the class dynamics of settler capitalist societies.
While the central example will be Australia, considerable attention will be directed towards comparisons with South Africa, New Zealand and Argentina.
tutorial participation 10%. This subject will examine the re-writing of the following themes in Australian history: nationalism and racism; Aboriginal pre-history and white relations; the role of women in society; the influence of literature, art and mass communications; and local and family history. It will also discuss the social and technical sources of these changes.

Textbooks:

Co-ordinator: Professor J Hagan.

HIST936: Australians and War
Spring session; 12 credit points (2 hrs seminar per wk).
Assessment: 1 x 3,500 word essay 40%, 1 x 3,500 word research exercise 40%, 1 x 2,000 literature review 20%.
This subject examines the impact of war on Australian society. The Home Front is the major area of study although some reference is made to more traditional areas of military history. Four conflicts form the focus of the subject, the European occupation of Australia, the two world wars and the Vietnam conflict. Themes examined include enlistment, conscription, the place of women in war time Australia and the digger myth.

Preliminary Readings:
McKernan, M, All In! Australia During the Second World War, Nelson, West Melbourne, 1983.
Scott, E, Australia During the War, Vol 11, Official History of Australia During the War of 1914-1918.

Textbooks:
McKernan, M and Browne, M, Australia, Two Centuries of War and Peace, Australian War Memorial, Canberra, 1988.

Co-ordinator: Dr J McQuilton.

HIST951 Philosophy of History
Spring session; 12 credit points (2 hr seminar per wk).
Assessment: 9,000 words in essays/tutorials.
This subject examines certain fundamental problems associated with historical enquiry, the core of which is the question, "How do we come to know the past?" Some related questions explored are: Is the historical discipline a science? Are there historical laws? What role is played by chance in determining the outcome of events? What is meant by explanation? Is it possible for historians to be objective? Can a knowledge of the past provide the historian with the ability to predict? Although participation in HIST927 does not require prior training in philosophy, it is expected that students will possess an interest in the grounds on which historians claim to know the causes of past events and developments.

Preliminary Reading:

Co-ordinator: Dr I McLaine.

HIST973 Major Thesis
48 credit points.
In addition to completing a major thesis, postgraduate students in the Department of History and Politics are required to attend a postgraduate seminar series to which visitors, postgraduates, and staff members contribute. Until further notice, the seminars will be of about two hrs, beginning at five o'clock on Wednesdays. During the period of their enrolment, full-time postgraduate students should attend not less than 70 percent of the seminars offered, and part-time postgraduate students about 35 percent. A committee consisting of two elected representatives of the students, the Head of the Department, and another staff member will advise on the program for each series. All candidates for Master of Arts Honours shall give at least two, and candidates for doctoral degrees shall give three, work-in-progress seminars over the course of their candidature.

Co-ordinator: refer to Head of Department.
The following postgraduate course is available:

1. Master of Arts

**POSTGRADUATE PROGRAM**

International Relations

**CURRENT RESEARCH AREAS**

Research can be supervised in 1996 in diverse aspects of International Relations, focussing primarily (but not exclusively) on the Asia-Pacific region.

**SCHEDULE OF PROGRAMS**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>INTR900</td>
<td>International Law and Diplomacy</td>
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<td>INTR910</td>
<td>Politics of International Relations</td>
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<td>INTR920</td>
<td>Advanced International Economic Relations</td>
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<td>INTR930</td>
<td>Organisational Behaviour</td>
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<td>INTR901</td>
<td>Practical Diplomacy</td>
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<tr>
<td>INTR911</td>
<td>Politics in the South Pacific</td>
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<td>INTR912</td>
<td>Pacific Rim and Pacific Basin</td>
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<td>INTR921</td>
<td>Advanced International Economics</td>
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<tr>
<td>INTR922</td>
<td>Advanced Topics in Economics</td>
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<tr>
<td>INTR931</td>
<td>Strategic Planning and Policy</td>
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<tr>
<td>INTR932</td>
<td>Selected Topics in Management</td>
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<tr>
<td>INTR940</td>
<td>Case Study in International Politics A</td>
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<td>INTR941</td>
<td>Case Study in International Politics B</td>
<td>8</td>
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<td>INTR950</td>
<td>Australia: Making of a Nation</td>
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<td>INTR957</td>
<td>Post-war Economic and Social Development</td>
<td>8</td>
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<tr>
<td>INTR958</td>
<td>Selected Topics on Post-war Developments</td>
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*Not all of these subjects are available each year - refer to Department of History and Politics before enrolment.*

For further details, see *Course Requirements* below.

**COURSE REQUIREMENTS**

1. **MASTER OF ARTS**

The degree is intended to provide opportunities for graduates of diverse disciplinary backgrounds to develop their academic understanding and professional skills in the field of international relations, broadly defined. The program is expected to be especially useful to students with relevant, professional experience or ambitions, including diplomats, other government officials, business persons, journalists, etc.

The program is multi-disciplinary in nature, focussing on international politics, economics, management, and law and diplomatic practice, in particular, but allowing both for specialisation within the program as well as for the inclusion of area studies, and other relevant subjects, in accordance with students' needs.

Students take part in regular simulations and professional seminars, workshops, exchanges with other institutions, including the Australian Department of Foreign Affairs and Trade, and where possible, professional placements. Special classes are provided in relevant computing and (where appropriate) English language, study, analytical, public speaking and other skills. A special centre (with computing, video and short-wave radio facilities, plus a range of pertinent periodicals) has been set aside for use by students in the program.

**Course Requirements**

48 credit points gained from subjects in the INTR schedule of postgraduate subjects (or such greater number as may be required in individual cases). Except with the permission of the Head of Department, students are required to complete the following four subjects in order to graduate in the program:

<table>
<thead>
<tr>
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<tr>
<td>INTR900 International Law and Diplomacy</td>
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<td>INTR910 Politics of International Relations</td>
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<td>INTR920 Advanced International Economic</td>
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<tr>
<td>Relations</td>
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<tr>
<td>INTR930 Organisational Behaviour</td>
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</table>

**Other subjects available:**

<table>
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<tr>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>INTR901 Practical Diplomacy</td>
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</table>

**SUBJECT DESCRIPTIONS**

**INTR900 International Law and Diplomacy**

*Autumn session; 8 credit points (3 hrs per wk of lectures, seminars and tutorials).*
The history, theory and practice of diplomatic and consular representation in both bilateral and multilateral contexts. Detailed analyses are made of the theoretical underpinnings, legal character and practical uses of international law; the law of treaties; various forms of diplomatic engagement and agreement; formal diplomatic (non)-recognition; the opening and breaking of relations; and diplomatic and consular immunity. Close attention is paid to the impact of modern technology and mass communications on international law and diplomacy; public diplomacy; regional and wider forms of technical, functional, economic and other co-operation, including areas such as the Law of the Sea.

Textbooks: to be advised.
Co-ordinator: refer Department.

INTR901 Practical Diplomacy
Spring session; 8 credit points (3 hrs per wk lectures, seminars and tutorials).
Assessment: 7,500 words of essays and class papers.
Case-studies, simulations, workshops and interactions with practitioners. Study and use of diplomatic instruments. Negotiation and dispute resolution.
Textbooks: to be advised.
Co-ordinator: refer Department.

INTR910 Politics of International Relations
Spring session; 8 credit points (3 hrs per wk of lectures, seminars and tutorials).
Assessment: 7,500 words of essays and tutorial papers.
Approaches to and methods of study, theories and concepts of international relations: idealist, legal, institutionalist, realist, Marxist, Neo-Marxist, globalist, feminist, systems, regimes, etc. The role of international law and diplomacy. Foreign policy making and implementation. Political order and the balance of power, both international and regional. The United Nations and other international organisations. Issues, blocs, and the politics of international economic, technological and functional co-operation, including foreign aid. Class work and assignments involve extensive and intensive analysis of particular issues, countries, alliances and organisations.
Textbook: to be advised.
Co-ordinator: Professor E P Wolfers.

INTR911 Politics in the South Pacific
Autumn session; 8 credit points (3 hrs per wk of lectures, seminars and tutorials).
Assessment: 7,500 words of essays and tutorial papers.
Politics in and among South Pacific island countries. Regional and sub-regional cooperation. Relations with external actors, including governments, international organisations and multi-national corporations. Class work and assignments provide occasions for detailed examination of particular case studies.
Textbooks: to be advised.
Co-ordinator: Professor E P Wolfers.

INTR912 Pacific Rim and Pacific Basin
Spring session; 8 credit points (3 hrs per wk of lectures, seminars and tutorials).
Assessment: 7,500 words of essays and tutorial papers.
The subject analyses aspects of relations between advanced, industrialising and less developed countries on the Pacific Rim and in the Pacific Basin. Particular attention is paid to the foreign relations, including relations with advanced industrial and industrialising countries, and regional as well as inter-regional co-operation, of Pacific nations. The subject addresses critical issues in defence, aid, trade, investment and other kinds of international flows and co-operation (including communications, fisheries, and the law of the sea). Particular attention is paid to the impact of modern technology and mass communications on international law and diplomacy; public diplomacy; regional and wider forms of technical, functional, economic and other co-operation, including areas such as the Law of the Sea.

Textbooks: to be advised.
Co-ordinator: Professor E P Wolfers.

INTR920 Advanced International Economic Relations
Spring session; 8 credit points (3 hrs per wk lectures and tutorials).
Assessment: essays, seminars and assignments.
The subject examines policy issues in the international economy especially as they affect the Asia-Pacific region. The role of international economic organizations such as the IMF, World Bank and GATT and emphasised as well as issues such as free trade, protectionism exchange rate determination and international capital flows. Options available to individual countries for international economic policy are explored.
Textbooks: to be advised.
Co-ordinator: Associate Professor R Castle.

INTR921 Advanced International Economics
Spring session; 8 credit points (3 hrs per wk lectures and tutorials).
Assessment: essay, seminar and examination. Aspects of some of the following topics are studied in depth: 1. Growth and Trade; 2. Factor Transfers (Foreign Investment); 3. Tariffs; 4. Import-Substituting Industrialisation; 5. Foreign Exchange Market; 6. Internal and External Balance (the two-gap model).
Textbooks: to be advised.
Co-ordinator: refer Department.

INTR922 Advanced Topics in Economics
Autumn or Spring session, depending on the topics covered; 8 credit points (3 hrs per wk of lectures and tutorials).
Assessment: essay, seminar and examination. Topics for this subject may be drawn from any area of Economics which the Heads of the Departments concerned consider to be suitable preparation for a higher degree and appropriate to the student's special interests.
Textbooks: to be advised.
Co-ordinator: refer Department.

INTR930 Organisational Behaviour
Autumn session; 8 credit points (2 hrs lectures per wk).
Assessment: seminars, case studies, essay(s) and examination(s).
A study of the behaviour of individuals in organisations, groups and group processes, leadership and communication, organisation design and job design, appraisal of performance, processes of organisational change and development. Application to public administration in developing countries.
Textbooks: to be advised.
Co-ordinator: refer Department.

INTR931 Strategic Planning and Policy
Spring session; 8 credit points (2 hrs lectures per wk).
Assessment: examination and essays.
The subject will use case studies as a key teaching vehicle and will examine strategy in the context of organisations. Key topics may include: strategy formulation, choice and implementation; strategy and structure and the organisational context; strategy and competitive advantage; international business; diversification, integration, acquisition and internal development; global strategies.
Textbooks: to be advised.
Co-ordinator: refer Department.

INTR932 Selected Topics in Management A
Autumn or Spring session; 8 credit points (2 hrs lectures per wk).
Assessment: assignments, seminars, examinations.
A special topic selected from any area of management. The selection is made by the Heads of Department concerned, taking into account the expertise of academic staff, including visiting staff, and the interests of students.
Textbooks: to be advised.
Co-ordinator: refer Department.

INTR940 Case Study in International Politics A
Autumn session; 8 credit points (minimum one hr/wk by personal arrangement with member(s) of staff).
Assessment: 7,500 words of research papers.
This subject is intended to provide students with an opportunity to engage in detailed research on a particular aspect of international relations approved by the Co-ordinator of the Postgraduate Program in International Relations. The project may focus on an issue, an actor (or actors), or a theoretical or methodological question which the student has previously encountered through reading or practical experience. Enrolment requires the approval of the Co-ordinator of the Postgraduate Program in International Relations, and may be determined by the availability of suitably qualified staff.
Textbooks: to be advised.
Co-ordinator: Professor E P Wolfers.

INTR941 Case Study in International Politics B
Spring session; 8 credit points (minimum one hr/wk by personal arrangement with member(s) of staff).
Assessment: 7,500 words of research papers.
This subject is intended to provide students with an opportunity to engage in detailed research on a particular aspect of international relations approved by the Co-ordinator of the Postgraduate Program in International Relations. The project may focus on an issue, an actor (or actors), or a theoretical or methodological question which the student has previously encountered through reading or practical experience. Enrolment requires the approval of the Co-ordinator of the Postgraduate Program in International Relations, and may be determined by the availability of suitably qualified staff.

Textbooks: to be advised.
Co-ordinator: Professor E P Wolfers.

INTR950 Australia: Making of a Nation

Spring session; 8 credit points (3 hrs of lectures/seminars).
Assessment: 7,500 words in essays/seminar papers.

This subject is intended to provide a detailed examination of twentieth century Australia, in the light of notions of dependency and autonomy, in order to assess the extent to which nationhood has been achieved. The subject begins with an analysis of concepts of the nation, nationalism, the state and cultural identity. Economic processes, key industries and relations with the international economy are analysed. The distinctive features of modern Australian political institutions, as well as internal and external policies are identified, and changes examined. The nature of Australian cultural traditions, including social, racial and class differences, are discussed. The subject concludes by returning to the question of national identity and the real and imagined quality of Australian independence.

Textbooks: to be advised.
Co-ordinator: refer Department.

INTR957 Post-War Economic and Social Development of Southeast Asia

Spring session; 8 credit points (3 hrs of lectures/seminars).
Assessment: 7,500 words in essays/seminar papers.

This subject traces economic and social development in Southeast Asia since the Second World War. It covers some major issues of economic development faced by countries of the region from the end of the colonial period to the present day and includes discussion of the colonial economic legacy, the formation of new social classes and their role in independence struggles, indicators of modernisation such as industrialisation, education, urbanisation, women and work, etc. Environmental issues and the economic reforms in Indochina are also discussed.
Co-ordinator: refer Department.

INTR958 Selected Topics on Post-War Developments in Southeast Asia

Spring session; 8 credit points (3 hrs of lectures/seminars).

Assessment: 7,500 words in essays/seminar papers.

The subject examines the politics of identity in Southeast Asia using a number of case studies, particularly from Indonesia. Issues explored include the relationship between nationalism, modernity and politics, the ways history and culture are viewed by present governments, the role of minority groups, the importance of Islam, and relationships between military rule and democracy.

Textbooks: to be advised.
Co-ordinator: Dr A Vickers.
COURSE OFFERED

The following postgraduate course is available:

1. Master of Arts

POSTGRADUATE PROGRAM

Maritime Policy

CURRENT RESEARCH AREAS

Research covers diverse aspects of maritime policy, focusing primarily, but not exclusively, on the Asia Pacific Region, and including national oceans policy, naval history, maritime regimes and regional maritime co-operation.

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN MARITIME POLICY

leading to the Master of Arts.

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<th>Number</th>
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<tr>
<td></td>
<td>Compulsory Core Subjects:</td>
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<tr>
<td>MPOL901</td>
<td>National Dimensions of Maritime Policy</td>
<td>8</td>
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<tr>
<td>MPOL902</td>
<td>International Issues in Maritime Policy</td>
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<td>Elective Subjects:</td>
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<tr>
<td>MPOL911</td>
<td>Maritime Transport I: International Shipping</td>
<td>8</td>
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<tr>
<td>MPOL912</td>
<td>Maritime Transport II: Port Development</td>
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<tr>
<td>MPOL920</td>
<td>Marine Environmental Management</td>
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<tr>
<td>MPOL921</td>
<td>Marine Environmental Planning</td>
<td>8</td>
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<tr>
<td>MPOL931</td>
<td>International Maritime Environmental Law</td>
<td>8</td>
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<tr>
<td>MPOL932</td>
<td>The Law of the Sea</td>
<td>8</td>
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<tr>
<td>MPOL941</td>
<td>History and Politics of Sea Power</td>
<td>8</td>
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<tr>
<td>MPOL951</td>
<td>Selected Topics in Maritime Policy (1)</td>
<td>8</td>
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<tr>
<td>MPOL952</td>
<td>Selected Topics in Maritime Policy (2)</td>
<td>8</td>
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Students may, with the permission of the Course Co-ordinator, apply to enrol in other subjects in the Postgraduate Calendar relevant to maritime policy.

Not all of these subjects may be available each year – refer to Department of History and Politics before enrolment. For further details, see Course Requirements below.

COURSE REQUIREMENTS

The postgraduate program in Maritime Policy is offered by the Department of History and Politics. This program, the first of its kind in the Asia Pacific region, is intended to provide professionally relevant academic training for a variety of different policy analysts, including advisers in government, the private sector, and non-governmental organisations, in relation to a wide range of maritime issues.

Conducted in close co-operation with the Maritime Policy Centre, the course is intended to provide opportunities for students of diverse professional and academic backgrounds to mix and exchange ideas relevant to policy making, analysis and implementation. Depending on each student's educational qualifications and work experience, students are required to complete at least 48 credit points in subjects, including the two core subjects, in the Maritime Policy schedule and other approved postgraduate subjects (or such greater number as may be required in individual cases).

Master of Arts

The degree is intended to enable groups of varying academic and professional backgrounds to develop their knowledge and analytical skills in relation to a wide range of maritime policy issues, broadly defined. The program is expected to be especially useful to prospective government officials, analysts and other practitioners engaged in maritime and related activities, including the Navy, commercial shipping, port management, fisheries and marine environmental protection.

The program consists of an interdisciplinary core of two compulsory subjects, plus a range of options which allow students to specialise in particular disciplines, and to acquire a broader acquaintance with the field as a whole.

In addition to formal course requirements, students take part in a variety of other professional activities, including specialist seminars.

SUBJECT DESCRIPTIONS

MPOL901 National Dimensions of Maritime Policy

Autumn session; 8 credit points (3 hrs per wk of lecture/seminar).

Assessment: 7,500 words in essays and seminar papers.

The subject introduces students to the field of maritime policy. It provides an overview of conceptual approaches and analytical tools used in public policy analysis as well as an introduction to major substantive areas of national maritime policy. It is interdisciplinary in nature, and participants are encouraged to bring a broad perspective to policy analysis through the use of concepts used in economics, science, management, law and politics. Particular policy areas to be considered include defence, marine industry, marine science and technology, offshore resource development, integrated coastal management, coastal surveillance, shipping and port development and oceans policy.

The subject compares and contrasts Australia's experience with maritime policy with that of other countries, particularly the United States of America and Canada. Particular attention is paid to regional maritime policy concerns in the South Pacific and Southeast Asia.

Pre-reading:


Co-ordinator: Professor EP Wolfers.
MPOL902 International Issues in Maritime Policy
Spring session; 8 credit points (3 hrs per wk of lecture/seminar).
Assessment: 7,500 words in essays and tutorial papers.
This subject examines maritime policy issues in an international context. In doing so, it deals with humanity's usage of the sea in a historical context and the foreign policy implications of maritime policy. It addresses international factors including the legal framework and theories of maritime power and strategy, before examining the emergence of international regimes in the maritime environment. Particular regimes considered include the legal regime, environmental resource regimes, the trade, shipping, and ports regimes, and finally the illegal activities regimes. Textbooks: to be advised.
Co-ordinator: Professor EP Wolfers.

MPOL911 Maritime Transport I: International Shipping
Autumn session; 8 credit points (3 hrs per wk of lecture/seminar).
Assessment: 7,500 words in essays and tutorial papers.
This subject focuses on the way in which the international shipping market is structured and operates. It examines the determinants of supply and demand for shipping and the factors which have been, and are, responsible for changes in the market. It looks at individual sub-markets—dry bulk, tankers and liner shipping, for example; and at freight rates and the pricing of shipping services. It pays special attention to recent developments in shipping including developments in containerisation, hub and feeder operations and intermodalism. It also looks at shipping developments in Southeast Asia and Pacific region countries; and at Australian flag shipping and changes in Australian shipping policy. Textbooks: to be advised.
Co-ordinator: Associate Professor R Robinson.

MPOL912 Maritime Transport II: Port Development
Spring session; 8 credit points (3 hrs per wk of lecture/seminar).
Assessment: 7,500 words in essays and tutorial papers.
This subject deals with the strategic development of ports. It assesses a number of approaches to the way in which ports are planned, and pays particular attention to the concepts of competitive efficiency and competitive advantage. It examines issues of port performance, port pricing and port investment policies. The subject reviews recent developments in Australian port development policy and in the development policies of ports in New Zealand, Southeast Asia and the Pacific Region. Textbooks: to be advised.
Co-ordinator: Associate Professor R Robinson.

MPOL920 Marine Environmental Management
Spring session; 8 credit points (56 hrs lecture/seminar per session).
Assessment: 7,500 words in essays and seminar papers.
This subject covers topics designed to give students a comprehensive overview of the scientific basis of maritime environmental management. The subject adopts a multidisciplinary approach to the scientific understanding of how major marine ecosystems work and shows how an appreciation of such knowledge leads to the development of appropriate management strategies for these systems. While there is some emphasis on the Australian situation, much of the material is applicable in any country. The systems covered include estuaries, reefs, coastal wetlands and lagoons. In addition, the science of the management of hazardous wastes (including radioactive materials) is discussed. Case studies from Australia, South-East Asia and the Pacific Islands are included. As part of the subject, students complete a team project to facilitate the development of interdisciplin ary skills and an appreciation of the benefits of teamwork in addressing environmental management issues. Textbooks: to be advised.
Co-ordinator: Professor J Morrison.

MPOL921 Marine Environmental Planning
Autumn session; 8 credit points (56 hrs lecture/seminar per session).
Assessment: 2 essays (10% each), 1 research report (40%) and final examination (40%).
This subject presents material necessary for the comprehensive overview of the status and development of maritime environmental planning in government and industry. Students are introduced to the principles of environmental planning. This is followed by presentations from staff from a wide range of organisations involved in environmental planning in order to highlight and explain the mechanisms, difficulties and benefits of current planning activities in Australia. While the emphasis is on the Australian situation, reference to activities in other countries are included, in addition to aspects of the global situation regarding environmental planning. As part of the subject, students complete a team project to facilitate the development of interdisciplin ary skills and an appreciation of the benefits of teamwork in addressing environmental management issues. Textbooks: to be advised.
Co-ordinator: Professor J Morrison.

MPOL931 International Maritime Environmental Law
Autumn session; 8 credit points (3 hrs per wk of lecture/seminar).
Assessment: 7,500 words in essays and seminar papers.
This subject uses as its conceptual framework sovereignty and sovereign rights. Students will be introduced to the concept of Port State and Flag State responsibilities and powers; pollution controls in international law; biological diversity; marine resource conservation; pollution control on the high seas; pollution control in the Area; the role of international and regional institutions within the subject's conceptual framework and the effectiveness of current marine environmental protection rules. Textbooks: to be advised.
Co-ordinator: Professor M Tsamenyi.

MPOL932 The Law of the Sea
Spring session; 8 credit points (3 hrs per wk of lecture/seminar).
Assessment: 7,500 words in essays and seminar papers.
This subject examines the evolving law of the sea from an historical perspective; examines maritime zones of jurisdiction (internal waters; territorial sea; contiguous zone; the exclusive economic zone; the high seas; the continental shelf and the Area); navigational regimes (transit passage, innocent passage, archipelagic sea lanes passage); maritime boundary delimitation and marine resources law (fisheries and oil/natural gas). Textbooks: to be advised.
Co-ordinator: Professor M Tsamenyi.

MPOL941 History and Politics of Sea Power
Autumn session; 8 credit points (3 hrs per wk of lecture/seminar).
Assessment: 7,500 words in essays and seminar papers.
This subject reviews the evolution of theories of sea power and maritime strategy from the early theorists of the nineteenth century to the post-Cold War tacticians of today. It addresses the relationship between ideas about the use of naval force and the actual history and politics of maritime power. In this respect, it evaluates the ideas of geopoliticians from Admiral Alfred Thayer Mahan and Sir Halford Mackinder through Nicholas Spykman and the planners of Total War to post-Cold War experts like Colin S Gray and his ilk. It relates the work of these theorists to the emergence of naval force and counterforce in the modern world. It also examines the development of seapower in peacetime as an instrument of state policy from the days of Gunboat Diplomacy to the age of United Nations peacekeeping at sea. Textbooks:
Co-ordinator: Dr P Sales/Professor EP Wolfers.

MPOL951 Selected Topics in Maritime Policy (1)
Autumn session; 8 credit points (3 hrs per wk of lecture/seminar).
Assessment: 7,500 words in essays and seminar papers.
This subject provides students with the opportunity to undertake a closely supervised programme of study, including reading and other appropriate forms of research, in an approved, specialist area of Maritime Policy. Textbooks: to be advised.
Co-ordinator: Professor EP Wolfers.

MPOL952 Selected Topics in Maritime Policy (2)
Spring session; 8 credit points (3 hrs per wk of lecture/seminar).
Assessment: 7,500 words in essays and seminar papers.
This subject provides students with the opportunity to undertake a closely supervised programme of study, including reading and other appropriate forms of research, in an approved, specialist area of Maritime Policy. (This subject covers a different range of topics from those covered in MPOL 951 Selected Topics in Maritime Policy (1).)

Textbooks: to be advised.

Co-ordinator: Professor EP Wolters.
THE DEPARTMENT OF MODERN LANGUAGES

The Department of Modern Languages offers a range of undergraduate programs in French, Italian, Spanish and Japanese. The Department has a strong commitment to research and accepts postgraduate students in French, Italian, Spanish and Japanese. In recent years, computer-aided language learning has been one of the focal points of departmental research.

FACILITIES

The Department has a fully equipped language laboratory and private study laboratory. There is also a computer laboratory for language learners. The Department has extensive collections of recorded audio and video materials in French, Italian, Spanish and Japanese.

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Arts by Research
3. Graduate Diploma in Arts (European Studies)

Doctor of Philosophy
Refer to Course Offerings for details regarding the Doctor of Philosophy.

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of Arts degree by research and the Doctor of Philosophy degree:

19th Century French novel
Society and medicine in the novels of Balzac
French and European minorities
Computer-aided language learning (French, Italian, Spanish, Japanese)
Linguistics applied to the teaching of French and Japanese as a second language
Intonation analysis
Language teaching methodology and materials development at the secondary and tertiary levels
War, armies and society of early modern Iberia
The Habsburg government of Portugal and War of Portuguese Independence, 1580-1668
Local government in early modern Spain
20th Century Italian novel and society
Federico De Roberto and The ‘Secondo Ottocento’
The Italian ‘Melodramma’
Private life in 13th and 14th century Italian novellistica
Italo-Australian studies
Multilingual broadcasting in Australia
Italian lexicography
Translation (English-Italian, Italian-English)
Contrastive linguistics: English-Italian, English-Japanese
Systemic functional linguistics: Japanese
Japanese language education
Japanese theatre and literature
Japanese economic and social issues

Honours Master of Arts

Students entering the program with an Honours degree at a standard of at least Class II, Division 2 will be required to complete a major thesis.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>MLCF975</td>
<td>Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

Graduate Diploma in Arts (European Studies)

The purpose of the Graduate Diploma in Arts is to provide in a recognised university course a means for graduates with limited acquaintance with European languages, thought and culture to acquire competence in these areas at a reasonably advanced level.

Students are required to complete 28 credit points from the Arts schedule under Languages, with the remaining 20 credit points to be chosen from subjects listed by other departments in the Arts schedule. These will be approved by the Head of Department of Modern Languages.
PHILOSOPHY

COURSES OFFERED

The following postgraduate courses are available:

1. Graduate Diploma in Arts
2. Master of Arts (Applied Ethics)
3. Honours Master of Arts by Research or Coursework
4. Doctor of Philosophy

POSTGRADUATE PROGRAMS

Philosophy

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of Arts degree by research and the Doctor of Philosophy degree:

Aesthetics
The definition of art
Make-believe
Truth in fiction
New Guinea tribal art

Epistemology and Metaphysics
Coherence theories of knowledge and truth
Perception
Realism and irrealism
Identity
Essentialism

History of Philosophy
Kant
The Empiricists

Logic
Modal logic
Deviant logics

Ethics (Theoretical and Applied)
Responsibility: action, motive, intention, justification and excuse
The doctrine of double effect
Freedom and the will
Issues in moral psychology, eg weakness and strength of will
Moral reasoning
Moral realism
Autonomy and paternalism
Consequentialism
Rights theory
Virtues and vices
Bioethics
Criminal justice ethics
Environmental ethics

Philosophy of Language
Theories of communication and interpretation
Truth and reference
Propositional attitude ascriptions

Philosophy of Mind and Action
Cognitive Science
Theories of the mind
The causal theory of action
Act individuation
Issues in philosophical psychology, eg self-deception, belief and the will, reason and desire, etc

Philosophy of Religion
The existence of God
God's nature and attributes

Philosophy of Law and Jurisprudence
Legal and political obligation
Legal reasoning
Interpretation in the law
Natural law theory
Criminal responsibility
CURRENT RESEARCH AREAS (cont’d)

The following areas of research are available to candidates undertaking the Honours Master of Arts degree by research and the Doctor of Philosophy degree:

- Philosophy of Feminism
- Philosophy of the Emotions
- Philosophy of Literature
- Political Philosophy
- Liberalism
- Socialism
- Consent theory
- Authority
- Social contract theory of the state
- Self-determination and secession
- Privacy
- Property
- Just war theory
- Theories of justice

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN PHILOSOPHY

leading to the Honours Master of Arts or Master of Arts (Applied Ethics).

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>(i)</td>
<td>Master of Arts</td>
<td></td>
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<tr>
<td>Core</td>
<td>PHIL923 Minor Thesis</td>
<td>24</td>
</tr>
</tbody>
</table>
| Electives
| PHIL933 Advanced Logic                       | 6             |
| PHIL943 Advanced Political Philosophy        | 6             |
| PHIL953 Advanced Philosophy of Value         | 6             |
| PHIL963 Advanced Epistemology and Metaphysics| 6             |
| PHIL973 Advanced Philosophy of Mind and Action| 6             |
| PHIL983 Advanced Philosophical Problems      | 6             |
| (ii)   | Master of Arts (Applied Ethics)              |               |
| Core   | PHIL935 Applied Ethics                       | 8             |
| PHIL955 Theoretical Ethics                   | 8             |
| PHIL923 Minor Thesis                         | 24            |
| Electives
| PHIL965 Bioethics                            | 8             |
| PHIL975 Professional Ethics and Responsibility in Health Care | 8         |
| PHIL985 The Ethics of Institutional Dispute Resolution | 8         |
| PHIL995 Environmental Ethics                 | 8             |

For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>PHIL913</td>
<td>Advanced Philosophical Topics</td>
<td>48</td>
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<tr>
<td>PHIL990</td>
<td>Feminist Political Philosophy</td>
<td>8</td>
</tr>
<tr>
<td>PHIL999</td>
<td>Major Thesis</td>
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</tr>
</tbody>
</table>

COURSE REQUIREMENTS

1. GRADUATE DIPLOMA IN ARTS

The purpose of the Graduate Diploma in Arts is to provide, in a recognised University course, a means for graduates with limited acquaintance with logic and philosophy to acquire competence in these subjects at a reasonably advanced level. The Graduate Diploma shall be subject to the University Course Rules for the award of Graduate Diplomas together with the following conditions.

(1) Candidates are required to complete subjects totalling 48 credit points from those listed in the General or the Arts Schedules under 'Philosophy'. Of these at least 24 must be from 300-level subjects and the remainder from 200-level subjects.

(2) A candidate may not include in his or her graduate diploma program any course component which substantially duplicates a subject or part of a subject previously passed by the candidate as part of any degree or diploma already held or previously attempted.

(3) The selection of courses and the program of study shall be approved by the Head of the Department.

(4) A full-time candidate shall normally complete the diploma in one academic year, a part-time candidate in no less than two and no more than three academic years.

(5) Admission to candidature for the Graduate Diploma is on the recommendation of the Head of the Philosophy Department who shall assess the applicant's aptitude for sustained philosophical study at a reasonably advanced level.
2. MASTER OF ARTS (APPLIED ETHICS)

The Master of Arts (Applied Ethics) aims to provide professionals and others who have a general interest in applied ethics with a philosophical education in one or more areas of applied ethics. Applied areas on offer in 1994 (subject to enrolments) are: Bioethics, Professional Ethics and Responsibility in Health Care, The Ethics of Institutional Dispute Resolution and Environmental Ethics.

It has become increasingly obvious with the proliferation of ethics committees and the demand for public accountability that health care professionals, public policy makers, lawyers, public servants, business people, scientists, researchers, and so on, are required to make well-reasoned, informed judgements about issues that are essentially ethical. Such judgements require philosophical expertise - one needs to be able to recognize the factual and evaluative components of the issues, to recognize evaluative issues as evaluative, critically to evaluate competing ethical claims, and to reason to a conclusion soundly. Yet the development of such expertise is typically not included in the professional training of people who are called to act as ethical decision-makers. The Master of Arts (Applied Ethics) helps make good this lack.

It would be expected that students undertaking the course would benefit at least in the following ways. First, they would sharpen their critical reasoning skills. Second, they would gain a good grounding in ethical theory and a comprehensive understanding of the specific issues in their chosen applied area. Third, they would enhance their ability to make difficult, ethically sensitive decisions.

The Master of Arts (Applied Ethics) is a course in applied philosophy, in which ethical theory, as studied in a core subject (PHIL955 - Theoretical Ethics) is applied to various areas of practical concern. The course is co-taught by members of the Philosophy Department and lecturers from the Faculties of Law and Health and Behavioural Sciences.

Candidature is open to holders of a Bachelor degree (pass or honours) in any field or others who satisfy the Board of Research and Postgraduate Studies of comparable professional standing or attainments. The Degree is available by Coursework and Minor Thesis.

Candidates shall successfully complete a program of 48 credit points, normally comprising a minor thesis (24 credit points) in applied ethics, together with the two core subjects (8 credit points each) PHIL935 and PHIL955 and one elective (8 credit points) from PHIL965, PHIL975, PHIL985 and PHIL995. Candidates who have done PHIL206, or equivalent, are required to take one core subject PHIL955 and two electives. Candidates who have done PHIL251/301, or equivalent, are required to take one core subject PHIL935 and two electives.

3. HONOURS MASTER OF ARTS

(a) Honours Master of Arts by Research

The purpose of the Honours Master of Arts by research is to enable suitably qualified graduates to make a significant independent contribution to Philosophy. Graduates who hold an Honours Bachelor degree (with a minimum of Honours Class II, Division 2) or equivalent may, if recommended for candidature, undertake PHIL999 Major Thesis (48 credit points). All other candidates must if recommended for admission, normally complete PHIL913 Advanced Philosophical Topics (48 credit points) with an average grade of distinction or better prior to enrolling in PHIL999.

(b) Honours Master of Arts by Coursework

The purpose of the Honours Master of Arts by Coursework in Philosophy is to enable suitably qualified graduates (ie graduates with Honours Class II or its equivalent or who have completed PHIL913 with an average grade of distinction or better) to undertake at advanced level coursework in areas which were not included at the appropriate level, in their undergraduate program, while pursuing a minor research project. Candidates must take subjects to the total value of 24 credit points from the schedule of graduate subjects in Philosophy, together with PHIL923 Minor Thesis.

4. DOCTOR OF PHILOSOPHY

For this degree, candidates enrol in the subject PHIL999 Thesis.

SUBJECT DESCRIPTIONS

PHIL913 Advanced Philosophical Topics

Double session (A); 48 credit points (variable combination of seminars, lectures and lecture-discussions).

Pre-requisites: entry is restricted to students seeking admission to the Honours Masters degree who do not have at least an Honours Class II, Division 2 degree in Philosophy but have attained an average of credit or better in their post-100 level undergraduate philosophy subjects.

Assessment: essays and written examinations as laid down in the requirements for such components as are approved or prescribed. An approved or prescribed selection of courses provided by the Department under other designations deemed by the Head of the Department to be appropriate as a foundation for postgraduate studies, given the background and intended pursuits of the individual student.

Textbooks

No set text. Selected reading material will be prescribed by the lecturers.

PHIL923 Minor Thesis

Double session (A); 24 credit points.

PHIL933 Advanced Logic

Double session (A); 6 credit points (variable combination of seminars, lectures and lecture-discussions).

Assessment: examination, assignments and/or essays as determined by the subject co-ordinator. An advanced study of issues in philosophical logic.

Co-ordinator: Dr J Burgess.

PHIL935 Applied Ethics

Double session (A); 48 credit points (variable combination of seminars, lectures and lecture-discussions).

Assessment: examination, assignments and/or essays as determined by the subject co-ordinator. An advanced study of issues in moral philosophy.

Co-ordinator: Dr J Burgess.

PHIL943 Advanced Political Philosophy

Double session (A); 6 credit points (variable combination of seminars, lectures and lecture-discussions).

Assessment: examination, assignments and/or essays as determined by the subject co-ordinator. An advanced study of issues in political philosophy.

Co-ordinator: Dr H Beran.

PHIL953 Advanced Philosophy of Value

Double session (A); 48 credit points (variable combination of seminars, lectures and lecture-discussions).

Assessment: examination, assignments and/or essays as determined by the subject co-ordinator. An advanced study of issues in the philosophy of value - eg ethics or aesthetics.

Co-ordinator: Dr S Unickie.

PHIL955 Theoretical Ethics

Double session (A); 6 credit points (variable combination of seminars, lectures and lecture-discussions).

Assessment: examination, assignments and/or essays as determined by the subject co-ordinator. An advanced study of issues in the philosophy of value - eg ethics or aesthetics.

Co-ordinator: Dr H Beran.

PHIL963 Advanced Epistemology and Metaphysics

Double session (A); 6 credit points (variable combination of seminars, lectures and lecture-discussions).

Assessment: examination, assignments and/or essays as determined by the subject co-ordinator. An advanced study of issues in epistemology and metaphysics.

Co-ordinator: Dr D Simpson.
PHIL965 Bioethics
Spring session; 6 credit points (3 hrs per wk).
Pre-requisite: Bachelor degree (pass or honours) in any field, or equivalent.
Assessment: 60% major research assignment, 40% seminar participation and papers.
A systematic study of a range of problems in bio-medical ethics. Among the topics for discussion will be a selection of the following: euthanasia; abortion; in vitro fertilization and anonymous donor programs; human embryo and foetal research; genetic engineering; surrogacy; moral problems of decision-making in health care and the allocation of health resources; organ transplantation; experimented involving human subjects.
Textbooks: No set text. Selected reading material will be prescribed by the lecturers.
Co-ordinator: Dr S Uniate.

PHIL973 Advanced Philosophy of Mind and Action
Double session (A); 6 credit points (variable combination of seminars, lectures and lecture-discussions).
Assessment: examination, assignments and/or essays as determined by the subject co-ordinator.
An advanced study of issues in the philosophy of mind and/or action.
Co-ordinator: Associate Professor R Dunn.

PHIL975 Professional Ethics and Responsibility in Health Care
Spring session; 8 credit points (3 hrs per wk).
Pre-requisite: Bachelor degree (pass or honours) in any field, or equivalent.
Assessment: 60% major research assignment, 40% seminar participation and papers.
A systematic study of a range of problems within the health care system. Among the topics for discussion will be a selection of the following: responsibility and autonomous professional practice - agent responsibility and negligence; informed consent and problems surrounding confidentiality; the health-care practitioner and the role of patient advocacy; the relationship between personal and professional ethics - role conflict and role ambiguity.
Textbooks: No set text. Selected reading material will be prescribed by the lecturers.
Co-ordinator: Dr S Dodds.

PHIL983 Advanced Philosophical Problems
Double session (A); 6 credit points (variable combination of seminars, lectures and lecture-discussions).
Assessment: examination, assignments and/or essays as determined by the subject co-ordinator.
An investigation at an advanced level of one or more philosophical problems.
Co-ordinator: Associate Professor R Dunn.

PHIL985 The Ethics of Institutional Dispute Resolution
Spring session; 8 credit points (3 hrs per wk).
Pre-requisite: Bachelor degree (pass or honours) in any field, or equivalent.
Assessment: 60% major research assignment, 40% seminar participation and papers.
A systematic study of the ethical problems faced by participants in adversarial systems, mediation, arbitration, conciliation and related processes. The subject will critically examine conventional justifications for the conduct of lawyers in the adversary system. These will be contrasted with the ethical obligations of decision makers in emerging alternative systems of dispute resolution.
Textbooks: No set text. Selected reading material will be prescribed by the lecturers.
Co-ordinator: Dr J Burgess.

PHIL990 Feminist Political Philosophy
Autumn session; 6 credit points (3 hrs per wk).
Pre-requisite: Bachelor degree (pass or honours) in any field, or equivalent.
Assessment: two 3,000 word essays (40% each) and seminar participation including a seminar presentation (20%).
This subject critically examines some themes in contemporary feminist political philosophy. Topics include the roles envisaged for women, children and families in traditional liberal, conservative and socialist political theory and the responses of feminist political theorists to these accounts. Communitarian political theories will also be examined from a feminist perspective. Particular emphasis will be placed on the tensions between ideals of citizenship and women's reproductive capacities; tensions among ideals of justice and equality and the cultural subordination of women's role and the theoretical problems which arise in attempts to distinguish the 'political life' of a state from the 'private lives' of the citizenry.
Co-ordinator: Dr J Burgess.

PHIL995 Environmental Ethics
Spring session; 6 credit points (3 hrs per wk).
Pre-requisite: Bachelor degree (pass or honours) in any field, or equivalent. Not to count with PHIL256.
Assessment: 60% major research assignment, 40% seminar participation and papers.
A systematic study of problems of environmental ethics. Among the topics for critical discussion will be a selection of the following: the place of humankind in nature; environmental ethics; whether a new, ethical principles that ought govern our treatment of the environment; the ethics of research using non-human animals, and the use and production of non-human animals for food, clothing, etc; the nature and extent of our moral obligations to the third world and to future generations; 'deep' versus 'shallow' theories of environmental ethics; whether a new, environmental ethic is necessary.
Textbooks: No set text. Selected reading material will be prescribed by the lecturers.
Co-ordinator: Dr J Dunn.
POLITICS

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Arts by Research
3. Master of Arts

POSTGRADUATE PROGRAM

Politics

CURRENT RESEARCH AREAS

Areas in which research can be supervised in 1996 include aspects of the following:

Australian politics, including public policy and foreign relations
Comparative politics
International relations
Politics of development/underdevelopment
Politics in state socialist societies
South Pacific politics
United States politics
Political theory
Mass media
Urban politics
Australian Political Thought

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN POLITICS
leading to the Master of Arts.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>POL902</td>
<td>Advanced Topics in Australian Politics</td>
<td>12</td>
</tr>
<tr>
<td>POL903</td>
<td>Issues in Australian Public Policy</td>
<td>12</td>
</tr>
<tr>
<td>POL914</td>
<td>Power and the Modern State</td>
<td>12</td>
</tr>
<tr>
<td>POL922</td>
<td>Advanced International Relations</td>
<td>12</td>
</tr>
<tr>
<td>POL931</td>
<td>From Revolution to Reform in CIS, Eastern and Central Europe</td>
<td>12</td>
</tr>
<tr>
<td>POL932</td>
<td>Contemporary Chinese Politics</td>
<td>12</td>
</tr>
<tr>
<td>POL941</td>
<td>Government and Politics in the South Pacific Islands Region</td>
<td>12</td>
</tr>
<tr>
<td>POL984</td>
<td>Power and the Modern State: Advanced Topics</td>
<td>8</td>
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For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECT

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<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>POL951</td>
<td>Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in POL951.

2. HONOURS MASTER OF ARTS

Candidates for this degree enrol in POL951.

3. MASTER OF ARTS

The Master of Arts program is intended to enable graduates with suitable grounding in Politics and/or related disciplines (such as History, Philosophy, Sociology, Law, Economics) to undertake advanced studies in Politics, either for its own sake or as a relevant background to careers in social science teaching, public administration, journalism, and public affairs in government and the private sector. Intending applicants should consult the Professor of Politics before enrolling in order to ascertain their eligibility as well as the subjects on offer each year.

Course requirements are a minimum of 48 credit points chosen from the Politics schedule. Teaching will emphasise small-group discussions, flexibility and independence.

SUBJECT DESCRIPTIONS

POL902 Advanced Topics in Australian Politics

*Autumn session; 12 credit points (3 hrs per wk lectures and tutorials).*

*Assessment:* 9,000 words of essays and tutorial papers.

The subject provides opportunities for detailed study at an advanced level of significant issues, institutions and processes affecting politics in Australia. The focus is on public policy and on the exploration and application of significant theoretical questions. Systematic comparisons are made with other advanced industrial countries. Students are helped and encouraged to undertake small-scale research projects of their own.

*Textbook:* to be advised.

*Co-ordinator:* refer to Department.

POL903 Issues in Australian Public Policy

*Spring session; 12 credit points (4 hrs per wk lectures and tutorials).*

*Assessment:* review of 1,000 words 10%, essay of 2,500 words 25%, critique of 2,500 words 25% and research paper of 3,000 words 40%.

This subject examines, at an advanced level, the policy options for Australian Governments in the 1990s in the light of contemporary policy debates: the Accord, equal opportunities, tariff policy, privatisation, reducing the size of the government sector, deregulation and environmentally sustainable growth. It focuses on Government-industry relations...
and the options for politically achievable macro and micro reform. Consideration will be given to the limitations created by the structure of the international political system.

Textbook: to be advised.
Co-ordinator: Dr S Reglar.

POL914 Power and the Modern State
Spring session; 12 credit points (3 hrs per wk lectures and tutorials).
Assessment: 9,000 words in essays and tutorial papers.
The subject examines a variety of perspectives on the nature and exercise of power in the modern state. It includes an advanced study of contemporary liberal, socialist and conservative writings on power and the state in modern advanced industrial countries, including Australia and countries in East Asia and Central Europe. Concepts such as authority, processes such as legitimation, and relationships between classes, interest groups, social movements and the state are analysed in detail. Students are encouraged to pay close attention to issues in which they have particular interest, experience and/or expertise.

Co-ordinator: Dr G Melleuish.

POL922 Advanced International Relations
Spring session; 12 credit points (3 hrs per wk, lectures, seminars and tutorials).
Assessment: 9,000 words in essays, seminar and tutorial papers.
This subject analyses theories, concepts and approaches to the advanced study of international relations, including regional and functional co-operation. Issues studied include security, diplomacy, foreign policy, and the role of government in international economic relations. The roles of non-government influence and relations, including the development and impact of foreign and international opinion on issues such as human rights; the role of the press and mass communications; and the growth and consequences of other trans-national links are analysed in the light of the theories outlined above. Students are encouraged and helped to undertake small-scale research projects of their own, focusing on Australia and the Asia-Pacific region(s).

Textbook: to be advised.
Co-ordinator: Professor E P Wolfers.

POL931 From Revolution to Reform in CIS, Eastern and Central Europe
Autumn session; 12 credit points (3 hrs per wk lectures and tutorials).
Assessment: 9,000 words in essays and tutorial papers.
This subject examines the collapse of the reforms in state socialist countries in the CIS, Eastern and Central Europe. It analyses the reasons for the loss of legitimacy of Leninist political systems and the role of social movements in the crisis of state socialism. The implications of changes in the domestic and foreign policies of the former nations of the USSR and Eastern and Central Europe for the "Balance of Power" in international relations are examined through consideration of special case studies. Competing explanations of the power structure of state socialism and post-soviet-type societies and international political economy are examined to determine what such approaches offer as explanations of current inter-state tensions and the crises facing the respective governments.

Textbooks: to be advised.
Co-ordinator: Dr S Reglar.

POL932 Contemporary Chinese Politics
Spring session; 12 credit points (4 hrs per wk lectures and tutorials).
Assessment: 2 x 3,000 word essays each 25%, 1 x 2,000 word essay 20%, 1 x 1,000 word tutorial paper 10%, journal 20%.
This subject examines the reasons for reform in the government and administration of the People's Republic of China. Issues studied include foreign policy, the role of ideology, the legacy of Mao Zedong, the Communist Party, law and policing, the role of intellectuals, theoretical debates in political economic policy, approaches to technological modernisation, industrial organisation, gender and family policy and problems of rural and urban life.

Textbooks:
Co-ordinator: Dr S Reglar.

POL941 Government and Politics in the South Pacific Islands
Autumn session; 12 credit points (3 hrs per wk lectures, seminars and tutorials).
Assessment: 9,000 words in essays, seminar and tutorial papers.
The subject analyses pre-colonial and colonial politics and government in the South Pacific islands. Particular attention is paid to nationalism, political parties and other forms of popular mobilisation, and decolonisation. Issues studied include constitution making, independence, and post-independence political arrangements, including challenges to the authority of successor states. The role of politics, government, policy-making and implementation, including the impact of external forces (aid donors, lenders, investors, etc) is discussed. Students are encouraged to undertake detailed case-studies of particular issues, institutions, countries or regions; to draw on, apply and test relevant bodies of theory; and to make systematic comparisons (which need not be confined to the region).

Textbook: to be advised.
Co-ordinator: Professor E P Wolfers.

POL984 Power and the Modern State: Advanced Topics
Spring session; 8 credit points (3 hrs of lectures/tutorials).
Assessment: 7,500 words in essays/tutorial papers.
This subject examines a variety of perspectives on the nature and exercise of power in the modern state. It includes an advanced study of contemporary liberal, socialist and conservative writings on power and the state in modern advanced industrial countries, including Australia and countries in East Asia and North America. Concepts such as authority, processes such as legitimation, and relationships between classes, interest groups, social movements and the state are analysed in detail. The implications of the preceding analyses for human rights, equal opportunities, freedom and justice are explained. Students are encouraged to pay close attention to issues in which they have particular interest, experience and/or expertise.

Textbook: to be advised.
Co-ordinator: Dr G Melleuish.

POL951 Major Thesis
Double session (A); 48 credit points.
Assessment: Thesis.
In addition to completing a major thesis, in close consultation with their appointed supervisor(s), postgraduate students are required to attend postgraduate seminars and to give work-in-progress seminars at least once a year. Students may also be required to complete such coursework as the Professor of Politics, acting in consultation with the supervisor(s), shall determine.
COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Arts by coursework and/or research
3. Master of Arts (Science and Technology Studies)
4. Graduate Diploma in Arts

POSTGRADUATE PROGRAMS

Science and Technology Studies

CURRENT RESEARCH AREAS

The following areas of research available to candidates undertaking the Honours Master of Arts degree by research and the Doctor of Philosophy degree include:

- Environment and socio-technical change
- Science, technology and public policy
- Political sociology of scientific knowledge
- The social and economic context of technological change
- Technology policy and industrial performance
- The politics of medicine and health
- Women and science
- Evolutionary theory in the nineteenth century
- Scientific controversy and the sociology of knowledge
- Darwinism, social Darwinism and neo-Darwinism
- The impact of genetics in agriculture and medicine
- The social impact and politics of information and communications technology
- Politics of atmospheric crisis
- Philosophy and sociology of scientific change
- Technical, ideological and institutional origins of Mechanism and Cartesianism 1600-1660
- Structure of scientific discourses - 'systems of nature', and doctrines of 'method'
- History and Sociology of technology
- Work, automation and employment
- Artificial intelligence and social control
- Technical controversies and political intervention
- Risk assessment and the politics of hazard
- Energy strategies and organisation for sustainable development
- Peace and war

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN SCIENCE AND TECHNOLOGY STUDIES
leading to the Honours Master of Arts (Program 1).

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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</thead>
<tbody>
<tr>
<td>STS901</td>
<td>Theories and Methods of Science and Technology Studies</td>
<td>12</td>
</tr>
<tr>
<td>STS921</td>
<td>Dynamics of Science and Technology</td>
<td>12</td>
</tr>
<tr>
<td>STS902</td>
<td>Advanced Topics in Science &amp; Technology Studies</td>
<td>12</td>
</tr>
<tr>
<td>STS909</td>
<td>Topics in History of Western Science and Technology</td>
<td>12</td>
</tr>
<tr>
<td>plus either</td>
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<td>STS903</td>
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<tr>
<td>or</td>
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<td>STS924</td>
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<td>Electives:</td>
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<tr>
<td>STS910</td>
<td>Gender and Body Politics</td>
<td>8</td>
</tr>
<tr>
<td>STS914</td>
<td>Master Narratives, Myth and Symbolic Politics in Science</td>
<td>12</td>
</tr>
<tr>
<td>STS929</td>
<td>Studies in Resource and Environmental Policy</td>
<td>12</td>
</tr>
<tr>
<td>STS931</td>
<td>Risk Assessment, Health &amp; Safety</td>
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<td>STS933</td>
<td>Energy and Technological Development</td>
<td>12</td>
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<td>STS934</td>
<td>Genetics and Technological Innovation</td>
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<td>STS935</td>
<td>The Impact of Computers and Communication Technology</td>
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<td>STS936</td>
<td>Critical Studies in Medicine and Health</td>
<td>12</td>
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For further details, see Course Requirements below.
POSTGRADUATE PROGRAM IN SCIENCE AND TECHNOLOGY STUDIES
leading to the Master of Arts (Program 2).

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<td>STS900</td>
<td>Theory and Methods of Science and Technology Studies</td>
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<tr>
<td>STS902</td>
<td>Advanced Topics in Science and Technology Studies</td>
<td>12</td>
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<tr>
<td>STS951</td>
<td>Research Report</td>
<td>12</td>
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</tbody>
</table>

For further details, see Course Requirements below.

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY
Candidates for this degree enrol in STS999.

2. HONOURS MASTER OF ARTS
The Department of Science and Technology Studies offers Honours Masters programs to students with a background in Science and Technology Studies who wish to pursue their studies at a higher level.

PROGRAM 1 - Honours Master of Arts (Science and Technology Studies)

This program is open to students with a substantial background in Science and Technology Studies who wish to pursue their studies at a higher level. Students entering the program with a degree in Science and Technology Studies, or its equivalent (as determined by the Head of Department), at a standard below Honours Class II, Division 2 will be required to complete subjects with a value of at least 96 credit points. Those with an Honours degree in Science and Technology Studies, or its equivalent, at a standard of Class II, Division 2 or higher will be required to complete subjects with a value of at least 48 credit points.

Students required to complete 96 credit points must complete 48 credit points before they enrol in either STS900 Minor Thesis, or STS924 Major Thesis, one of which must be completed by all students enrolled in Program 1.

3. MASTER OF ARTS

Science and technology play central and crucial roles in our society. Their social and economic implications are becoming increasingly important and contentious issues. This postgraduate course is offered by the Department of Science and Technology Studies to science, applied science, humanities and social science graduates who wish to further their understanding of the forces shaping science and technology and their social, economic and political dimensions in modern industrial society.

PROGRAM 2 - Master of Arts (Science and Technology Studies)

This program offers a coherent set of courses in the area of science and technology in their socio-economic and political contexts, together with a research component.

The degree of Master of Arts in Science and Technology Studies has been designed for graduates without an extensive STS background and is of particular relevance to those employed in government, administration and management, teaching and educational planning, and relevant to those more generally concerned with the social relations of science, medicine and technology.

Students entering the Masters program in Science and Technology Studies will be required to complete subjects with a value of 48 credit points as set out in the Schedule for this Program.

Interdisciplinary Seminar
Students enrolled in either Program 1 or Program 2 are required to attend and contribute to a series of regular informal seminars and discussion meetings held within the Department of Science and Technology Studies during Autumn and Spring Sessions.

Assessment
Continuous assessment by written assignments and seminar presentations, together with a research report (Program 2), minor or major thesis (Program 1).

Entry to Course
Will be dependent upon approval by the Head of Department.

Program Determination
Students wishing to enrol for the Honours Master of Arts, Program 1 or Master of Arts, Program 2, must have their proposed course of study approved by the Head of the Department.

4. GRADUATE DIPLOMA IN ARTS

The aim of this course is to enable graduates with a limited acquaintance with the history and philosophy of science and technology or the role of science and technology in contemporary society, to acquire an understanding of these subjects to a reasonably advanced level. The Graduate Diploma shall be subject to the Course Rules for the Award of Graduate Diplomas together with the following conditions:

1. candidates are required to complete subjects totalling 48 credit points from those listed in the Arts Schedule under 'Science and Technology Studies'. Of these at least 24 must be from 300-level subjects and the remainder from 200-level subjects. Subject to the joint approval of the Head of the Department of Science and Technology Studies and the Head of the other department concerned, 12 credit points may be taken from suitable subjects listed in the Arts Schedule under other Departments;
2. a candidate may not include in his or her graduate diploma program any course component which substantially duplicates a subject or part of a subject previously passed by the candidate as part of any degree or diploma already held or previously attempted;
3. the selection of courses and the program of study shall be approved by the Head of Department;
4. a full-time candidate shall normally complete the graduate diploma in one academic year, a part-time candidate in no less than two and no more than three academic years;
5. admission to candidature for the Graduate Diploma is on the recommendation of the Head of the Department of Science and Technology Studies.

SUBJECT DESCRIPTIONS

STS901 Theories and Methods of Science and Technology Studies
Autumn session; 12 credit points (3 hrs seminars per wk).
Assessment: essays and seminar papers.

STS902 Advanced Topics in Science and Technology Studies
Autumn or Spring session; 12 credit points (3 hrs seminars per wk).
Assessment: essays and seminar papers.

STS903 Minor Thesis
Autumn or Spring session; 24 credit points (3 hrs per wk).
Assessment: thesis.
A thesis embodying the result of an original investigation of a problem approved by the Head of the Department under the supervision of a staff member.

STS909 Topics in History of Western Science and Technology
Autumn or Spring session; 12 credit points (3 hrs per wk lecture/seminars).
Assessment: essay 50%, seminar paper 30%; and two oral seminar criticisms 10% each.
An introduction to the methods and...
interpretative tools of the history of Western science and technology, including perspectives on contemporary history of science and technology. Topics will be selected to explore key periods and central theoretical debates and may include: scientific perspectives on the Renaissance and Early Modern Europe; technology dynamics, innovation and social change since the Industrial Revolution; new perspectives in the social history of technology and contextual history of science in the 19th and 20th centuries; the dynamics of contemporary science and technology; and the relations between the history of science and the history of technology.

Textbook:
No single suitable textbook; current research embodied in the main journals and significant recent books will be the focus of concern.

Co-ordinator: Associate Professor J A Schuster.

STS910 Gender and Body Politics
Autumn session; 8 credit points (3 hrs lecture/seminar per wk).
Assessment: major essay, seminar paper, presentation and participation.
Increasingly in the modern world, scientific and medical practitioners and their cultural allies have come to articulate the authoritative social theories of the feminine and masculine body and mind. Historically, science and medicine have included women within their gaze, but excluded her from their practice. Critical awareness of contemporary scientific and medical issues concerning women requires an understanding of the social and historical shaping of scientific and medical knowledge claims. This subject focuses on the intersection of social, scientific and medical discourses and practices concerning the representation of women's bodies, minds and health. It draws upon feminist critiques of science and medicine and recent theoretical developments in the history and sociology of the body in examining medical and scientific constructions of women's bodies, health and nature, in their institutional and wider social contexts.

Textbook: no set text.

Co-ordinator: to be advised.

STS914 Master Narratives, Myth and Symbolic Politics in Science
Spring session; 12 credit points (3 hrs per wk lecture/seminars).
Pre-requisite: available only to students enrolled in Master of Cultural Studies.
Assessment: essay 50%; seminar paper 30% and two oral seminar commentaries 20%.
For subject description see STS914 Master Narratives, Myth and Symbolic Politics in Science.

Co-ordinator: Associate Professor J A Schuster.

STS929 Studies in Resource and Environmental Policy
Autumn session; 8 credit points (3 hr lecture/seminar per wk).
Assessment: major research essay of 4,000 words, minor essay of 1,500 words, seminar participation, plus class exercises.
This subject will provide advanced study of the social, economic and political processes through which environmental policy is negotiated and instituted. The subject will be thematic, choosing one or more particular areas of technological development and its environmental impact as a case study. (The areas will be chosen in any given year on the basis of their contemporary relevance). Theoretical perspectives which will be developed in the subject may include the politics and sociology of scientific controversy, global, national and regional developments in environmental regulation, theories of state regulation and intervention, and the choice and negotiation of different environmental strategies. Students will be expected to read extensively and critically, to engage in coherent and documented argument and to approach the problems considered by using insights from a number of different theoretical perspectives.

Textbooks:
The study program will rely on extensive library study in journals and books, supplemented by case study material assembled for the subject.

Co-ordinator: Professor J Falk.

STS931 Risk Assessment, Health and Safety
Spring session; 12 credit points (3 hrs per wk).
Assessment: essay 30%, review exercise 15%, seminar presentation 20%, participation 15%, take-home examination 20%.
This subject investigates scientific and political aspects of environmental and occupational hazards, with special reference to contemporary Australia. The course will include: concept of acceptable risk, public participation in decisions about risks, shaping of attitudes to risks, the social production of scientific knowledge. The course will draw on case studies which are currently being debated in Australia: eg hazardous waste, asbestos, radiation, fuel additives.

Co-ordinator: Dr S Russell.
ST5933 Energy and Technological Development
Autumn session; 12 credit points (3 hrs per wk).
Assessment: participation 15%, review exercise 15%, seminar presentation 20%, essay 30%, take-home examination 20%.
This subject examines the social, economic and political factors influencing patterns of energy provision and choice of energy technologies; the social and environmental implications of different energy options; and the nature of the debates themselves which have developed throughout the world on these issues and choices.
Textbooks:
Co-ordinator: Dr S Russell.

ST5934 Genetics and Technological Innovation
Autumn session; 12 credit points (3 hrs per wk).
Assessment: seminar paper 30%, essay 30%, attendance, preparation and participation 20%, oral examination 20%.
This subject examines the emergence, development and impact of molecular biology and genetic engineering on the life sciences, in their social context. Issues to be addressed may include: the roles of Avery, Chargaff and Pauling prior to the development by Watson and Crick of their model of DNA; the part played by Wilkins and Franklin in the work leading up to the double helix; the acceptance of the Watson-Crick structure; the function of Crick's 'Central Dogma of Molecular Biology' in guiding subsequent work; the elucidation of the structure of RNA; the development of recombinant DNA techniques; Asilomar and safety of recombinant DNA; molecular biology versus genetic engineering; controversy over release of recombinant organisms; biotechnology in Australia.
Textbooks:
Co-ordinator: to be advised.

ST5935 The Impact of Computers and Communication Technology
Autumn session; 12 credit points (3 hrs per wk).
Assessment: two essays 60%, seminar paper 20%, seminar presentation 20%.
The course will examine the effects of information technology on work and organisations principally through the work of Zuboff (1988). The author's main conclusion is that the full benefits from information technology can only be achieved when managers can relinquish their old ideas about employees and organisations. The main topics covered by the course are: Theories of organisation and industrial society. How and why organisations change. Early and recent socio-technical theory. The computer and the "textualisation" of work. The limits of hierarchy in an "informed" organisation. Information technology as a window on the organisation - "Panoptic" power. The changing nature of managerial authority. Authority and expert systems. Decision-making in the information age. The changing nature of Human Resource Management. The scope of information technology in the modern organisation.
Textbooks:
Co-ordinator: Mr S Aungles.

ST5936 Critical Studies in Medicine and Health Care
Spring session; 12 credit points (3 hrs per wk).
Assessment: essay 50%, two seminar papers 50%.
An examination of the increasing technological dependency and automation of diagnosis and treatment in modern medicine and health care; their socio-economic and political implications.
Co-ordinator: to be advised.

ST5945 Technology and Economics i
Autumn session; 6 credit points (3 hrs per wk).
Assessment: essay 25%, seminar paper 20%, review 20%, research paper 35%.
This subject explores in historical and contemporary terms the relation between technology and economy - in industrialised, newly industrialising and developing countries. It also assesses the past and potential contribution of economists to understanding the origins of, influences on, and impacts of, technological change and R&D activity. It examines among other topics: structural changes in the global economy; technology, development and economic growth; the role of technological change in cyclical patterns in economic activity; economic influences on innovative activity, technological trajectories and diffusion; technology, productivity and employment; firms, markets and technological change; influences of government economic policies on countries' technological capabilities; comparative economics of research and development; economic appraisal of technological projects.
Textbooks:
Co-ordinator: to be advised.

ST5946 Management of Technological Change
Spring session; 6 credit points (3 hrs per wk).
Assessment: major case study 50%, six research exercises 50%.
The objectives of this subject are to develop familiarity with the conceptual tools and techniques available to manage technology in private and public sector organisations in the context of the changing role of technology in the national and global economy and the implications of these changes for national, industry and company strategies. The course will cover issues of technology strategy formulation and management, marketing of technology, models and mechanisms of government involvement in technology development, new corporate strategies, the changing nature of government role and the relationship with new organisational forms, new public policy methods, and the nature of the debates and decisions surrounding the management of technological change.
Textbooks:
Co-ordinator: to be advised.

ST5947 Case Studies in Science and Technology Policy
Spring session; 6 credit points (3 hrs per wk).
Assessment: tailored to individual student projects and will include a major case study report of at least 5,000 words.
The objectives of this subject are to provide practical insights and experience in the application of methods of analysis, policy formulation, implementation and monitoring of science and technology in their social and political context. Case studies will be chosen on the basis of departmental and student interests and expertise, and may also draw on research themes from the Science and Technology Analysis (STA) Research Program. Students will engage in the analysis of one or more case studies of technological controversy taking into account their political, economic and technical dimensions. Participation will be based on a combination of active research, course work, and policy laboratory studies and exercises. Topic areas may include consideration of issues such as the evolution of the biotechnology sector: the interplay of science policy and science; the role of technology in the international economy; the role of technology in national and regional strategies; the role of technology in the changing structure of the global economy; the role of technology in the environment; the role of technology in the world of work; the role of technology in health and safety; the role of technology in the world of education; the role of technology in the world of energy; the role of technology in the world of resource management; the role of technology in the world of warfare; the role of technology in the world of information; the role of technology in the world of entertainment; the role of technology in the world of communication; the role of technology in the world of ethics; the role of technology in the world of politics; the role of technology in the world of religion; the role of technology in the world of culture; the role of technology in the world of art; the role of technology in the world of sport; the role of technology in the world of sport; the role of technology in the world of sport; the role of technology in the world of sport; the role of technology in the world of sport; the role of technology in the world of sport.
Textbooks:
Not on offer in 1996.

ST5948 Research Project
Spring session; 6 credit points.
Assessment: research reports 80%, proficiency and application 20%.
Students will be provided with an attachment to an organisation which is involved in decision-making about technology appropriate to their interests in which they will design and carry out a closely supervised policy exercise relevant to the organisation and prepare two reports - one on the Science and one for the organisation. Typical organisations will include government departments, research organisations, innovation centres, technology parks, consulting organisations and public and private sector companies.
Co-ordinator: to be advised.

i Not on offer in 1996.
STS951 Research Report

*Autumn or Spring session; 12 credit points (3 hrs per wk).*

A report providing a survey and analysis of arguments and data on the subject approved by the Head of the Department, under the supervision of a staff member.

*Co-ordinator:* to be advised.
COURSES OFFERED

The following postgraduate courses are available.

1. Doctor of Philosophy
2. Honours Master of Arts (Cultural Studies)
3. Honours Master of Arts by Research
4. Master of Arts
5. Master of Policy (Social Policy)
6. Master of Arts (Cultural Studies)
7. Graduate Diploma in Arts
8. Graduate Certificate in Migration and Development

POSTGRADUATE COURSEWORK PROGRAMS

Social Policy
Sociology
Cultural Studies
Migration and Development

CURRENT RESEARCH AREAS

The overall approach of Wollongong Sociology centres on the analysis and understanding of the social, political and cultural consequences of people's changing conditions of life. Concern with issues of critical and theoretical analysis and social and public policy underlie the Department's research and scholarship. These interests are developed through concentration on a few key areas which the Department classifies in two crosscutting ways: by specialisation and by regional foci.

The disciplinary specialisations are Urban and Regional studies, Intercultural studies (encapsulating the areas of multiculturalism, migration, Asian societies and indigenous peoples) and Women's studies. The principal regional research foci of the Department are Australia and the Asia/Pacific region, with the emphasis being on comparative perspectives.

These are the Department's priority areas for postgraduate teaching, research and scholarship.

The Department is closely associated with the Social Change, Social Justice and Citizenship Research Group. This Research Group brings together researchers and post-graduate students concerned with the analysis of fundamental factors of social advantage and disadvantage in social, political and cultural change and integrates research within Sociology in these areas of central concern to the discipline. The University's Centre for Multicultural Studies is a unit within the Department. These two initiatives will enhance the Department's research activities as well as strengthening the development of our teaching in both undergraduate and postgraduate areas.

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN SOCIOLOGY
leading to the Master of Arts.

<table>
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<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>SOC910</td>
<td>Postgraduate Sociology Seminar</td>
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<tr>
<td>SOC933</td>
<td>Advanced Research Techniques</td>
<td>8</td>
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<td>Plus at least two of the following:</td>
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<tr>
<td>SOC940</td>
<td>Advanced Social Policy Studies</td>
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<tr>
<td>SOC942</td>
<td>Advanced Race and Ethnic Studies</td>
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<tr>
<td>SOC943</td>
<td>Advanced Urban Society</td>
<td>8</td>
</tr>
<tr>
<td>SOC946</td>
<td>Practical Communication and Communication Theory</td>
<td>8</td>
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<tr>
<td>SOC959</td>
<td>Advanced Studies of Gender in Society</td>
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<tr>
<td>Electives:</td>
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<tr>
<td>SOC906</td>
<td>Sexuality, Health Issues and Social Policy</td>
<td>8</td>
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<tr>
<td>SOC918</td>
<td>Advanced Sociology of Development</td>
<td>8</td>
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<tr>
<td>SOC938</td>
<td>Advanced Health Sociology</td>
<td>8</td>
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<tr>
<td>SOC949</td>
<td>Advanced Social Regulation: Policies and Issues</td>
<td>8</td>
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<tr>
<td>SOC950</td>
<td>Advanced Studies of the Individual in Society</td>
<td>8</td>
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<td>SOC961</td>
<td>Women, Migration and Development</td>
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<td>SOC962</td>
<td>Nationalism and Minorities in the Asia-Pacific Region</td>
<td>8</td>
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<td>SOC970</td>
<td>Advanced Social Movements</td>
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<tr>
<td>CMS904</td>
<td>Australian Multiculturalism: Social Policy and Cultural Identity in a Changing Society</td>
<td>8</td>
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<tr>
<td>CMS905</td>
<td>New Migrations and Global Change</td>
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</table>

(A Special Topic may be substituted for one of the electives with the permission of the Head of the Department).

For further details, see Course Requirements below.

* Not on offer in 1996.

1 Subject currently offered by PAGE. For further details see Subject Descriptions.
POSTGRADUATE PROGRAM IN SOCIAL POLICY
leading to the Master of Policy (Social Policy).

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<tr>
<td>SOC904</td>
<td>Case Studies in Social Policy</td>
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<td>SOC933</td>
<td>Advanced Research Techniques</td>
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<td>SOC940</td>
<td>Advanced Social Policy Studies</td>
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<td>SOC906</td>
<td>Sexuality, Health Issues and Social Policy</td>
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<td>Sociology of Development</td>
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<td>SOC938</td>
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<td>New Migrations and Global Change</td>
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<tr>
<td>POL984</td>
<td>Selected Topics in Australian Politics</td>
<td>8</td>
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</table>

(A Special Topic may be substituted for one of the electives with the permission of the Head of the Department).

For further details, see Course Requirements below.

* Not on offer in 1996.
1 Subject currently offered by PAGE. For further details see Subject Description.

OTHER POSTGRADUATE SUBJECTS

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<tr>
<th>Number</th>
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<tr>
<td>SOC921</td>
<td>Special Topic in Sociological Studies</td>
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<td>SOC990</td>
<td>Minor Thesis</td>
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<tr>
<td>SOC999</td>
<td>Major Thesis</td>
<td>48</td>
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</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

A student may enrol for a PhD in Sociology on successfully completing a BA(Hons) in Sociology at Class II, Division 1 or higher, on successfully completing an MA(Hons) in Sociology, or with approval of the Head of Department, after completing, at a high level, the Master of Arts Degree in Sociology. Normally, a minimum of three years of full-time research is required to complete a PhD in Sociology. Full-time candidates enrol in SOC999. Part-time enrolment is available. Students may enrol in Sociology or Multicultural Studies as appropriate.

2. HONOURS MASTER OF ARTS (CULTURAL STUDIES)

For details of this course, please refer to the "CULTURAL STUDIES" entry in the Faculty of Arts section.

3. HONOURS MASTER OF ARTS BY RESEARCH

This degree is available to graduates with an Honours degree in Sociology. Normally, a minimum of one year full-time research is required to complete an MA(Hons) in Sociology. Full-time candidates enrol in SOC999. Part-time enrolment is available. Students may enrol in Sociology or Multicultural Studies as appropriate.

4. MASTER OF ARTS

The purpose of the Master of Arts is to allow graduates to pursue studies of society, culture and knowledge within frameworks provided by sociological theory. Students are required to choose subjects worth a total of 48 credit points from the Schedule of Graduate Studies, with the following qualifications:

- (1) persons who have completed a major in Sociology at the undergraduate level shall not include in their program subjects which are substantially similar to those already completed;
- (2) students shall discuss their overall program with the Head of the Department or post-graduate co-ordinator prior to enrolment, at which time the most appropriate program will be decided;
- (3) optional subjects will be offered according to Postgraduate Rules. That is, not all subjects will be offered in any one year or session;
- (4) the Master of Arts shall be available as a part-time and full-time program. Full-time students are expected to complete the degree in two academic sessions, part-time students in not less than three and not more than six academic sessions.

5. MASTER OF POLICY (SOCIAL POLICY)

(1) The objective of the Master of Policy is to allow pass graduates in arts or with other approved areas of study or experience, to pursue advanced studies in theoretical and practical aspects of contemporary Australian social policy. The tightly structured program will prepare students for work in government or voluntary welfare organisations, or policy related community groups. Students shall be admitted under the Rules covering the Masters Degree, with the additional qualifications covered below.

- (2) Students are required to complete successfully an approved program of study of 48 credit points drawn from the Schedule of Graduate Studies, as set out in the table above.
- (3) Students shall not include in their program subjects substantially similar to those already completed as part of their previous undergraduate or graduate studies.
- (4) Students shall discuss their proposed program with the Co-ordinator of the Master of Policy (Social Policy) prior to enrolment.
- (5) Students may be required to undertake additional work as a pre-requisite for subjects included in the Schedule of Graduate Subjects.
- (6) The Master of Policy shall be available as a part-time and full-time program. Full-time students are expected to complete the degree in two academic sessions, part-time students in not less than three and not more than six academic sessions.

6. MASTER OF ARTS (CULTURAL STUDIES)

For details of this course, please refer to the "CULTURAL STUDIES" entry in the Faculty of Arts section.
7. GRADUATE DIPLOMA IN ARTS

The purpose of the Graduate Diploma in Arts is to provide graduates who have a limited knowledge of Sociology a means of acquiring a sociological competence at a reasonably advanced level. The Head of the Department will advise intending students on which course structure is most appropriate to their interests. The Graduate Diploma will be subject to the Course Rules for the award of Graduate Diplomas together with the following conditions:

(1) candidates are required to complete subjects totalling 48 credit points from those listed in the Arts Schedule under Sociology. Of these, at least 24 must be from 300-level subjects and the remainder from 200-level subjects;

(2) a candidate may not include in his or her Graduate Diploma program any course component which substantially duplicates a subject or part of a subject previously passed by the candidate as part of any degree or diploma already held or previously attempted;

(3) the selection of subjects and the program of study shall be approved by the Head of the Department;

(4) a full-time candidate shall normally complete the diploma in one academic year, a part-time candidate in no less than two and no more than three academic years;

(5) admission to candidacy for the Graduate Diploma is on recommendation of the Head of the Sociology Department who shall assess the applicant's aptitude for sustained sociological study at a reasonably advanced level.

8. GRADUATE CERTIFICATE IN MIGRATION AND DEVELOPMENT

This certificate is offered only by distance education via the Profession and Graduate Education (PAGE) consortium and in collaboration with the Special Broadcasting Service (SBS). The course is concerned with aspects of contemporary processes of globalisation, linking issues of social, economic, political and cultural change as they relate to Australia and the Asia-Pacific region. This course is run in conjunction with the Centre for Multicultural Studies. For further details on this course only, contact (042) 214 444.

SUBJECT DESCRIPTIONS

CMS904 Australian Multiculturalism: Social Policy and Cultural Identity in a Changing Society

Autumn/Spring session; 8 credit points (14 TV units).

Assessment: short essay 20%, book review 30%, major essay 50%.

Please note: This subject is currently offered by PAGE. Students wishing to take this subject will need to contact the Head of the Department concerning availability.

This subject will describe and analyse multiculturalism in Australia as a public policy, and relate it to changes in Australia's demographic and social structure. It starts with an examination of the historical emergence of multiculturalism, showing the way in which Australian identity was constituted prior to 1945, and the factors which led to changes in the wake of the post-1945 mass immigration program. The policy of assimilation and the reasons for its failure will be examined. The demographic, socio-economic and political dimensions of community formation and the development of cultural pluralism will be analysed. The subject will go on to look at the institutional and policy implications of multiculturalism, as it has developed since 1972. The course stresses multicultural policies for the definition of citizenship and for international relations will also be examined.

Co-ordinator: Professor S Castles.

CMS905 New Migrations and Global Change

Autumn/Spring session; 8 credit points (14 TV units).

Assessment: short essay 20%, book review 30%, major essay 50%.

Please note: This subject is currently offered by PAGE. Students wishing to take this subject will need to contact the Head of the Department concerning availability.

This subject will describe and analyse contemporary mass population movements and their consequences for society. It introduces basic concepts of theoretical approaches to understanding migration, covering a number of disciplines, including sociology, political economy, economics, geography and political science. Theories of migration will be linked to analyses of global change covering economic, political and cultural dimensions. The history of international migration and its links with the emerging world market will be discussed. International migration will be examined both from the perspective of less-developed sending countries and highly-developed receiving countries. The main emphasis will be on the receiving countries. Issues to be examined include effects on labour markets, community formation and effects on cities, racism and resistance, ethnic diversity and the state, and the effects of ethnic diversity on national identity and the character of nation-states.

Co-ordinator: Professor S Castles.

SOC904 Case Studies in Social Policy

Spring session; 8 credit points (2 hrs seminar/bookshop).

Pre-requisite: successful completion of SOC940.

Assessment: workshop participation, seminar reports, assignments.

A case-centred approach is used to examine policy issues, concentrating on exploring the methodologies of issue identification, definition, investigation, and policy development, implementation, outcome and review. Students will develop case analyses based on reading and visits to community agencies. Topics may include welfare, health, employment and communications policies, programs addressed to the needs of the aged, youth, the disabled and government strategies aimed at overcoming disadvantage experienced by Aborigines, immigrants or women. Where appropriate, comparative international perspectives will be used to explore the relationships between state forms and social policies.

Co-ordinator: Mr M Morrissey.

SOC905 Social Policy Research Project

SOC906 Sexuality, Health Issues and Social Policy

Autumn session; 8 credit points (2 hrs seminar).

Assessment: participation, 7000 words of written work which will include: a book review, a short essay and a long essay.

The 1980s and 1990s have been a time of a resurgence of politics and policy making about 'private' aspects of human social relations: sexual expression and sexual reproduction. This subject will trace the ways that feminist and sexual liberationist politics have challenged previous social theory and public policy practice by liberal democracies in these areas. Current social theory regarding gender relations and human sexuality will be considered. It will then critically examine the attempts by various Australian governments to make policy about fertility and fertility control including reproductive technology, HIV/AIDS and other aspects of sexual health, and sexual and physical abuse of women and children.

Co-ordinator: Ms R Albury.

SOC910 Postgraduate Sociology Seminar

Autumn session; 8 credit points (2 hrs seminar).

Assessment: seminar presentations and essay.

The subject matter will explore contemporary theoretical and substantive issues in sociology. The subject will provide a means of exploring particular areas of current debate within the discipline.

Co-ordinator: Professor J Bern or Dr A Aungles.

SOC918 Advanced Sociology of Development

Autumn session; 8 credit points (2 hrs seminar).

Assessment: Two seminar papers, one major essay.

This subject examines the interaction between rich and poor nations, and theoretical explanations for the emergence of international disparities of wealth. In particular it will focus on the Asia-Pacific region, and the role that Australia plays in this part of the world. Development programs conducted by both government and non-government agencies will be studied, with illustrative examples from current development debates.

Co-ordinator: Dr A Cornish.

SOC921 Special Topic in Sociological Studies

Autumn/Spring session; 8 credit points (variable combination of individual supervision and seminars).

Pre-requisite: permission of Head of Department.

Assessment: one essay and tutorial assignments.

Topics for this subject may be chosen from any area of Sociology which the Head of the Department considers to be of suitable
substance and level to be offered as a SOC900 subject. This will be a reading subject offered under the direct supervision of a member of staff. For information on the availability of topics offered, students should consult the Head of the Department. Co-ordinator: Refer to Head of Department.

SOC933 Advanced Research Techniques
* Autumn session; 8 credit points (2 hrs seminar).
Assessment: research project and continuous assessment of work set in ‘practical’ seminars.
This subject will explore social science techniques of enquiry with a focus of appropriate methods, both qualitative and quantitative, for different types of enquiry. Students will review some of the traditional social science tools of analysis - questionnaire, semi-structured interviewing and formal observation. Some of the following alternative methods will be considered - film, video, analysis of public documents, participant observation, unobtrusive measures and evaluation research.
Co-ordinator: Mr M Morrissey.

SOC938 Advanced Health Sociology

SOC940 Advanced Social Policy Studies
* Autumn session; 8 credit points (3 hrs lecture/seminar).
Assessment: written exercises and group project.
The aim of the subject is to explore the relationship between social policy and sociological theory. The subject will review major debates in contemporary sociology in these areas and move towards developing a paradigm for the evaluation of policy in Australia. In the discussion of social policy in Australia will focus on understanding the role of the State in the development and impact of policy and the historical and materialist base in which the State and its policies are located.
Co-ordinator: Head of Department

SOC942 Advanced Race and Ethnic Studies
Spring session; 8 credit points (3 hrs lecture/seminar).
Assessment: essay, seminar paper, presentation and participation.
This subject introduces students to theories of race, ethnicity, racism, in relation to other dimensions of social structure, in particular class and gender relations. Within an analysis of the Australian context, the significance of culture and ideology is explored. This includes an analysis of the subjective and structural dimensions of racial oppression and liberation movements, as well as an analysis of the broader theoretical and substantive relationship between culture, identity and resistance. These theories and issues will relate to the situation of Aboriginal and ethnic minorities in Australia, and international and historical comparisons will be made.
Co-ordinators: Professor S Castles and Dr E Vasta.

SOC943 Advanced Urban Society

SOC946 Practical Communication and Communications Theory
* Autumn session; 8 credit points (2 hrs seminar).
Assessment: major essay, seminar paper and participation.
This subject aims to lift professional communication skills and understanding by relating practical issues to theoretical models, concepts, and ideas. It seeks to undertake this by exploring various debates, and theoretical constructs which help relate individuals to society. Practical work will include: interviewing, participant observation, role-playing, analysing visual and phenomenological material. The theoretical traverse will examine various accounts, models and theories of communication and aims to raise students’ ability to encode and decode communication.
Co-ordinator: Dr T Jagtenberg.

SOC947 Cultural Theory
Spring session; 8 credit points (2 hrs seminar).
Assessment: major essay, seminar paper, and in-class textual exercise.
This subject aims to introduce students to the work of leading cultural theorists and modes of cultural analysis. A number of perspectives will be covered ranging from structuralism, neo-marxism and phenomenology, through to feminism and post-modernism. Key concepts and issues to be explored will include forms and modes of culture in their social context: for example 'high' culture and 'popular' culture; hegemony; media culture; the relationship between 'race'/ethnicity and culture; gendered cultures; the relationship between feminism and culture; the technological mediation of culture; cultural production as social/political intervention; visual culture; culture and the environment; post-modernism. Students will explore the implications, value and impact of particular cultural theories and will be encouraged to construct their own interventions.
Co-ordinators: Dr T Jagtenberg and Dr E Vasta.

SOC949 Advanced Social Regulation: Policies and Issues
* Autumn session; 8 credit points (3 hrs lecture/seminar).
Assessment: major essay/research paper, and continuous assessment of seminar work.
In this subject we analyse social regulation as a complex social process with the penal, welfare and medical spheres comprising three major systems of social control in modern industrial/post industrial societies.
The first section of the course covers a detailed examination of the competing theories in the field and an investigation of the changes in modes of social control since the sixteenth century. This provides the basis for the second part of the course in which we investigate current issues and policies of social control with an emphasis on the changing role of the State in regulated and controlled within the three spheres.
Co-ordinator: Dr A Aungles.

SOC950 Advanced Studies of the Individual in Society

* Not on offer in 1996.
Spring session; 8 credit points.
(3 hrs lecture/seminar/workshop).
Assessment: major essay, seminar project, and participation.
This subject examines fundamental aspects of human identity and explores the extent to which an individual is ‘socially constructed’. The situation of the individual is located in the historical, cultural, and institutional context of ‘modern’/’post-modern’ times through a consideration of contemporary myths, ideologies and practices which provide structure and meaning to daily life (e.g. love, gender, truth). The course broadly addresses the question of how personal identity is achieved in the context of change and uncertainty. These issues involve cross-cultural exploration of different models of self, identity and relationship. Students have the opportunity to explore a range of perspectives including interactionist, structuralist, post-structuralist and post-modern approaches to questions of identity. This also involves some consideration of ‘non-western’ traditions and questions about the ecological status of human identity.
Co-ordinator: Dr T Jagtenberg.

SOC959 Advanced Studies of Gender in Society
* Autumn session; 8 credit points (3 hrs lecture/seminar).
Assessment: participation, seminar papers and long essay: maximum of 7000 words.
This subject takes as its focus current debates about the constitution of humans as gendered subjects. Through the reading of key texts students will explore the debates within contemporary sociological thought on the complex inter-relation of social structures, social institutions and social practices in the constitution of femininity and masculinity. The debates to be addressed include those about the sexual division of labour, the contradictory position of women in relation to the family and the State, and the nature and role of sexism and patriarchy in the constitution of femininity and masculinity. Each year the subject concentrates on a particular aspect of gender relations in Australia. The focus will be on the interaction of local and global social institutions of gender division. Examples will be drawn from current literature.

Please Note: Students with little or no background in the study of gender relations must consult the lecturer for preliminary reading.
Co-ordinator: Ms R Albury.

SOC961 Women, Migration and Development
Autumn or Spring Session; 8 credit points.
Assessment: to be advised.
Prerequisites: MICRO 606
The central theme of this subject is the increasingly important role of women in processes of development, urbanisation and migration. For many women, rural urban movement is merely the first link in a migratory chain. The subject will examine this feminisation of migration as a global tendency. The theoretical framework will include feminist theory, political economy, demography, sociological theories of migration and ethnic relations.
Co-ordinator: Dr E Vasta.
SOC962 Nationalism and Minorities in the Asia-Pacific Region

*Autumn or Spring session; 8 credit points.*

**Assessment:** to be advised.

**Pre-requisite:** none.

This subject will focus on the emergence of modern nation states in Southeast Asia, and the links between ethnicity and concepts of nationalism in this process. Through a series of case studies it will develop an analysis of the relationship between the state and minority groups, raising both theoretical and practical concerns.

**Co-ordinators:** Dr A Cornish and Dr A Vickers.

SOC970 Advanced Social Movements

*Spring session; 8 credit points (3 hrs lecture/seminar).*

**Assessment:** major essay, seminar paper and presentation, participation.

This subject will examine, historically and sociologically, local and global power relations with particular reference to traditional channels of resistance and change. Firstly some of the traditional channels, such as trade unions, will be analysed as agents of change. Secondly new social movements including the women’s movement, urban movements, environmental and minority liberation movements will be examined.

**Co-ordinator:** Dr E Vasta.

SOC990 Minor Thesis

24 credit points.

SOC999 Major Thesis

48 credit points.
WOMEN’S STUDIES

COURSES OFFERED

The following postgraduate course is available:

1. Master of Arts

The Master of Arts in Women’s Studies is both interdisciplinary and multidisciplinary. The structure of the degree is built on the disciplinary base of the students’ undergraduate degrees. All students are expected to complete work for this award in more than one discipline. The common core provides an introduction to the concepts and debates that constitute Women’s Studies as an academic field. The listed specialisations allow students to focus their study in a particular area at a greater depth. In 1996 this degree will be administered by the Department of Sociology.

POSTGRADUATE PROGRAM

Women’s Studies

CURRENT RESEARCH AREAS

Following a successful completion of the MA (Women’s Studies), students with appropriate academic backgrounds may be accepted as candidates for research degrees in one of departments of the Faculty of Arts which offers subjects in this degree.

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN WOMEN’S STUDIES
leading to the Master of Arts.

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<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>Core:</td>
<td>WMST901 Feminist Issues and Debates</td>
<td>8</td>
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<tr>
<td></td>
<td>WMST902 Feminist Theory</td>
<td>8</td>
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<tr>
<td>Specialisations</td>
<td>Students choose 2 subjects (at least 16 credit points) from one of the three specialisations listed below and a further 2 subjects (at least 16 credit points) as electives. It is strongly recommended that students choose one elective from another specialisation. The second may be chosen from their specialisation or from any of the subjects listed as electives below.</td>
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<tr>
<td>Textual and Visual Representation</td>
<td>Core</td>
<td>ENGL925 Writing the Gendered Body</td>
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<td>Options</td>
<td>EDGA973 Language, Ideology and Culture</td>
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<td>ENGL910 20th Century Women Writers</td>
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<td>ENGL933 Early Women Writers</td>
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<td>ENGL936 Sexuality and Representation</td>
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<td></td>
<td>VIS910 Visual Arts Theory</td>
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<tr>
<td>Gender, Politics and Society</td>
<td>Core</td>
<td>SOC959 Advanced Studies in Gender in Society</td>
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<tr>
<td>Options</td>
<td>EDGA923 Sport, Culture and Education</td>
<td>8</td>
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<td>PHIL990 Feminist Political Philosophy</td>
<td>8</td>
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<td></td>
<td>SOC949 Social Regulation: Policies and Issues</td>
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<td>HIST913 The Making of the Modern Australian Woman</td>
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<td>Science, Medicine and Gender</td>
<td>Core</td>
<td>STS910 Gender and Body Politics</td>
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<td>Options</td>
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<td>SOC938 Advanced Health Sociology</td>
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<td>SOC906 Sexuality, Health Issues and Social Policy</td>
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<td>STS934 Genetics and Technological Innovation</td>
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<td>STS936 Critical Studies in Medicine and Health Care</td>
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<td>Electives</td>
<td>GHMB922 Psychosocial Development of the Family</td>
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<td>GBHD981 Maternal and Child Health in Developing Countries</td>
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<td></td>
<td>ENGL909 Deconstructing Australia: Cultural Dissidence and the Ethics of Difference</td>
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<td>SOC942 Advanced Race and Ethnic Studies</td>
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<td>MGMT916 Management and Employment Relations</td>
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<td>MGMT906 Managing People at Work</td>
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<td></td>
<td>WMST903 Advanced Topics in Women’s Studies</td>
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<td>Please note: Not all subjects will be available each year, refer to the relevant department and the Co-ordinator of Women’s Studies before enrolling.</td>
<td>For further details, see Course Requirements below.</td>
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</table>
COURSE REQUIREMENTS

1. MASTER OF ARTS

(Administered in 1996 by the Department of Sociology)

The Masters program is an interdisciplinary and multidisciplinary course—based in the Faculty of Arts.

Pass degree entry

Pass graduates or equivalent may undertake a 48 credit point Master of Arts course, choosing 6 subjects (which in normal circumstances will include the two prescribed subjects) from the Schedule. The degree will run over one year full-time or two years for part-time students.

(i) Students are required to successfully complete an approved program of study of 48 credit points drawn from the Schedule of Graduate Subjects, as set out in the table 'Postgraduate Program in Women's Studies'.

(ii) Students shall undertake any additional work required by Departments or Faculties as a prerequisite for subjects included in the Schedule of Graduate Subjects.

(iii) Students shall not include in their program subjects substantially similar to those already completed as part of their previous undergraduate or graduate studies.

(iv) Students shall discuss their proposed program with the Co-ordinator of the Master of Arts (Women's Studies) prior to enrolment.

(v) The Master of Arts (Women's Studies) shall be available as a part-time and a full-time program. Full-time students are expected to complete the degree in two academic sessions, part-time students in not less than three and not more than six academic sessions.

SUBJECT DESCRIPTIONS

WMST901 Feminist Issues and Debates

Autumn session; 8 credit points (3 hrs lecture/seminar).
Pre-requisite: entry into MA (Women's Studies) Assessment: seminar presentation and participation plus a minimum of 7000 words as a seminar paper, a short essay and a long essay.

This subject will be taught as an interdisciplinary seminar series which will examine the challenges of feminist knowledges to established modes of thought and social organisation. Through a study of some key issues in women's lives the subject will examine the interactions between feminist theory and activism in both historical and contemporary debates. These studies will be drawn from the following areas: suffrage and citizenship; work; family; health; sexuality; cultural production and representation; war and peace; and ecology. The areas of focus will be determined according to staff availability.

Co-ordinator: Dr K Newey.

WMST902 Feminist Theory

Spring session; 8 credit points (3 hrs lecture/seminar).
Pre-requisite: WMST901.
Assessment: seminar presentation and participation plus a minimum of 7000 words comprising a seminar paper, a short essay and a long essay.

Through an examination of historical and contemporary literature this subject will provide the basis for an exploration of the concepts, theories and discourses used to investigate the meanings of gender in contemporary Western culture. The subject will be divided into three parts: the social and intellectual foundations of theories of sexuality and gender; the contribution of feminist scholarship to the theoretical developments in the humanities and social sciences during the past two decades, and recent developments within feminist theory. According to staff availability, the subject will focus on at least two areas: social and political thought, literary theory, cultural studies, feminist epistemology and feminist critiques of established epistemologies.

Co-ordinator: Dr S Dodds.

WMST903 Advanced Topics in Women's Studies

Autumn/Spring session; 8 credit points (contact hrs by arrangement).
Pre-requisite: WMST901, WMST902 and specialisation (part-time students), WMST901 (full-time students).
Co-requisite: WMST 902 (full-time students).
Assessment: written work equivalent to 7000 words.

This subject offers students an opportunity for in-depth study of a particular aspect of Women's Studies. The topics will be determined annually according to the availability of staff for supervision. Normally this will be a reading program determined by the supervisor and student in consultation with the Co-ordinator of Women's Studies. Students will be expected to demonstrate some background in the topic they undertake; work experience may be substituted for academic study in some cases.

Co-ordinator: Ms R Albury.

Interdisciplinary Subjects

For the following subject descriptions, please refer to individual Department listing.

Faculty of Arts

Dept of English
ENGL909 Deconstructing Australia: Cultural Dissonance and the Ethics of Difference
ENGL910 20th Century Women Writers
ENGL925 Writing the Gendered Body
ENGL933 Early Women Writers
ENGL936 Sexuality and Representation

Dept of History & Politics
HIST913 The Making of the Modern Australian Woman

Faculty of Education

EDGA923 Sport, Culture and Education
EDGA973 Language, Ideology and Culture

Faculty of Health & Behavioural Sciences

DHMD981 Maternal and Child Health in Developing Countries

Faculty of Nursing

GHMB922 Psychosocial Development of the Family

Dept of Philosophy

PHIL965 Bioethics
PHIL990 Feminist Political Philosophy

Dept of Science & Technology Studies

STS910 Gender and Body Politics
STS934 Genetics and Technological Innovation
STS936 Critical Studies in Medicine and Health Care

Dept of Sociology

SOC906 Sexuality, Health Issues and Social Policy
SOC938 Advanced Health Sociology
SOC942 Advanced Race and Ethnic Studies
SOC949 Social Regulations: Policies and Issues
SOC959 Advanced Studies in Gender in Society
FACULTY OF COMMERCE
FACULTY OF COMMERCE

FACULTY OFFICE

Dean: Professor Gill Palmer
Sub Dean: Ms Diana Kelly
Executive Officer: Ms Miranda Baker (042) 21 3380
Professional Officer: Ms Rosemary Cooper (042) 21 4031
Administrative Assistant: Ms Carol Wett (042) 21 3665
External Relations Officer: Ms Belinda Schuster

MEMBER UNITS

The Faculty of Commerce is made up of the following Units:

- Accounting and Finance
- Business Systems
- Economics
- Management

RESEARCH COURSES AVAILABLE

The Faculty offers Honours Master of Commerce and Doctor of Philosophy degrees by research and some offer the Honours Master of Arts by research.

POSTGRADUATE PROGRAMS

Postgraduate programs are available in the Faculty in the following areas:

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<td>Quantitative Economics</td>
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For Total Quality Management, refer to the “Cross Faculty Programs” Section.
DEPARTMENT OF ACCOUNTING AND FINANCE

Departmental Head and Professor of Accountancy
Michael J K Gaffikin, BCom Well, MBA (Hons) Massey, PhD Syd, FCPA

Professor
David J Johnstone, BA BCom (Hons) PhD Syd

Associate Professors
Gary Linnegar, DBA Mississippi State, MBA (Mgt) AC E, PhD Illin is
Michael McCrae, BCom DipEd Melb, MEOCA WA, PhD ANU

Senior Lecturers
Henry W Collier, MA MBA Mich State, BBA, CPA, CMA
Mary M Day, BBus DIIAIE, MCom (Hons), PhD, AAIM, FC PA
Gerhard Gniewosz, BA GradDipBusAdmin SAIT, MCom DipCom Otago, CPA
Warwick N Funnel, BA BCom UNSW, BCom MCom (Hons), PhD, CPA
Hema G M Wijewardena, BA Vid yaba, MBA New Hampshire State, PhD Sri l.

Lecturers
Anne Abraham, BSc Syd, DipEd STC, MAcc C Sturt, MCom ASA
Ari W Ar iyadasa, BA Vid yaba, DipAcc Ceyl, MEC Syd, ACA
Larry A Blackett, BCom (Hons) MCom (Hons) UNSW, MAS Illinois
Anwar I Chowdhury, BCom MCom Dhaka, ACA (Aust), ACA (Eng & Wales) ACMA (Bangl)
Kathie Cooper, BCom (Hons), PhD
Barbara Cornelius, MEC(Finance) DipFinMan PhD UNE, BA Georgia State
Adrian Gardiner, BBus(Accy) QUT, MMM Qld
Mary A Kaidonis, BSc Adel, MCom(Hons) DipA FIA, CDIPA GDipEdCoun (Hons) SAIT, CPA
Gregory K Laing, BBus(Acc) MIHE, MCom (Hons), GradCertEdQU T
 Sudhir Lodh, BCom (Hons), MCom, PhD Raj, MBA, KUL Belgium
Geoff A Mickhail, BCom GradDip(Mgt) Sc Cairo, MSc Ec (Info Sys) LSE, MBCS
Ceng UK, LIDPM MORS UK, AIEEE USA
Ron Perrin, BBA WSyd, MCom
Robert B Williams, BCom UNSW, MCom (Hons), DipEd, PhD, PhD, FIA

Janet Moore, BCom MCom (Hons)

Associate Lecturers
Helen Irvine, BCom Qld, MCom
Clive Salzer, BSc Syd, GradDipMangt N'cle, MBA
Connie Spasich, BBus UTC, MCom(Hons), CPA
Hendrika Tibbitts, BCom, MBA, CPA
Daniel Yeung, BBA HK, BCom MCom, ASA, ACIB UK

Professional Officer
Anne Mitchell, BA DipEd UNSW, BCom

Computer Systems Officer
Mak Kwai Lan (Tina), BMath BE PEng MAusIE

Administrative Assistants
Cynthia Frew
Maureen Todd, BA UNE

DEPARTMENT OF BUSINESS SYSTEMS

Departmental Head and Professor
K Graham Winley, BA Macq, MSc(OR) UNSW, PhD

Associate Professor
Joseph G Davis, BSc Cal icut, Grad Dip Mgmt IM, PhD Pittsburgh

Senior Lecturers
Stephen Little, BSc (Arch) MSc Aston, PhD RCA
Li-Yen Shue, BA Chiao Tung, MS New Mexico, PhD Texas Tech
Robert MacGregor, BSc DipEd UNSW, MACS, MEd(Hons), MUKSS
Lawrence Schafer, DipAppChem Swinburne, BSc PhD Monash

Lecturers
Ang Y Ang, BSc Lond, DiplS cTeach Armidale, GDipEd MCom(Hons) (Hons) SCAE
Deborah Bunker, BA MCom(Hons) UNSW
Rodney J Clarke, BA GDipBusiness, Keith Curie, DipComp(Eng) (IBM), MACS, MWIA
Joshua Fan, BMath BE, PEng, MAusIE
Edward Gould, BSc DipCompSc N'cle (NSW), MEngSc Syd
Helen Hasan, BSc UNSW, MSc Macq, DipCompSc
Peter Hyland, BSc UNSW, GradDipReligEduc Sydney CCE, GDipEd GDipCom MCom(Hons)
Colin Jones, BSc BE Syd, BA BTh A C Theol, BD Med, CDi DipA Moore TC, BA
Sim Kim Lau, BSc Malaysia, MB RMIT
Jeanne Wong, BCom, MCom

Professional Officers
David Dodds, BCompSc
Philip Waugh, BCom

Administrative Assistant
Debbie Critcher

DEPARTMENT OF ECONOMICS

Departmental Head and Associate Professor
Robert Castle, MEc Syd

Acting Departmental Head and Professor
Donald E Lewis, BA Calif St, MA PhD Wash St

Professor
Dudley A S Jackson, BA BPhil Of

Associate Professors
D P Chaudhuri, BA (Hons)Punjeb, MA PhD Delhi
Tran Van Hao, BSc WA, MEc PhD Monash
Ammon Levy, BA MA Tel-Avivo, PhD Calif (Berkeley)
Raymond Markey, BA DipEd Syd, PhD
Mokhtar M Metwally, BCom Ain Shams Cairo, MA PhD Leeds
Chris Nyland, BA PhD Adel

Senior Lecturers
Khorshed Chowdhury, BA (Hons) MA Chittagong, MEc NE, PhD Manil
Charles Harvie, BA Strath, MA Hamilton, PhD War
Diana Kelly, BA Macq, MCom (Hons)
Nelson Perera, BSc Sri Lanka, PhD Lat, MCom
Edgar J Wilson, BSc ANU, MEc Monash

Lecturers
Gary Fulton, BA (Hons), MCom
Ann Hodgkinson, BCom Qld, MEc Adel
Boon Chye Lee, BA Sing, MBA Ph D UNSW
Joan Rodgers, BA UNE, DipInforProc Qld, MCom Cant, MA Suss Ph D Minn
John Rodgers, BAgEc UNE, DipInforProc Qld, MA SussePh D Minn
Chung-Sok Suh, BSc Seoul, MCom PhD UNSW
Nadia Verucci, BA (Hons) MCom (Hons)
Anthony Webber, BCom (Hons) N'cle, PhD UNSW

Associate Lecturers
Frank Neri, BCom (Hons) BSc Lea T, GradDipEd UWA, MCom (Hons) UNSW,
Hugh Shorten, BA UNSW
Liliana Viachos, BCom

Professional Officer
Wolfgang Brodesser, BE BA

Research Assistants
Robert Hood, BA(Hons) DipEd MA(Hons) Macq
Stuart Svensen, BA (Hons) MA Qld

Administrative Assistants
Sophie Abercrombie, AssocDipAdmin
Julie Ch in

DEPARTMENT OF MANAGEMENT

Departmental Head and Professor of Management
Gill Palmer, BScSc(Hons) Birm, MSc LSE, PhD City UK, FAIM, FAHRI

Professors
Michael Hough, RFD ED BE UNSW, BA Macq, GradDipInfor Proc N'cle (NSW), DipEd NCAE, DipSchAdm in ACAE,
FACULTY VISITING COMMITTEE

Mr Ian Angus
Dr Steven Andersen, Managing Director,
Southern Pathology
Mr Richard Dowse, Quality Manager,
Wellongong City Council
Mr Michael Duffy, Senior Manager,
Management Development,
Commonwealth Bank
Ms Mary Foley, General Manager, Policy
Development, Health Care of Australia,
Mayne Nickless Ltd
Prof Graeme Galt, Chairman, Korn-Ferry
International

Mr Warren Greentree, General Manager,
Illawarra Electricity
Mr Paul Greenwood, President, NSW Small
Business Combined Association
Mr Les Gregory, Manager, BHP Pty Ltd,
Training & Development, Sheet & Coil
Products Division
Mr Greg Klamus, Manager, Major Business
Reform, The Water Board, Potts Hill
Reservoir
Mr Kevin Locke, Training Manager, BHP
Steel, Slab & Plate Products Division
Mr Paul Matters, Secretary, South Coast
Labour Council
Mr John McKenna, General Manager,
Marksman Homes
Mr Malcolm Moes, Administrations
Manager, Kembla Grange Plant,
Tubemakers of Australia, Water, Oil &
Gas Industries Division
Mr Phil O'Sullivan, Director, Capital
Markets, Barclays de Zote Wedd,
Australia
Ms Kathy Rozmeta, Training &
Development Manager, CocaCola -
Amatil
Mr Tom SAAR, Partner, McKinsey & Co
Ms Vivien Twyford, Director, Vivien
Twyford Communications
Mr Mike Withford, National Marketing
Partner, Price-Waterhouse Urwick
ACCOUNTING AND FINANCE

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Arts by Coursework or Research
3. Honours Master of Commerce by Coursework or Research
4. Master of Commerce
5. Graduate Diploma in Commerce

POSTGRADUATE PROGRAMS

Auditing
Controllership
External Reporting
Information Systems in Accounting
International Accounting & Finance
Management Accounting
Finance

Note: All programs leading to the Master of Commerce degree have three components from which subjects are to be selected - an inner core, an outer core and approved electives.

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master degrees and the Doctor of Philosophy degree:

Accounting and information systems
Accounting and EDI
Auditing
Controllership
Critical accounting theory
External financial reporting
Finance
Government and not-for-profit accounting
History of accounting thought
Management accounting
Small business management

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN EXTERNAL REPORTING

leading to the Master of Commerce or the Honours Master of Arts or Commerce.

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POSTGRADUATE PROGRAM IN EXTERNAL REPORTING (cont’d).
leading to the Master of Commerce or the Honours Master of Arts or Commerce.

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For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN INTERNATIONAL ACCOUNTING & FINANCE
leading to the Master of Commerce or the Honours Master of Arts or Commerce.

(i) Master of Commerce

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Outer Core, at least 4 from

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plus approved electives

(ii) Honours Master of Arts or Commerce

Compulsory

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Electives, at least 12 credit points from

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For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN MANAGEMENT ACCOUNTING
leading to the Master of Commerce or the Honours Master of Arts or Commerce.

(i) Master of Commerce

Inner Core, at least 3 from

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Outer Core, at least 3 from

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plus approved electives

(ii) Honours Master of Arts or Commerce

Compulsory

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Postgraduate Program in Management Accounting (cont’d).
leading to the Master of Commerce or the Honours Master of Arts or Commerce.

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For further details, see Course Requirements below.

Postgraduate Program in Finance
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<td>Corporate Financial Information Analysis</td>
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Note: With the Approval of the Head of Department students may substitute other relevant subjects for ACCY921 and ACCY922.

(ii) Honours Master of Arts or Commerce

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For further details, see Course Requirements below.

Postgraduate Program in Information Systems in Accounting
leading to the Master of Commerce or the Honours Master of Arts or Commerce.

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<td>ACCY936</td>
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<td>ACCY983</td>
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For further details, see Course Requirements below.
POSTGRADUATE PROGRAM IN INFORMATION SYSTEMS IN ACCOUNTING (cont’d).
leading to the Master of Commerce or the Honours Master of Arts or Commerce.

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POSTGRADUATE PROGRAM IN CONTROLLERSHIP
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<td>ACCY973 History of Accounting Thought</td>
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ACCY903 Accounting Theory                        | 6             |
ACCY904 Financial Accounting                     | 6             |
ACCY913 Management Accounting                    | 6             |
ACCY993 Research Essay                           | 12            |
Electives, at least 12 credit points from         |               |
ACCY907 Empirical Research Methods in Accounting | 6             |
ACCY914 Management Planning and Control Systems  | 6             |
ACCY924 Corporate Financial Information Analysis | 6             |
ACCY933 Studies in Information Systems in Accounting | 6           |
ACCY973 History of Accounting Thought            | 6             |
ACCY995 Research Project                         | 24            |

For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN AUDITING
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POSTGRADUATE PROGRAM IN AUDITING (cont’d).

leading to the Master of Commerce or the Honours Master of Arts or Commerce.

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For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

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<td>ACCY962 Professional Practice - Auditing &amp; EDP</td>
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<td>ACCY963 Professional Practice - Taxation</td>
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 COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in ACCY996.

2. HONOURS MASTER OF ARTS

(a) Candidates who have completed at an acceptable standard the requirements for the award of the BA(Hons) in Accounting and Finance, Economics or Management at a standard of Class II, Division 2 or higher, or an equivalent degree, may qualify for the award of the MA(Hons) degree by completing at honours standard any one of the courses of study listed below under the Honours Master of Commerce degree.

(b) Candidates who have completed the requirements for the BCom degree at a standard less than Class II, Division 2, or equivalent degree, may, subject to the attainment of a satisfactory standard in that degree, be permitted to register as candidates for the MA(Hons) degree by completing at honours standard any one of the courses of study listed below under the Honours Master of Commerce degree.

3. HONOURS MASTER OF COMMERCE

(a) Candidates who have completed the requirements for the award of the BCom(Hons) in Accounting and Finance, Economics or Management at a standard of Class II, Division 2 or higher, or an equivalent degree, may qualify for the award of the MCom(Hons) degree by completing at honours standard any one of the following courses of study:

(i) Thesis (48 credit points);

(ii) Project (12 credit points, Accounting and Finance; 16 credit points, Economics) plus course work to aggregate not less than 48 credit points;

(iii) Research report (24 credit points) and course work aggregating not less than 24 credit points;

(iv) Course work aggregating not less than 48 credit points.

(b) Candidates who have completed the requirements for the BCom degree at a standard less than Class II, Division 2, or equivalent degree, may, subject to the attainment of a satisfactory standard in that degree, be permitted to register as candidates for the MCom(Hons) degree. Such candidates may qualify for the award of the degree by completing at honours standard subjects aggregating not less than 96 credit points of which subjects aggregating not less than 48 credit points shall be selected from the specialisation Schedule.

(c) Candidates holding the combined BCom(Hons) degree including the compulsory 400-level subjects aggregating 30 credit points may proceed to the 48 credit point MCom(Hons) degree; other candidates (with the combined Honours degree who have not completed all the compulsory subjects) will be required to complete any of the compulsory subjects plus subjects aggregating 48 credit points.

(d) Candidates required to undertake a preliminary program or required to complete designated subjects at an appropriate standard in accordance with Clause 501(3) of the Honours Masters Degree Rules may have their enrolment cancelled in the event that the preliminary program or designated subjects is not completed at the appropriate standard.

4. MASTER OF COMMERCE

The purpose of this pass degree is to provide graduate students, who have completed the Accountancy or Finance specialisation for the BCom degree, with the opportunity of further in-depth study of advanced topics in accounting or finance. This degree should be particularly suitable for students wishing to specialise in professional areas, or wishing to complete graduate specialisations approved by the
Australian Society of CPA's. The degree of 48 credit points may be studied full-time over one year, or may be studied part-time. Subjects are to be selected from the Schedule of Graduate Subjects in accordance with one of the postgraduate programs. Entry requires a BCom with a specialisation in Accountancy or Finance, or equivalent degree.

Candidates who do not have a specialisation in Accountancy and wish to complete an accounting program in their degree may be permitted to study for the degree provided that they include Financial Accounting III and Management Accounting III (or, in special situations, other undergraduate accountancy subjects); thus the total credit points required for these candidates is 72.

Members of not less than five years standing of the Australian Society of Accountants or the Institute of Chartered Accountants in Australia with appropriate experience are permitted to enrol for the degree even though they do not hold an undergraduate degree; such candidates will be required to pass subjects aggregating 72 credit points.

5. GRADUATE DIPLOMA IN COMMERCE

In accordance with the general regulations governing graduate diplomas, candidates for the Graduate Diploma in Commerce must have been admitted to the degree of Bachelor in the University or other approved institution. In special circumstances a professional person holding a tertiary qualification (for example, an experienced accountant with the Commerce (Accounting Procedures) Certificate) may be permitted to enrol. The main requirement is that subjects aggregating not less than 30 credit points of the 48 necessary for the Graduate Diploma are to be obtained from 200- and/or 300-level subjects offered by the Accounting and Finance Department. The Graduate Diploma requires one year full-time study or part-time equivalent.

The Graduate Diploma serves a wide variety of interests. On the one hand Science or Engineering graduates may study first the second year accounting or take, say, Management Accounting to third year, and on the other hand, Accountancy students may specialise further for professional purposes.

Specific requirements for the Graduate Diploma are:

1. not less than 30 credit points (of the minimum required of 48) are to be obtained from 200- and/or 300-level subjects offered by the Department of Accounting and Finance;
2. with the approval of the Head of the Department of Accounting and Finance subjects may be selected from 900 level subjects offered by the Department of Accounting and Finance. (Any subjects selected under this clause may be included in the 30 credit points required under 1.); and

3. the whole course for the diploma is to be approved by the Head of the Department of Accounting and Finance as providing a coherent course of study.

SUBJECT DESCRIPTIONS

Seminars
Generally a two hour weekly seminar or lecture is held for each 900 level subject.

Assessment
The assessment for 900 level subjects will specify the seminar contribution, essays and examination.

Textbooks
There are no prescribed textbooks. Reading is required from a wide variety of references, including books and journal articles. Specific recommendations may be obtained from the Department of Accounting and Finance.

ACCY901 Accounting for Managers

Autumn session: 6 credit points.

The interpretation and utilisation of the major types of reports and analyses prepared by accountants for management decision making.

Co-ordinator: Ms J F Moore.

ACCY903 Accounting Theory

6 credit points.


Co-ordinator: Professor MIR Gafflinik.

ACCY904 Financial Accounting

6 credit points.

The objectives and functions of external financial reporting, including periodic profit measurement. Evaluation of accounting measurement methods including historical cost, general price level, current value and relative price change models. Communication in accounting reports.

Co-ordinator: Mr R Perrin.

ACCY905 International Accounting

6 credit points.


Co-ordinator: Mr G Gnieadowsz.

ACCY906 Issues in Financial Accounting

6 credit points.

Contemporary issues in financial reporting to external parties, including accounting for different classes of assets, liabilities and equities. Legal, institutional and professional reporting requirements including proposals for Improvement in accounting principles applied in practice.

Co-ordinator: Mr A W Aryanawat.

ACCY907 Empirical Research Methods in Accounting

6 credit points.

The subject provides an overview of the ways accounting researchers identify, formulate and investigate accounting and information systems issues. This includes a study of the criteria adopted to select research projects and of the relationship between research and accounting information systems issues such as experimental design, validity threats, measurement problems, and statistical analysis will also be considered. Selected published accounting research will be used to illustrate the methods of empirical research in accounting and information systems.

Co-ordinator: Associate Professor M McCra.

ACCY908 Applied Financial Accounting

6 credit points.

An in-depth examination of external financial reporting addressing both practice reporting issues and resultant economic implications. Specific applications will be presented in relevant case studies and based on realistic business situations drawn from published financial statements and press reports.

Co-ordinator: Mrs A Abraham.

ACCY909 Comparative Accounting Systems

6 credit points.

An in-depth examination of the patterns of accounting development in different national political environments. Key variables determining the differential accounting development patterns and their implications, in particular, for multinational reporting, will be critically evaluated. Approaches for resolving the problems posed by the diversity of accounting systems will also be considered.

Co-ordinator: Mr G Gnieadowsz.

ACCY910 Issues in International Accounting

Spring session: 6 credit points (2 hrs per wk)

Pre-requisite: ACCY905.

Assessment: by seminar.

Specific current issues that may be examined in depth include harmonisation of accounting standards and practices, foreign currency accounting, internal control and performance evaluation problems in foreign subsidiaries, and international transfer pricing problems. Content may be revised subject to the currency of specific issues and in light of student interests.

Co-ordinator: Mr G Gnieadowsz.

ACCY913 Management Accounting

6 credit points.

The conceptual basis of management accounting and information systems. An examination of the organisational content
of management accounting, including the contingency approach to management accounting, the interrelationships between individual and group behaviour and management accounting systems.

Co-ordinators: Dr SC Lodh and Dr W Funell.

ACCY914 Management Planning and Control Systems 6 credit points.

An in-depth analysis of selected aspects of the design and evaluation of management accounting, planning and control systems.

Co-ordinator: Associate Professor G Linnegar.

ACCY916 Studies in Controllershhips 6 credit points.

The role and functions of the Chief Accounting Officer. Designing, installing and managing accounting systems - both financial and managerial. Specific problem areas in controllership, as depicted in selected case studies.

Co-ordinator: Mr L Blackett.

ACCY918 Applied Management Accounting 6 credit points.

An in-depth applied analysis of selected topics in management accounting. Topics chosen could include decision theory and analysis, financial model building, cost prediction and control techniques, pricing, management accounting systems design, and the interrelationships between management and the management accounting system. Theoretical concepts developed in other management accounting subjects will be expanded as needed to support the complex applications being studied.

Co-ordinator: Dr RB Williams.

ACCY921 Managerial Finance 6 credit points.

Pre-requisite: ACCY901 or ACCY983. An examination of the sources and uses of corporate finance, and the identification of relevant costs for decision making. Specific topics may include financial decision and corporate strategy, valuation, receivables, capital investment, risk and uncertainty, required rates of return, dividend policy, leasing, mergers and acquisitions.

Not to count with MGMT921 Managerial Finance.

Co-ordinator: Professor D Johnstone.

ACCY922 Capital Investment 6 credit points.

An in-depth study of investments and investment decision analysis. The theoretical bases of asset pricing and net present value. The application of investment selection criteria under diverse conditions and in different market settings. The incorporation of risk into investment decision analysis and a study of the application of capital asset pricing models in investment evaluation.

Not to count with ACCY915

Co-ordinator: Associate Professor M McCrae.

ACCY923 Investment Management 6 credit points.


Co-ordinator: Dr SC Lodh.

ACCY924 Corporate Financial Information Analysis 6 credit points.

A survey of methods for the appraisal and prediction of corporate financial performance from such publicly available information as accounting numbers, industry and economic statistics, and stock market data. Equal emphasis is placed upon the development of theoretical constructs, and appraisal of the results of empirical research, especially Australian studies.

Co-ordinator: Professor D Johnstone.

ACCY925 Australian Banking Practices 6 credit points.

This subject focuses on accounting aspects of the practices and operations of banks and other financial institutions in Australia. Topics include the regulatory structure of financial institutions; the cheque clearing system; float management; and electronic banking. Additionally, the subject should enable the student to understand balance sheet planning and capital adequacy analysis as used in financial institutions.

Co-ordinator: to be advised.

ACCY926 Studies in Business Finance 6 credit points.

Contemporary business finance theory, including option pricing theory, arbitrage pricing model, bond swapping and bond immunisation.

Co-ordinator: Dr B Cornelius.

ACCY927 Small Business Finance 6 credit points.

Planning the structure and finances of a small business from establishment of the small business through to flotation. The choice of the structure of business and an examination of alternative sources of finance, requirements of financiers, improved utilisation of existing resources, and relevant costs in financing.

Not to count with ACCY942.

Co-ordinator: Dr B Cornelius.

ACCY928 Multinational Financial Management 6 credit points.

Pre-requisite: MGMT921 or ACCY921. The role of multinationals in international investment; aspects of the international monetary system; Euromarkets; foreign exchange markets; internal and external exposure management techniques; currency futures and options; swaps; financing MNC investment; MNC investment decision-making; political risk analysis; international taxation.

Not to count with MGMT998.

Co-ordinator: Mr G Gniewosz.

ACCY931 Advanced Decision Support Systems 6 credit points.

This subject will examine the theoretical foundations for Decision Support Systems. Consideration will be given to architectural and environmental factors in designing Decision Support Systems. Practical accounting applications will be provided. Empirical studies and recent developments in business will be selected for in-depth review.

Co-ordinator: to be advised.

ACCY933 Studies in Information Systems in Accounting 6 credit points.

Studies of particular computer applications in accounting. Specific problem areas as depicted in selected case studies.

Co-ordinator: Ms MA Kaidonis.

ACCY936 Management and Information Systems 6 credit points.

The effective use and control of information systems, particularly computer-based information systems, and the likely impact of developments in this area on management functions and how managers carry out those functions.

Co-ordinator: Associate Professor G Linnegar.

ACCY943 Auditing and Accounting Information Systems 6 credit points.

The general principles of auditing applied to the audit of computer-based accounting systems and the use of computers as an auditing tool. Particular emphasis on the positive aspects of auditing and internal control, including their contribution towards improvements in: (a) management functions such as planning; and (b) the quality (both real and perceived) of information flows within an entity and between it and external parties.

Co-ordinator: Mr GME Mickhail.

ACCY944 Issues in Auditing 6 credit points.

An in-depth examination of contemporary topics in auditing, with emphasis on controversial and theoretical issues, including social and ethical issues, role of quantitative techniques in the audit function, continuous auditing concept, uncertainty reporting, audit performance evaluation, extension of attest function and public sector auditing.

Co-ordinator: Mr AI Chowdhury.

ACCY961 Professional Practice - Accounting 6 credit points.


Co-ordinator: to be advised.

ACCY962 Professional Practice - Auditing and EDp 6 credit points.

Statements of Auditing Standards and Statements of Auditing Practice. EDp Systems and Controls.

Co-ordinator: to be advised.
ACCY963 Professional Practice - Taxation
6 credit points.
Co-ordinator: to be advised.

ACCY968 Insolvencies
6 credit points.
Note: A student who has passed ACCY368 Insolvencies may not enrol in this subject.
Accounting and legal aspects of corporate and non-corporate insolvencies including bankruptcies, liquidations, receivership; alteration of capital, reconstruction, amalgamation and takeovers.
Co-ordinator: Ms C Spasich.

ACCY973 History of Accounting Thought
6 credit points.
Co-ordinator: Dr KA Cooper.

ACCY974 Accounting Regulation
6 credit points.
An in-depth study of the regulation of accounting practice and procedures, the accounting profession and of measurement and disclosure in external financial reporting. This could include an examination of the consequences of regulation, alternative institutional arrangement for setting standards, the impact of accounting theory on standard setting, and a historical review of accounting regulation.
Co-ordinator: Ms JF Moore.

ACCY983 Studies in Government Accounting
6 credit points.
A detailed examination of selected areas in federal, state, regional or local government accounting.
Co-ordinator: Dr WN Funnell.

ACCY985 Special Topic in Accounting - A
6 credit points.

ACCY986 Special Topic in Accounting - B
6 credit points.
A special topic to be selected from any area of financial accounting, management accounting, business finance, information systems or government accounting. The selection would be made by the Head of the Department, taking into account the expertise of academic staff, including visiting staff, and the interest of students.
Co-ordinator: Professor MJR Gaffikin.
BUSINESS SYSTEMS

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Commerce by Coursework and/or Research
3. Master of Business Administration (specialisations in Systems Management and Systems Development)
4. Master of Commerce
5. Graduate Diploma in Commerce (Business Information Systems)
6. Graduate Certificate in Business Information Systems

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of Commerce degree by research and the Doctor of Philosophy degree:

Project 1: The Application of Knowledge-Based Information Systems in Organisations
This project is concerned with the investigation, development and implementation of knowledge-based information systems and associated development methodologies for the purpose of managerial decision support.

Specific areas of investigation include:
(a) the application of knowledge-based systems in commercial environments;
(b) methodologies for the development of knowledge-based systems;
(c) the refinement of knowledge for incomplete domain theories;
(d) the development of second generation expert systems;
(e) intelligent search methods for project management.

Project 2: The Support of Information Systems in Organisations
This project addresses aspects of support important to the efficient and effective operation of information systems in organisations including; the education and training needs of information systems professionals and users, the interface and interaction between personnel and computer-based systems, the management of information systems resources.

Specific areas of investigation include:
(a) information systems curriculum research supporting the education and training needs of users and professionals with a national and international focus;
(b) the human computer interface with a focus on educational applications;
(c) the management of information systems resources with a focus on issues related to open systems;
(d) tools, techniques and methodologies for the design and implementation of intelligent tutoring systems and databases.

Project 3: Information Systems Development in the Organisational Context
This project addresses the evaluation and development of information systems in organisations with focuses on managerial decision making and the use of qualitative analysis.

Specific areas of investigation include:
(a) qualitative analysis of the organisational context of information systems development;
(b) the evaluation and development of information systems for managerial decision making.

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN BUSINESS INFORMATION SYSTEMS
leading to the Master of Commerce or the Honours Master of Commerce.

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<td>BUS950</td>
<td>Systems Development Methodologies</td>
<td>6</td>
</tr>
<tr>
<td>BUS951</td>
<td>Critical Issues in Systems Development</td>
<td>6</td>
</tr>
<tr>
<td>BUS952</td>
<td>Information Systems Management</td>
<td>6</td>
</tr>
<tr>
<td>BUS953</td>
<td>Management of Systems Development</td>
<td>6</td>
</tr>
<tr>
<td>12 credit points of 900 level BUSS subjects selected from Schedule 4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) Honours Master of Commerce</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schedule 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS981</td>
<td>Advanced Information Systems Topic A</td>
<td>6</td>
</tr>
<tr>
<td>BUS982</td>
<td>Advanced Information Systems Topic B</td>
<td>6</td>
</tr>
<tr>
<td>BUS983</td>
<td>Advanced Information Systems Topic C</td>
<td>12</td>
</tr>
<tr>
<td>BUS984</td>
<td>Advanced Information Systems Topic D</td>
<td>12</td>
</tr>
<tr>
<td>BUS986</td>
<td>Research Report</td>
<td>24</td>
</tr>
<tr>
<td>BUS987</td>
<td>Thesis</td>
<td>48</td>
</tr>
<tr>
<td>For further details, see Course Requirements below.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MASTER OF BUSINESS ADMINISTRATION
leading to the Master of Business Administration specialisations in Systems Management or Systems Development.
Refer Graduate Business and Professional Education Unit.
OTHER POSTGRADUATE SUBJECTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule 4</td>
<td></td>
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<tr>
<td>BUS906</td>
<td>Information in Organisations</td>
<td>6</td>
</tr>
<tr>
<td>BUS908</td>
<td>Intelligent Tutoring Systems</td>
<td>6</td>
</tr>
<tr>
<td>BUS909</td>
<td>Office Automation</td>
<td>6</td>
</tr>
<tr>
<td>BUS924</td>
<td>Systems Modelling and Simulation</td>
<td>6</td>
</tr>
<tr>
<td>BUS925</td>
<td>Techniques for Knowledge-Based Systems Development</td>
<td>6</td>
</tr>
<tr>
<td>BUS926</td>
<td>Decision Support Systems</td>
<td>6</td>
</tr>
<tr>
<td>BUS927</td>
<td>Human Computer Interaction</td>
<td>6</td>
</tr>
<tr>
<td>BUS928</td>
<td>Current Issues in Knowledge-Based Systems Development</td>
<td>6</td>
</tr>
</tbody>
</table>

Students enrolled in the Master of Commerce or the Master of Business Administration specialising in Systems Development must select two 6 credit point subjects from only one of the groupings: BUS906, BUS927 or BUS925, BUS928 or BUS908, BUS909, BUS926. Not all subjects in Schedule 4 are on offer in any year.

Graduate Diploma in Commerce

| Schedule 5                                                                                                               |
| BUS211 | Business Systems Development A                                         | 6             |
| BUS212 | Business Systems Development B                                         | 6             |
| BUS214 | Commercial Programming I                                               | 6             |
| BUS215 | Commercial Programming II                                              | 6             |
| BUS311 | Database Management Systems                                            | 6             |
| BUS312 | Distributed Information Systems                                         | 6             |
| BUS315 | Information Systems Prototyping                                        | 6             |
| BUS317 | Advanced Business Programming                                          | 6             |

Descriptions for the subjects in this schedule are provided in the University Undergraduate Calendar. Pre-requisites will not apply to Graduate Diploma and Graduate Certificate students. Students may substitute other 200 or 300 level BUS subjects in Schedule 5 or 6 with approval from the Head of Department.

Graduate Certificate in Business Information Systems

| Schedule 6                                                                                                               |
| BUS211 | Business Systems Development A                                         | 6             |
| BUS212 | Business Systems Development B                                         | 6             |
| BUS311 | Database Management Systems                                            | 6             |
| BUS312 | Distributed Information Systems                                         | 6             |

For further details, see Course Requirements below.

COURSE REQUIREMENTS

1. **DOCTOR OF PHILOSOPHY**

Candidates for this degree enrol in BUS999.

2. **HONOURS MASTER OF COMMERCE (BUSINESS INFORMATION SYSTEMS)**

1.(a) Candidates who have completed the requirements for the award of the BCom(Hons) in Accountancy, Business Systems Analysis, Economics or Management at a standard of Class II, Division 2 or higher, or an equivalent degree, may qualify for the award of the MCom(Hons) degree by completing at honours standard any one of the following courses of study:

   (i) Thesis (48 credit points); or
   (ii) Research report (24 credit points) and course work aggregating not less than 24 credit points.

(b) Subjects are to be selected from 900-level subjects offered by either the Department of Accountancy, the Department of Economics, the Department of Business Systems, or the Department of Management, and included in the Schedule of Graduate Subjects; provided that:

   (i) A combination of subjects from two departments must be approved by the Heads of the two Departments concerned; and
   (ii) Subjects aggregating not more than 12 credit points may be selected from those offered by other Departments, where approval is given by the Heads of the respective Departments (i.e. the Department offering the subject on one hand, and on the other, either Accountancy, Economics, Business Systems, or Management as appropriate in each case. The appropriate Department would be the Department in which the student had taken or planned to take more than 48 credit points in Honours subjects for the undergraduate degree and graduate subjects for this degree).
   (iii) A candidate may not include for this degree subjects similar in content to subjects included in the honours part of the undergraduate course.

2. Candidates who have completed the requirements for the BCom degree at a standard less than Honours Class II, Division 2, or equivalent degree, may, subject to the attainment of a satisfactory standard in that degree, be permitted to register as candidates for the MCom(Hons) degree. Such candidates may qualify for the award of the degree by completing at honours standard subjects aggregating not less than 96 credit points of which subjects aggregating not less than 48 credit points shall be selected in accordance with the requirements of (1) above.

3. Candidates holding the combined BCom(Hons) degree including the compulsory 400-level subjects aggregating 30 credit points may proceed to the 48 credit point MCom(Hons) degree; other candidates (with the combined Honours degree who have not completed all the compulsory subjects) will be required to complete any of the compulsory subjects plus subjects aggregating 48 credit points.

4. Candidates required to undertake a preliminary program or required to complete designated subjects at an appropriate standard in accordance with the Honours Masters Rules may have their enrolment cancelled in the event that the preliminary program or designated subjects is not completed at the appropriate standard.

3. **MASTER OF BUSINESS ADMINISTRATION (IN SYSTEMS MANAGEMENT AND SYSTEMS DEVELOPMENT)**

Refer Graduate Business and Professional Education Unit.

4. **MASTER OF COMMERCE**

The MCom(Prof) degree specialising in Business Information Systems provides graduates with the opportunity to study some advanced topics in information systems and to undertake a research project in one of the areas of research interest in the department. The program aims to both
deepen and broaden the knowledge and skills of students in systems development methodology, systems management and a selected area of IS research. Graduates from the program would be qualified to take on a senior analyst or project management role in the IS Department, to plan and initiate innovative use of IT/IS within their organisations, or to pursue further research via doctoral studies. The one year full-time course may also be studied part time.

Applicants must have:

(i) a degree in computing and or IS; or
(ii) a degree with a major study in computing and/or IS; or
(iii) a graduate diploma in computing and/or IS.

5. GRADUATE DIPLOMA IN COMMERCE (BUSINESS INFORMATION SYSTEMS)

This course aims to provide graduates from a recognised tertiary course, a program of studies which will enable them to function as an information systems professional within an organisation or business concern. The course curriculum provides a balanced approach to the technical knowledge and skills as well as the human emphases of the information systems field.

The course is specifically designed for those who hold tertiary qualifications in areas not related to the discipline of information systems and who wish to gain essential initial education in information systems.

Specific admission requirements for the Diploma:

1. a university degree or equivalent;
2. completion of at least the equivalent of one introductory computing subject at tertiary level. Applicants not meeting this requirement may do a Summer Session course at this University prior to commencement.

In appropriate circumstances a person may be admitted if he/she submits evidence of such academic and professional attainments deemed to be equivalent to the requirements above.

Course Duration
The course is available by part-time study over four sessions (two years), in which case each student takes two subjects in any session, or by full-time study over two sessions.

Course Structure
The course is a coherent program of study which involves the successful completion of eight subjects (48 credit points) as listed above in Schedule 4.

6. GRADUATE CERTIFICATE IN BUSINESS INFORMATION SYSTEMS

This one year part-time course is designed for graduates from a recognised tertiary institution seeking an introductory course in the field of information systems.

Specific entry requirements for the Certificate are:

(i) a University degree or equivalent;
(ii) completion of at least the equivalent of one introductory computer programming subject at tertiary level. Applicants not meeting this requirement may do the Summer Session subject BUSS 111 at this University prior to commencement.

The course is specifically designed for and restricted to those who hold qualifications in areas not related to the discipline of information systems. Students performing at a satisfactory level in the Graduate Certificate may be permitted to continue with the Graduate Diploma in Commerce (Business Information Systems) with up to 24 credit points of specified credit. These students will not be entitled to receive the Graduate Certificate in Business Information Systems.

SUBJECT DESCRIPTIONS

Information on textbooks used in subjects is provided in subject outlines and is available on request prior to the start of teaching.

BUSS903 Information Systems for Managers
Spring session; 6 credit points (3 hrs per wk).
Assessment: assignments, and examination.
This subject provides an analysis of the structures and functions of the range of typical computer-based business information systems. Other issues considered are the integration of discrete applications into the total information system and organisational implications of such integration and automation. As a core MBA subject, there is an emphasis on the international nature of business and wherever possible and appropriate, case study examples and problems which illustrate the increasing globalisation of the business and management environment.
Textbook: to be advised.
Co-ordinator: Dr L Schafe.

BUSS906 Information in Organisations
Autumn session; 6 credit points (3 hrs per wk).
Assessment: examination, assignments and case studies.
This subject establishes a foundation for understanding the role of information systems in organisations and how such systems relate to organisational objectives and structures. Topics covered include: the systems concepts in an organisation; information theory; information flows and decision processes; nature of information systems in organisations; techniques and skills in representing system structures; and integration of information systems into the organisational structure. Examples will be drawn from business organisational settings wherever possible.
Textbook: to be advised.
Co-ordinator: Dr L Schafe.

BUSS908 Intelligent Tutoring Systems
Spring session; 6 credit points (3 hrs per wk).
Assessment: examination, assignments and case studies.
This subject examines the design, construction, and implementation of intelligent tutoring systems and adaptive instructional systems. It draws upon recent advances in artificial intelligence, software engineering, and the psychology of learning, and applies these developments to the design of computer software for training and instruction. Examples and applications will be drawn from the business environment.
Textbook: to be advised.
Co-ordinator: Dr L Schafe.

BUSS909 Office Automation
Spring session; 6 credit points (3 hrs per wk).
Assessment: examination and assignments.
This subject considers the integration of key elements in office automation - namely: people, computers, and communication - with the ultimate aim of improving the productivity of office staff. It examines such issues as: the technology of text; hypertext data; image; and audio-processing; decision support systems; human and ergonomic factors; office systems analysis; and professional management aids; and computer-based information services.
Textbook: to be advised.
Co-ordinator: Dr L Schafe.

BUSS924 Systems Modelling and Simulation
Spring session; 6 credit points (3 hrs per wk).
Assessment: assignments, examination. This subject aims to develop the concepts of modelling and simulation as applied to information systems. A variety of models, both deterministic and stochastic and the associated methodologies will be presented. The students will be expected to actually construct a model(s) and to evaluate the performance of the model by analysis or simulation with the view to optimise the performance of the real system. Simulation languages GPSS and SLAM II will be introduced.
Textbook: to be advised.
Co-ordinator: Dr L Schafe.

BUSS925 Techniques for Knowledge-Based Systems Development
Autumn session; 6 credit points (3 hrs per wk).
Assessment: assignments and examination. This subject provides a comprehensive understanding of the techniques and tools used in knowledge-based systems development and particular emphasis on the role of knowledge-based systems in business applications. Topics covered include components of a knowledge-based system, rule-based and frame-based methodologies, knowledge acquisition, knowledge representation, knowledge formulation, inference mechanisms and techniques used in implementing a knowledge-based system. The subject also considers the evaluation and selection of knowledge-based systems development tools and techniques.
Textbook: to be advised.
Co-ordinator: Dr L Schafe.

BUSS926 Decision Support Systems
Autumn session; 6 credit points (3 hrs per wk).
Assessment: assignments and examination. This subject examines the following issues in decision support systems: objective and subjective rationality in decision making; decision making process in individuals and in organisations; uncertainty and Delphi group techniques; the role of
decision support systems in MIS; design and evolution of decision support systems; cognitive styles, man-machine interfaces, tools and techniques in support of decision making.

Textbook: to be advised.
Co-ordinator: Dr L Schafe.

BUSS927 Human Computer Interaction

Spring session; 6 credit points (3 hrs per wk).
Assessment: assignments and examination.
The aim of this subject is to make students aware of the multidisciplinary nature of the domain of Human Computer Interaction. It aims to provide students with the knowledge and skills required to make sound judgements about the design of a business computer system in terms of its suitability for achieving the particular goals required by its users, to evaluate how well software systems fulfill the needs of their users and to contribute to the design of user-centred systems in which users and task needs are given major consideration.
Textbook: to be advised.
Co-ordinator: Dr L Schafe.

BUSS928 Current Issues in Knowledge-Based Systems Development

Spring session; 6 credit points (3 hrs per wk).
Assessment: assignments and examination.
Content: This subject provides a broader perspective to knowledge-based systems technology by investigating some of the current issues and trends in knowledge-based systems development with particular emphasis on the strategies for successful knowledge-based systems applications in the business environment. Topics covered include: the history of database, the structure of data, database design, issues of database administration, database control issues and practical experience with the use of database packages.
Objectives: On successful completion of this subject students will have an appreciation of the skills required to develop database systems and the functions of database packages. They will understand the principles of database administration and control.
Textbook: to be advised.
Co-ordinator: Dr L Schafe.

BUSS940 Management Information Systems Project

Double (A) or Autumn or Spring session; 18 credit points.
Assessment: written report.
Students will be expected to carry out a substantive project in management information systems, under the supervision of a member of staff, culminating in a substantial written report.
Co-ordinator: Dr L Schafe.

BUSS945 Information Systems Project

Double (A) or Autumn or Spring session; 12 credit points.
Assessment: written report.
Content: The aim of this subject is to provide students with the opportunity to study a topic of research interest either within an external organisational setting (MBA students) or an internal staff research group in the department (MCom or MBA students). The project will be completed under staff supervision and culminates in the production of a substantial written report plus other products such as software, manuals as appropriate to the project.
Objectives: On successfully completing this subject students will have developed demonstrated skills in the analysis, synthesis and evaluation of information related to a specific topic. They will have experienced the tasks associated with conducting an individual piece of research under supervision.
Textbook: as relevant to the individual student project.
Co-ordinator: Dr L Schafe.

BUSS950 Systems Development Methodologies

Autumn session; 6 credit points (3 hrs per wk).
Assessment: essays, presentation and examination.
Content: This subject aims to overview and compare a range of systems development methodologies through the study of the underlying philosophical basis and methods, tools and techniques used in these methodologies.
Objectives: On successfully completing this subject students will have an appreciation of the origins and philosophical bases underpinning a range of different methodologies, the frameworks and issues which may be used to assess and compare methodologies. They will have an understanding of the basic tools and techniques used across a range of methodologies and the major phases and stages used in a selection of methodologies.
Textbook: to be advised.
Co-ordinator: Dr L Schafe.

BUSS951 Critical Issues in Systems Development

Spring session; 6 credit points (3 hrs per wk).
Assessment: essay and major reports.
Content: This subject aims to provide a critical examination of the relationships between systems development methodologies and organisational contexts through the study of alternative systems development life cycles and development practices.
Objectives: On successfully completing this subject, students will be able to demonstrate the ability to: analyse and identify the assumptions embedded in specific methodologies; select and apply compatible sets of methods, techniques and tools; complement technical frames of reference in order to incorporate social and organisational issues in systems development and use.
Textbook: to be advised.
Co-ordinator: Dr L Schafe.

BUSS952 Information Systems Management

Autumn session; 6 credit points (3 hrs per wk).
Assessment: assignments and examination.
This subject examines a number of current management issues pertinent to the effective and efficient use of IS/IT resources throughout an organisation in pursuit of organisational objectives. Issues considered include: strategic planning and the use of IS/IT for gaining competitive advantage; linking business and IS/IT planning, formulating IS/IT architecture, and information management; structure, organisation and placement of the IS/IT Department within the organisation; end-user computing and IS/IT Department support; IS/IT Department functions and operations; organisational change, IS/IT ethics.
Textbook: to be advised.
Co-ordinator: Dr L Schafe.

BUSS953 Management of Systems Development

Session; 6 credit points (3 hrs per wk).
Assessment: assignments and examination.
Content: This subject provides an introduction to, and overview of, the knowledge and skills required to successfully
manage computer-based systems development projects within an organisational setting. Topics and issues considered include: IS/IT project management and its organisational context; project management tools and techniques; feasibility study methods; resource estimation techniques; IS/IT project groups behaviour, and management; systems development environments for professionals and end-users; quality assurance; project and system evaluation.

Objectives: On successfully completing this subject students will be able to: identify and describe the knowledge and skills required to successfully manage projects, identify and apply appropriate techniques to feasibility studies, apply project management software to the tasks of systems development, identify appropriate tools and techniques used to support development projects and describe the key concepts and issues involved in group behaviour and the management of development groups.

Textbook: to be advised.

Coordinator: Dr L Schafe.

BUSS981 Advanced Information Systems Topic A
6 credit points.

BUSS982 Advanced Information Systems Topic B
6 credit points.

BUSS983 Advanced Information Systems Topic C
12 credit points.

BUSS984 Advanced Information Systems Topic D
12 credit points.

BUSS986 Research Report
24 credit points.

BUSS987 Masters Thesis
48 credit points.

BUSS999 Doctoral Thesis
48 credit points per year.
The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Commerce by Coursework or Research
   Honours Master of Arts by Coursework or Research
3. Master of Commerce by coursework
4. Graduate Diploma in Commerce (Economics)
5. Graduate Certificate in Applied Economics

**POSTGRADUATE PROGRAMS**

General Economics
Development Economics
Global Economics
Human Resource Economics
Environmental and Resource Economics
Managerial Economics
Money, Banking and Finance
Public Policy
Quantitative Economics

There is a Supplementary Schedule 11 for postgraduate subjects offered by the Department of Economics for postgraduate students taking other degrees. The Industrial Relations Schedules 12 and 13 are given in the Industrial Relations section. In special circumstances the Head of the Department may substitute an approved 900-level subject for a subject or subjects in Schedules 2 to 11.

Subject to student demand, staff availability, and resource limitations, some subjects may not be available in a given year. The session in which a subject is to be offered will be determined by the Head of Department. Contact the Department of Economics for details.

**CURRENT RESEARCH AREAS**

The areas of research in which staff can offer supervision are indicated by the areas by Schedules 1 to 11 and by the specific subjects within those schedules. Other areas may be offered subject to consultation with the Head of Department.

**SCHEDULE OF PROGRAMS**

**SCHEDULE 1: MASTER OF COMMERCE (HONOURS) ECONOMICS**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON996</td>
<td>Advanced Macroeconomic Theory</td>
<td>8</td>
</tr>
<tr>
<td>ECON997</td>
<td>Advanced Microeconomic Theory</td>
<td>8</td>
</tr>
<tr>
<td>ECON998</td>
<td>Graduate Quantitative Analysis</td>
<td>8</td>
</tr>
<tr>
<td>Plus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON992</td>
<td>Research Report</td>
<td>24</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECON993</td>
<td>Thesis</td>
<td>48</td>
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</table>

**SCHEDULE 2: GENERAL ECONOMICS**

(a) Graduate Certificate/Graduate Diploma

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON205</td>
<td>Macroeconomic Theory and Policy</td>
<td>8</td>
</tr>
<tr>
<td>ECON215</td>
<td>Microeconomic Theory and Policy</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Any approved 200 or 300 level Economics subject</td>
<td>8</td>
</tr>
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</table>

(b) Master of Commerce

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON936</td>
<td>Graduate Macroeconomics</td>
<td>8</td>
</tr>
<tr>
<td>ECON937</td>
<td>Graduate Microeconomics</td>
<td>8</td>
</tr>
<tr>
<td>and one of</td>
<td>History of Economic Thought</td>
<td>8</td>
</tr>
<tr>
<td>or</td>
<td>Advanced Topics B</td>
<td>8</td>
</tr>
<tr>
<td>or</td>
<td>Graduate Quantitative Analysis</td>
<td>8</td>
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</tbody>
</table>

* Variations to the Schedules 1-10 must be approved by the Head of the Department of Economics or the Postgraduate Co-ordinator.
1 Head of the Department of Economics may agree to the substitution of another quantitative subject for ECON998.
2 Only for candidates who have successfully completed ECON996, 997 and 998 or their equivalents.
### SCHEDULE 3: DEVELOPMENT ECONOMICS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td></td>
<td><em>Three from</em></td>
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</tr>
<tr>
<td></td>
<td>ECON251 Industry and Trade in East Asia</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>ECON303 Economic Development Issues</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>ECON305 Economic Development Planning</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>ECON310 Cost-Benefit Analysis</td>
<td>8</td>
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<tr>
<td></td>
<td>(b) Master of Commerce</td>
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<tr>
<td></td>
<td>ECON907 Cost-Benefit Analysis</td>
<td>8</td>
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<tr>
<td></td>
<td>ECON908 Advanced Topics in the Economics of Development</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>ECON923 Applied Economic Development Planning</td>
<td>8</td>
</tr>
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</table>

### SCHEDULE 4: GLOBAL ECONOMICS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>(a) Graduate Certificate/Graduate Diploma</td>
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<td></td>
<td><em>Three (including at least one 300 level subject) from</em></td>
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</tr>
<tr>
<td></td>
<td>ECON216 International Economics A</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>ECON251 Industry and Trade in East Asia</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>ECON252 Global Economics</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>ECON253 Comparative Economic Systems</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>ECON307 International Monetary Economics</td>
<td>8</td>
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<tr>
<td></td>
<td>(b) Master of Commerce</td>
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<tr>
<td></td>
<td>ECON902 Advanced International Monetary Economics</td>
<td>8</td>
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<tr>
<td></td>
<td>ECON911 Advanced International Economics</td>
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<tr>
<td></td>
<td>ECON924 International Economic Relations - B</td>
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### SCHEDULE 5: HUMAN RESOURCE ECONOMICS

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<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(a) Graduate Certificate/Graduate Diploma</td>
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<tr>
<td></td>
<td><em>Three from</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECON240 Industrial Relation B: Wage Determination in Australia</td>
<td>8</td>
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<tr>
<td></td>
<td>ECON308 Labour Economics</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>ECON315 Applied Microeconomics</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>ECON317 Economics of Health Care</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>(b) Master of Commerce</td>
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</tr>
<tr>
<td></td>
<td><em>Three from</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECON912 Labour Economics</td>
<td>8</td>
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<tr>
<td></td>
<td>ECON916 Microeconomic Analysis</td>
<td>8</td>
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<tr>
<td></td>
<td>ECON917 Economics of Health Care</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>ECON957 Productivity and Labour</td>
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### SCHEDULE 6: ENVIRONMENTAL AND RESOURCE ECONOMICS

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### SCHEDULE 7: MANAGERIAL ECONOMICS

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## SCHEDULE 7: MANAGERIAL ECONOMICS (cont'd).

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## SCHEDULE 8: MONEY, BANKING AND FINANCE

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## SCHEDULE 9: PUBLIC POLICY

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## SCHEDULE 10: QUANTITATIVE ECONOMICS

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<td>Mathematical Economics</td>
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<td>Quantitative Analysis for Decision Making - I</td>
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<td>ECON231</td>
<td>Business Statistics and Forecasting</td>
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## SCHEDULE 11: SUPPLEMENTARY

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<td>ECON929</td>
<td>Macrodynamics</td>
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<td>ECON932</td>
<td>Economic Analysis of the Business Environment</td>
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<td>ECON991</td>
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COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY
   For the degree of Doctor of Philosophy, candidates enrol in the subject ECON993 Thesis. Additional subjects may be required.

2. HONOURS MASTER OF COMMERCE
   HONOURS MASTER OF ARTS
   The purpose of the Honours Masters degree is to provide graduate students who have completed the Economics specialisation for the BCom degree (or equivalent) with the opportunity for further in-depth study of advanced topics in Economics as a preparation for a professional career as an economist. Entry requires a BCom degree with a specialisation in Economics or an equivalent degree.

   The Course Rules governing the Honours Masters degree will apply. The degree of 96 credit points can be studied full-time over two years, or may be studied part-time.

For the Honours Masters degree students must, subject to the subsequent advanced standing or exemption clause:

(i) complete Schedule 1 (48 credit points)
and
(ii) complete 24 credit points from section (b) of one of the Schedules 3-10,
and
(iii) complete an additional 24 credit points of approved 900-level economic subjects.

Students who have completed the BCom(Hons) in Economics or the BA(Hons) in Economics, or an equivalent degree, and who have graduated in Honours with a standard of Class II, Division 2 or higher may be given advanced standing or exemption up to a maximum of 48 credit points of the required 96 credit points.

3. MASTER OF COMMERCE
   The purpose of this pass degree is to provide graduate students who have completed the Economics specialisation for the BCom degree (or equivalent) with the opportunity for further in-depth study of advanced topics in Economics as a preparation for a professional career in economics.

   The Course Rules governing the Masters degree will apply. The degree of 48 credit points may be studied full-time over one year, or may be studied part-time.

For the Master of Commerce degree, normally students must complete 48 credit points at the 900 level including:

(i) 24 credit points from Schedule 1 or section (b) of Schedule 2* and
(ii) 24 credit points from section (b) of one of the Schedules 3-10.

Entry requires a BCom degree with a specialisation in Economics or an equivalent degree. Candidates who do not have a specialisation in Economics but who have the equivalent of Economics to second-year level in their undergraduate degree may be permitted to study for the degree provided they have first passed a program of 24 credit points of 300-level Economics subjects approved by the Head of Department; thus the total credit points required for these candidates is 72.

4. GRADUATE DIPLOMA IN COMMERCE
   The purpose of this diploma is to provide graduate students who have not completed an Economics specialisation in their undergraduate degree with the opportunity for advanced study in Economics.

   The Course Rules governing Graduate Diplomas will apply. Accordingly, candidates for the Graduate Diploma in Commerce will normally hold a Bachelor degree from an approved institution. In special circumstances a professional person holding a tertiary qualification other than a Bachelor degree may be permitted to enrol.

   The Graduate Diploma in Commerce requires two sessions of full-time study or the part-time equivalent.

For the Graduate Diploma students must complete 45 credit points including:

(i) 24 credit points from section (a) of Schedule 2
and
(ii) 24 credit points from section (a) of one of the Schedules 3-10.

5. GRADUATE CERTIFICATE IN APPLIED ECONOMICS
   The purpose of this certificate is to provide graduate students an opportunity for advanced study in Applied Economics. The award is suitable for students who have not completed an Economics specialisation in their undergraduate degree. Section (a) of Schedule 2 is usually most appropriate for such students. The award is also designed for those who have completed an undergraduate major in Economics and who would like to pursue a short course with advanced study in a specialist area. Section (a) of Schedules 3-10 is usually most appropriate for such students.

   The Graduate Certificate can be completed in one session of full-time study or the part-time equivalent.

For the Graduate Certificate students must complete 48 credit points including:

(i) 24 credit points from section (a) of Schedule 2
and
(ii) 24 credit points from section (a) of one of the Schedules 3-10.

SUBJECT DESCRIPTIONS

Composition of Subjects
Three hours lectures/seminars per week.

Assessment
Continuous assessment by written assignments, essays and Departmental examinations.

ECON901 Monetary Economics
8 credit points.
The subject is in two sections. The first section compares the monetarist theory of money with the reintepreted Keynesian theory of money, examining: theories and evidence on the demand for money; the relative stability debate; the transmission mechanism and the policy implications of both theories. The second section examines conflicting theories such as Monetarist and Keynesian Neutral. The topics to be covered are: the theories of the supply of money; the effect of the growth of financial institutions on the efficacy of monetary policy; and the debate on the term structure of interest rates. Much of the subject will be based on journal articles in which most of the debates have been carried.
Co-ordinator: Dr C Harvie.

ECON902 Advanced International Monetary Economics
8 credit points.
Foreign exchange markets; banking and financial institutions; money supply, price level and international adjustment; international monetary system.
Co-ordinator: Dr K Chowdhury.

ECON903 Public Finance
8 credit points.
This subject further develops topics encountered in the undergraduate Public Finance course. Particular emphasis will be placed on issues surrounding inter-governmental fiscal relations in a federal system. Questions of fiscal transfer mechanism, divisions of powers and responsibilities and the equalisation measures which might be used will be considered.
Co-ordinator: Associate Professor R Castle.

ECON905 Input-Output Analysis* 8 credit points.
Design and estimation of input-output matrices. Basic equilibrium, optimising and forecasting techniques. Application to planning and some regional problems.
Co-ordinator: to be advised.

ECON906 History of Economic Thought* 8 credit points.
A study of the history of Economics, mainly concerned with the origins and development of modern Economics.
Co-ordinator: Associate Professor R Castle.

ECON907 Cost-Benefit Analysis 8 credit points.
The main objective of the subject is to develop skills in appraising public sector (and other) investment projects. These skills are sought through a study of the role and theory underlying cost-benefit analysis. The subject contains a practical component involving the appraisal of specific investment projects. Topics covered will include: welfare economics; the derivation

* Not on offer in 1996.
ECON908 Advanced Topics in the Economics of Development
8 credit points.
The subject provides an in-depth analysis of formulation of development policies in less developed countries in the light of theory and experience. The formulation of an integrated strategy of development is preceded by problem description and application of relevant economic theory. Possible topics include: economic growth versus economic development; poverty and inequality; population growth; unemployment and rural-urban migration; technological change; peasant agriculture and agricultural productivity; human capital and development (foreign investment; credit and institutions); international dimensions of development and development planning.
Co-ordinator: Associate Professor DP Chaudhri.

ECON909 Econometric Theory
8 credit points.
This subject deals with advanced topics in the theory and practice of econometrics and covers contemporary issues of modelling specification, estimation, testing, and forecasting. Much of the course will be based on journal articles in which the current econometric issues have been discussed.
Co-ordinator: Associate Professor Tran Van Hao.

ECON910 Advanced International Economics
8 credit points.
Aspects of some of the following topics are studied in-depth: growth and trade; factor trade (foreign investment); tariffs; import-substituting industrialisation; foreign exchange market; internal and external balance (the two-gap model).
Co-ordinator: Dr CS Suh.

ECON911 Labour Economics
8 credit points.
The theory of the labour market and applications to the Australian situation, including labour supply and demand. Special emphasis is placed on analysing the changing nature of the workforce and structural changes in industries and occupations. Wage theory and practice are examined under conditions of collective bargaining and arbitration. The development of the arbitration system in Australia and principles of wage determination followed by the Commission are of particular importance. Wages and income policies, including indexation policies will also be studied, as will wage developments outside the arbitration system.
Co-ordinator: Ms N Verrucci.

ECON912 Industrial Economics
8 credit points.
A study of industrial organisation and performance, decision-making criteria and constraints affecting output and distribution of revenue, market behaviour, and matters of ownership and control of the unit organisation.
Co-ordinator: Dr CS Suh.

ECON916 Microeconomic Analysis
8 credit points.
Several areas of microeconomic theory will be selected for advanced treatment. Within each topic, contemporary applications will be explored after the development of a theoretical base.
Co-ordinator: Professor D Lewis.

ECON917 Economics of Health Care
8 credit points.
Not to count with ECON18.
A survey of economic aspects of the Australian health care system. Topics covered will include the supply and demand for health services, health care delivery systems, health insurance, social statistics and medical decision making. Government policies influencing all aspects of health care will be analysed and evaluated.
Co-ordinator: Professor D Lewis.

ECON918 Economics of Health Care - A
6 credit points.
Not to count with ECON17.
A survey of economic aspects of the Australian health care system. Topics covered will include the supply and demand for health services, health care delivery systems, health insurance, social statistics and medical decision making. Government policies influencing all aspects of health care will be analysed and evaluated.
Co-ordinator: Professor D Lewis.

ECON919 Economics of Energy Resources
8 credit points.
The main objects of the subject are to review the applications of economic theory to contemporary energy problems; and to evaluate the available options for energy policies. The course topics include: social objectives with respect to energy; renewable and non-renewable energy resources; optimisation frameworks for the extraction of energy resources; the demand for energy; energy supply and the role of alternative energy technologies including the role of nuclear energy; energy deficits and the role of international trade; and the design and implementation of energy policies.
Co-ordinator: to be advised.

ECON921 Econometric Models
8 credit points.
This is a subject on the foundations of econometric models. Both single-equation and simultaneous equation models will be studied. Emphasis is on suitable model building with economic content, on obtaining estimates with desirable properties, on testing procedures, on model evaluation and selection, and applications.

ECON922 Economic Analysis of the Business Environment
6 credit points.
This subject focuses on the macro and micro environment of business and organisations, and the role of managers in relating their organisational behaviour to the economic environment. Internationalisation of business and the globalisation of economics and markets will be studied as well as macroeconomic and microeconomic policies which affect the business environment.
Co-ordinator: Ms A Hodgkinson.
ECON933 Game Theory* 8 credit points.
Pre-requisite: ECON111 and ECON122 or their equivalents.
A study of advanced topics in game theory. The objective of this subject is to build on traditional analytical techniques in economics based on assumptions of certainty and competitive markets. Using game theory, the analysis is extended to settings that traditional economic analysis is unable to cope with. These typically involve settings incorporating risk and uncertainty, asymmetric and incomplete information and strategic situations where the assumptions of competitive markets do not apply. The emphasis is on theoretical developments and the application of the central tools of game theory to real world problems of business and economics involving strategic interactions between parties.

Textbook:
Co-ordinator: Dr B Lee.

ECON934 Advanced Financial Economics 8 credit points.
Pre-requisite: ECON212 or equivalent.
An advanced study of the theory of optimal acquisition, financing and composition of assets and production activities with applications in the fields of economics of the firm, agricultural economics and international economics. The optimal control method and phase-plane diagrams will be applied in the analysis of the optimal trajectories of capital investment, advertising and borrowing. Investors' portfolio choices and producers' activity sets will be analysed within a mean-variance expected utility maximisation framework incorporating the notions of risk aversion, costs of risk bearing and diversification. The determinants and implications of debt accumulation, insolvency, continuation or liquidation will be analysed within the context of international economics.

Co-ordinator: Associate Professor A Levy.

ECON935 Advanced Managerial Economics and Operations Research 8 credit points.
Pre-requisite: ECON228 or ECON230 or equivalent.
A study of advanced quantitative techniques techniques applicable to economic and managerial decision-making. This subject covers a wide range of quantitative analyses such as forecasting techniques, Bayesian analysis, Markov process models, PERT, CPM and specialised network algorithms, risk preference analysis, transportation and assignment models and quadratic and nonlinear programming.

Textbook:
Co-ordinator: Associate Professor M Metwally.

ECON936 Graduate Macroeconomics 8 credit points.
The aim of the subject is to analyse the major factors which determine economic behaviour in the aggregate and to evaluate how alternative macroeconomic policies may improve some performance. In doing so the course examines the major determinants of aggregate demand equilibrium, namely consumption and investment demands, international factors, money and interest. Monetary and fiscal policies are examined using this analytic structure to determine the effectiveness of these policies. Aggregate supply equilibrium is then analysed in terms of wages, prices and employment. The problems of inflation and unemployment are also considered along with possible wages policies. The subject concludes with a brief review of longer term growth explanations of economic behaviour and associated policy prescriptions.

Co-ordinator: Mr E Wilson.

ECON937 Graduate Microeconomics 8 credit points.
The subject provides the theoretical basis for analysis of a wide range of microeconomic issues and policies. Topics include demand and supply theory; consumer preference theory; theory of the firm; cost functions; market behaviour under perfect competition, monopoly, and imperfect competition; factor markets; general equilibrium theory; externalities and intertemporal choice and risk. The emphasis in these topics is on providing a theoretical foundation that is linked to empirical analysis and interpretation of real world problems.

Textbooks:
Co-ordinator: Dr CS Sub.

ECON938 Environmental Economics 8 credit points.
This subject will provide a comprehensive analysis of environmental issues utilising the theory of economic externalities and the theory of ecologically sustainable development. Methods used to convert environmental problems and to measure externalities will be analysed. It will also evaluate environmental policies in Australia, developing countries and in the international economy.

Textbook:
Co-ordinator: Ms A Hodgkinson.

ECON939 Principles of Econometrics 8 credit points.
This course deals with the fundamental concepts of econometrics used in applied economic work in the academic, business and government sectors. The course covers the standard and non-standard econometric models, based on time series, cross-section, or qualitative data. Emphasis will be on applications of the econometric methodologies in empirical research.

Textbook:
Co-ordinator: Associate Professor Tran Van Hoa.

ECON940 Econometric Analysis* 8 credit points.
The subject deals with applications of the econometric theory to microeconomic and macroeconomic analyses. Topics include consumer demand, production function, investment analysis, finance, unemployment, inflation, and international trade. The subject also covers multi-sector economy-wide modelling of the Keynesian and neo-classical classes, and emphasises particularly empirical research on current economic issues.

Textbook:
Co-ordinator: Associate Professor Tran Van Hoa.

ECON941 Advanced Topics in Economics - A 8 credit points.

ECON942 Advanced Topics in Economics - B 8 credit points.

ECON943 Advanced Topics in Economics - C 8 credit points.

ECON944 Advanced Topics in Economics - D 8 credit points.

ECON945 Advanced Topics in Economics - E 8 credit points.

ECON946 Advanced Topics in Economics - F 8 credit points.

ECON948 Special Topics in Economics - G 6 credit points (3 hrs per wk of lectures, tutorials and seminars)
Pre-requisites: ECON932 or other ECON as approved by Head, Department of Economics Note: Enrolment must be specifically approved by the Head, Department of Economics

The purpose of this subject is to make available a 6 credit point form of specialised ECON subjects for MBA students. Special assessment requirements will be provided reflecting the lower work load of a 6 credit point subject. The objectives are those of the substantive subject. This subject can

* Not on offer in 1996.
replace designated ECON MBA subjects in MBA Schedules 5, 6, 10 and 11 and MCom (ACCY) Schedule - Treasury (Finance).

Co-ordinator: Associate Professor R Castle.

ECON981 Special Topics in Economics - H
6 credit points (3 hrs per wk of lectures, tutorials and seminars)
Pre-requisites: ECON932 or other ECON as approved by Head, Department of Economics

Note: Enrolment must be specifically approved by the Head, Department of Economics

The purpose of this subject is to make available a 6 credit point form of specialised ECON subjects for MBA students. Special assessment requirements will be provided reflecting the lower work load of a 6 credit point subject. The objectives are those of the substantive subject. This subject can replace designated ECON MBA subjects in MBA Schedules 5, 6, 10 and 11 and MCom (ACCY) Schedule - Treasury (Finance).

Co-ordinator: Associate Professor R Castle.

ECON991 Project
16 credit points.

ECON992 Research Report
24 credit points.

ECON993 Thesis
48 credit points per year.

ECON996 Advanced Macroeconomic Theory
8 credit points.
This subject critically reviews advanced contemporary macroeconomic theories and their policy prescriptions. It stresses the need to consider four important concepts: namely the international orientation of macroeconomics, the role of expectations and their formation, the importance of macroeconomic adjustment speeds, dynamics and stability properties, and finally, the difficulty of formulating and implementing consistent, optimum macroeconomic policy in a changing world.

Co-ordinator: Mr E Wilson

ECON997 Advanced Microeconomic Theory
8 credit points.
The objective of this subject is to provide a balanced and comprehensive coverage of the core topics in theoretical microeconomics, with particular attention to welfare economics, the economics of production, and contestable markets.

Co-ordinator: Dr T Webber.

ECON998 Graduate Quantitative Analysis
8 credit points.
Advanced mathematical and statistics techniques used in economic research will be studied. The emphasis will be on mathematical techniques which are of use in understanding advanced theoretical subjects in economics as well as statistical techniques needed to conduct empirical research in economics.

Co-ordinator: Professor D Lewis.

For descriptions of subjects not listed here, refer to Industrial Relations section.
COURSES OFFERED

The following postgraduate courses are available:

1. Graduate Certificate in Management
2. Graduate Diploma in Commerce
3. Master of Business Administration

SCHEDULE OF PROGRAMS

GRADUATE CERTIFICATE IN MANAGEMENT

The objective of the Graduate Certificate is to provide an introductory study of the concepts of management and management practice. The Certificate is deliberately structured to provide different approved programs of study, including off-campus programs for specific employment groups (e.g., the NSW Police Service) or specified professional groups (e.g., Public Sector Managers).

Admission to this Graduate Certificate requires Bachelor qualifications, though in special circumstances an applicant holding other academic or professional qualifications, and with relevant work experience and/or employer support, may be admitted as a candidate. This award is equivalent to 6 months full-time study. Students complete 24CP of study selected from the Graduate Diploma in Commerce (MGMT) schedule. Students qualifying for the Graduate Certificate in Management who have achieved an average of a credit grade or better over all subjects may be admitted to the Graduate Diploma program. They will receive a credit of up to 24CP depending upon the particular program of study undertaken.

GRADUATE DIPLOMA IN COMMERCE (Management)

Entry to this program is based on graduate qualifications, employment history and managerial experience. Students completing the GradDip with better than credit average results and relevant work experience will be eligible for admission to the MBA program.

The Graduate Diploma in Commerce (Management) is a one year full-time or two year part-time course comprising eight compulsory subjects. Subjects focus on the fundamental issues that relate to essential managerial understandings and skills in that area. This is a 48CP course.

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<tr>
<td>ACCY901</td>
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<tr>
<td>ECON932</td>
<td>Economics Analysis of the Business Environment</td>
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<td>BUS5083</td>
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<td>MGMT905</td>
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<tr>
<td>MGMT906</td>
<td>Managing People at Work</td>
<td>6</td>
</tr>
<tr>
<td>MGMT907</td>
<td>Managerial Skills Workshop</td>
<td>6</td>
</tr>
<tr>
<td>MGMT922</td>
<td>Marketing Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT979</td>
<td>Financial Decision Making</td>
<td>6</td>
</tr>
</tbody>
</table>

Co-ordinator: Professor Michael Hough.

MASTER OF BUSINESS ADMINISTRATION

The Master of Business Administration (MBA) is a two year full-time or four year part-time course. Students will be required to complete the core elements of study, as for the Graduate Diploma in Commerce (Management), in the first half of the MBA. These subjects will serve as an introduction to the subsequent specialisation subjects that follow.

A number of specialisation options are available in the second year of the two year full-time program, representing the final 48CP of the 96CP MBA program. Subjects offered depend on student demand and available resources. Specialisations can include:

- General Management
- Marketing
- Human Resource Management
- Total Quality Management
- Public Sector Management
- International Business
- Operations Management
- Strategic Management
- Technology and Innovation Management
- Finance
- Industrial Relations
- Business Economics
- Systems Management
- Systems Development
- Legal Studies

This is a 96CP course, awarded at Pass or Merit level.

Co-ordinator: Professor Michael Hough.

MASTER OF BUSINESS ADMINISTRATION SCHEDULE

Students intending to enrol in the Master of Business Administration please note:

- Some subjects require prerequisites or are subject to entry requirements. Refer to individual subject descriptions in this Calendar.
- Enrolment in some subjects may require the approval of the appropriate Coordinator or Departmental Head.
- Not all subjects and specialisations are offered every year.
### MASTER OF BUSINESS ADMINISTRATION SCHEDULE (cont’d).

<table>
<thead>
<tr>
<th>Number</th>
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<tbody>
<tr>
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<td>Core subjects - 48CP, as specified for the Graduate Diploma in Commerce (Management)</td>
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<td>Economic Analysis of the Business Environment</td>
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<tr>
<td>BUS903*</td>
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<td>Business Ethics and Law</td>
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<td>Managing People at Work</td>
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<tr>
<td>MGMT979</td>
<td>Financial Decision Making</td>
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</table>

42CP of approved specialisation studies from one of the following schedules:
1. General Management
2. Marketing
3. Human Resource Management
4. Total Quality Management
5. Public Sector Management
6. International Business
7. Operations Management
8. Strategic Management
9. Technology and Innovation Management
10. Finance
11. Industrial Relations
12. Business Economics
13. Systems Management
14. Systems Development
15. Legal Studies

Plus 6CP of integration studies

- MGMT931 Strategic Planning and Policy 6
- or MGMT976 Competitive Analysis and Strategy 6

* Students who study the specialisation in Systems Development do not enrol for BUS903.

### SPECIALISATION SCHEDULES

Most specialisation schedules include the option of a project within the prescribed 42CP.

<table>
<thead>
<tr>
<th>Number</th>
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<tbody>
<tr>
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<td>Schedule 1: General Management</td>
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<tr>
<td></td>
<td>Coursework Option</td>
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<tr>
<td></td>
<td>42CP of MGMT900 subjects (not MBA core subjects)</td>
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<tr>
<td></td>
<td>and MGMT931 Strategic Planning and Policy</td>
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<td></td>
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<td>24CP of project studies</td>
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<tr>
<td></td>
<td>MGMT980 Business Research Methods</td>
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<tr>
<td></td>
<td>MGMT982 Project</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>or MGMT981 MBA Project</td>
<td>24</td>
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</table>

|        | Schedule 2: Marketing                        |               |
|        | Compulsory Subjects                          |               |
|        | MGMT977 Research for Marketing Decisions     | 6             |
|        | MGMT957 International Marketing Strategy     | 6             |
|        | MGMT967 Quantitative Methods                 | 6             |
|        | and MGMT931 Strategic Planning and Policy    | 6             |
|        | Coursework Option                            |               |
|        | 24CP of coursework from the following subjects |               |
|        | ACCY921 Managerial Finance                   | 6             |
|        | MGMT938 Managing Services Marketing          | 6             |
|        | MGMT939 Contemporary Issues in International Marketing | 6 |
|        | MGMT956 New Product Marketing                | 6             |
|        | MGMT935 Marketing Planning and Strategy      | 6             |
|        | or any 6CP postgraduate subject approved by the Head of the relevant Department. |               |
|        | Project Option                               |               |
|        | 24CP of project studies                      |               |
|        | either                                       |               |
|        | MGMT938 Managing Services Marketing          | 6             |
|        | MGMT982 Project                              | 18            |
|        | or MGMT981 MBA Project                       | 24            |
### Schedule 3: Human Resource Management

**Compulsory Subjects**

<table>
<thead>
<tr>
<th>Number</th>
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<tr>
<td>ECON954</td>
<td>Industrial Relations in Australia</td>
<td>6</td>
</tr>
<tr>
<td>MGMT931</td>
<td>Strategic Planning and Policy</td>
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*plus either*

<table>
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<tbody>
<tr>
<td>MGMT916</td>
<td>Management and Employment Relations</td>
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*or*

<table>
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<tr>
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<th>Credit Points</th>
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<tbody>
<tr>
<td>MGMT919</td>
<td>Human Resource Strategies and TQM</td>
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*Coursework Option*

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<th>Subject</th>
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<tr>
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<td>Management and Employment Relations</td>
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*or*

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<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>MGMT919</td>
<td>Human Resource Strategies and TQM</td>
<td>6</td>
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*and*

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>MGMT938</td>
<td>Managing Services Marketing</td>
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*and 18CP from either*

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<tr>
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<td>MGMT915</td>
<td>Management of Change</td>
<td>6</td>
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<tr>
<td>MGMT918</td>
<td>Organisational Processes</td>
<td>6</td>
</tr>
<tr>
<td>MGMT924</td>
<td>Organisations and their Environments</td>
<td>6</td>
</tr>
<tr>
<td>MGMT947</td>
<td>Quality Management</td>
<td>6</td>
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<td>MGMT963</td>
<td>Management of Occupational Health and Safety</td>
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<tr>
<td>ECON948</td>
<td>Employers and Industrial Relations</td>
<td>6</td>
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*or any 6CP postgraduate subject approved by the Head of the relevant Department.*

*Project Option*

<table>
<thead>
<tr>
<th>Number</th>
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<tbody>
<tr>
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<td>MGMT982</td>
<td>Project</td>
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*or*

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<tr>
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<tbody>
<tr>
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### Schedule 4: Total Quality Management

**Compulsory Subjects**

<table>
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<tbody>
<tr>
<td>MGMT947</td>
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<td>MGMT915</td>
<td>Management of Change</td>
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<td>TQM911</td>
<td>Introduction to TQM</td>
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<td>Strategic Planning and Policy</td>
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*Coursework Option*

<table>
<thead>
<tr>
<th>Number</th>
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</tr>
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<tbody>
<tr>
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<td>Management and Employment Relations</td>
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*and 18CP of coursework selected from*

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</thead>
<tbody>
<tr>
<td>MGMT918</td>
<td>Organisational Processes</td>
<td>6</td>
</tr>
<tr>
<td>MGMT919</td>
<td>Human Resource Strategies and TQM</td>
<td>6</td>
</tr>
<tr>
<td>MGMT920</td>
<td>Organisational Analysis</td>
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</tr>
<tr>
<td>MGMT924</td>
<td>Organisations and their Environments</td>
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</tr>
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<td>MGMT961</td>
<td>International Business Management</td>
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<td>MGMT967</td>
<td>Quantitative Methods</td>
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<tr>
<td>MGMT970</td>
<td>Contemporary Issues in Service Quality</td>
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*or any 6CP postgraduate subject approved by the Head of the relevant Department.*

*Project Option*

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<tbody>
<tr>
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<td>Business Research Methods</td>
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<tr>
<td>MGMT982</td>
<td>Project</td>
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*or*

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>MGMT981</td>
<td>MBA Project</td>
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### Schedule 5: Public Sector Management

**Compulsory Subjects**

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<th>Subject</th>
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<tbody>
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<td>MGMT927</td>
<td>Australian Government Administration</td>
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<td>MGMT928</td>
<td>Public Policy and Administration</td>
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*and*

<table>
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<tr>
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<tbody>
<tr>
<td>MGMT931</td>
<td>Strategic Planning and Policy</td>
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*Coursework Option*

<table>
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<td>MGMT919</td>
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SPECIALISATION SCHEDULES (cont’d).

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<tbody>
<tr>
<td>MGMT916</td>
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</tr>
<tr>
<td>MGMT920</td>
<td>Organisational Analysis</td>
<td>6</td>
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<td>MGMT918</td>
<td>Organisational Processes</td>
<td>6</td>
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<tr>
<td>MGMT915</td>
<td>Management of Change</td>
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<tr>
<td>MGMT963</td>
<td>Management of Occupational Health &amp; Safety</td>
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<td>MGMT948</td>
<td>Project in Regional Administration</td>
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<td>ACCY983</td>
<td>Studies in Government Accounting</td>
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<td>ECON903</td>
<td>Public Finance</td>
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or any 6CP postgraduate subject approved by the Head of the relevant Department.

Project Option

24CP of project studies either

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<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>MGMT980</td>
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<tr>
<td>MGMT982</td>
<td>Project</td>
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<td>or MGMT981</td>
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Schedule 6: International Business

Compulsory Subjects

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<td>MGMT931</td>
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<td>MGMT957</td>
<td>International Marketing Strategy</td>
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<td>International Business Management</td>
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<td>ACCY928</td>
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and Coursework Option

24CP of subjects from

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<td>MGMT978</td>
<td>Cross Cultural Management</td>
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<td>ECON924</td>
<td>International Economic Relations</td>
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<td>MGMT939</td>
<td>Contemporary Issues in International Marketing</td>
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Any 900-level MGMT subject(s) which are not core subject(s) for the MBA, or previously studied.

Any 6CP postgraduate subject approved by the Head of the relevant Department.

Project Option

24CP of project studies either

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<thead>
<tr>
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<th>Subject</th>
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<td>MGMT982</td>
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<tr>
<td>or MGMT981</td>
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Schedule 7: Operations Management

Compulsory Subjects

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<td>MGMT952</td>
<td>Production and Operations Management</td>
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and Coursework Option

24CP of coursework from

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plus one elective postgraduate subject from any of the Commerce Schedules as approved by the Head of the relevant Department.

Project Option

24CP of project studies either

<table>
<thead>
<tr>
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<th>Subject</th>
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<td>MGMT982</td>
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<td>MBA Project</td>
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Schedule 8: Strategic Management

Compulsory Subjects

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<tbody>
<tr>
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<td>MGMT915</td>
<td>Management of Change</td>
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<td>Strategic Planning and Policy</td>
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<tr>
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<td>or</td>
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<td>MGMT982 Project</td>
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</tr>
<tr>
<td>or</td>
<td>MGMT981 MBA Project</td>
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</table>

#### Schedule 9: Technology and Innovation Management

**Compulsory Subjects**

- MGMT931 Strategic Planning and Policy 6
- MGMT933 Management of Process Innovation 6
- MGMT934 Management of Process Innovation 6
- BUS992 Information Systems Management 6

**Coursework Option**

24CP of coursework from

- MGMT915 Management of Change 6
- MGMT954 Special Topic in Management A 6
- plus 12CP from any non-core MGMT subjects listed in MBA Specialisation Schedules 3, 4, 7 or 13 or Project Option

or

**Project Option**

24CP of project study either

- MGMT980 Business Research Methods 6
- MGMT982 Project 18
- MGMT981 MBA Project 24

#### Schedule 10: Finance

**Compulsory Subjects**

- ACCY923 Investment Management 6
- ACCY926 Studies in Business Finance 6
- ECON934 Advanced Financial Economics 6
- ACCY921 Managerial Finance 6
- MGMT931 Strategic Planning and Policy 6

**Coursework Option**

18CP of coursework from

- ACCY922 Capital Investment 6
- ACCY924 Corporate Financial Information Analysis 6
- ACCY925 Australian Financial Institutions 6
- ACCY927 Small Business Finance 6
- ACCY928 Multinational Financial Management 6
- ECON902 Advanced International Monetary Economics 6

Note: A project option is available with permission from the Head of Accountancy or the designated departmental nominee.

#### Schedule 11: Industrial Relations

**Compulsory Subjects**

- ECON954 Industrial Relations in Australia 6
- ECON944 Advanced Topics in Economics D 6
- MGMT931 Strategic Planning and Policy 6

**Coursework Option**

24CP of coursework from either

- MGMT954 Human Resource Management 6
- MGMT916 Management and Employment Relations 6

or

- MGMT953 Human Resource Management 6

and

**Coursework Option**

24CP of coursework from either

- ECON944 Employers and Industrial Relations 6
- ECON952 Workplace and Enterprise Bargaining 6
- ECON953 Political Economy of Australian Wage Determination 6
### SPECIALISATION SCHEDULES (cont'd).

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON955</td>
<td>Comparative Studies in Industrial Relations</td>
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</tr>
<tr>
<td>ECON956</td>
<td>Advanced Industrial Relations Processes</td>
<td>6</td>
</tr>
<tr>
<td>ECON957</td>
<td>Productivity and Labour</td>
<td>6</td>
</tr>
<tr>
<td>ECON958</td>
<td>Industrial Relations &amp; Management Thought</td>
<td>6</td>
</tr>
</tbody>
</table>

or one 6CP subject from MBA Specialisation Schedule 3

or

Project Option

| ECON992 | Research Project                                                        | 24            |

**Schedule 12: Business Economics**

**Compulsory Subjects**

| ECON907 | Cost-Benefit Analysis                                                   | 8             |
| ECON936 | Graduate Macroeconomics                                                 | 8             |
| ECON937 | Graduate Microeconomics                                                 | 8             |
| MGMT931 | Strategic Planning and Policy                                           | 6             |

and

**Coursework Option**

24CP of coursework from

| ECON909 | Econometric Theory                                                      | 8             |

and any 2 of

| ECON913 | Industrial Economics                                                    | 8             |
| ECON916 | Microeconomic Analysis                                                  | 8             |
| ECON924 | International Economic Relations                                        | 8             |
| ECON933 | Game Theory                                                             | 8             |
| ECON934 | Advanced Financial Economics                                            | 8             |
| ECON935 | Advanced Managerial Economics and Operations Research                   | 8             |
| ECON938 | Environmental Economics                                                 | 8             |
| ECON944 | Advanced Topics in Economics D                                          | 8             |

or any postgraduate subject approved by the Head of the relevant Department.

or

Project Option

| ECON992 | Research Project                                                        | 24            |

**Schedule 13: Systems Management**

**Compulsory Coursework**

| BUS945  | Information Systems Project                                             | 12            |
| BUS952  | Information Systems Management                                          | 6             |
| BUS953  | Management of Systems Development                                      | 6             |
| MGMT976 | Competitive Strategy and Analysis                                       | 6             |
| BUS950  | Programming for Managers                                               | 6             |
| BUS931  | Database for Managers                                                  | 6             |

Plus a 6CP 900-level BUSS subject selected from Schedule 4 in the Business Systems calendar section.

**Schedule 14: Systems Development**

**Compulsory Subjects**

| BUS945  | Information Systems Project                                             | 12            |
| BUS952  | Information Systems Management                                          | 6             |
| BUS953  | Management of Systems Development                                      | 6             |
| MGMT976 | Competitive Strategy and Analysis                                       | 6             |
| BUS950  | Systems Development Methodologies                                       | 6             |
| BUS951  | Critical Issues in Systems Development                                 | 6             |

Plus 12CP of 900-level BUSS subjects selected from Schedule 4 in the Business Systems calendar section.

**Schedule 15: Legal Studies**

**Compulsory Subjects**

| LAW810  | Law in Society                                                          | 8             |
| LAW811  | Law of Contracts                                                        | 8             |
| MGMT931 | Strategic Planning and Policy                                           | 6             |

and

**Coursework Option**

30CP of coursework from

| LAW951  | Taxation Policy and Practice                                           | 6             |
| LAW953  | Studies in Taxation                                                     | 6             |
| LAW964  | Studies in Business Law                                                 | 6             |
| LAW965  | Studies in Administrative Law                                           | 6             |
| LAW966  | Studies in Industrial Law                                               | 6             |
| LAW967  | Studies in Trade Practices and Consumer Law                             | 6             |
| LAW988  | Special Topic in Law                                                    | 6             |

or any 6CP postgraduate subject approved by Dean of Faculty of Law.
SPECIALISATION SCHEDULES (cont'd).

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<td></td>
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<td>LAW951</td>
<td>Taxation Policy and Practice</td>
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<tr>
<td>LAW953</td>
<td>Studies in Taxation</td>
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<td>LAW964</td>
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<td>LAW965</td>
<td>Studies in Administrative Law</td>
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<td>LAW966</td>
<td>Studies in Industrial Law</td>
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<td>LAW967</td>
<td>Studies in Trade Practices and Consumer Law</td>
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<td>and</td>
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<td></td>
<td>24CP of Project study</td>
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<tr>
<td>MGMT980</td>
<td>Business Research Methods</td>
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<td>MGMT982</td>
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<tr>
<td>or</td>
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<tr>
<td>MGMT981</td>
<td>MBA Project</td>
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</tr>
</tbody>
</table>

COURSE REQUIREMENTS

1. MASTER OF BUSINESS ADMINISTRATION

This degree is offered to allow practising managers to broaden their understanding of key managerial processes including skills, concepts and disciplines. This is achieved by the 1st year of the full-time program (or part-time equivalent) offering the core issues of managerial skills and concepts, followed by the 2nd year of the full-time program (or part-time equivalent) enabling either a deliberate specialisation selected from a range of management focus areas, or the opportunity to study generally across a wide range of advanced management issues.

The degree will be awarded at either Pass or Merit level. For award at Merit level a student must satisfactorily pass all subjects at the first attempt, and maintain a grade average across all subjects of 70% or higher. If a student chooses to study a specialisation successful completion of that specialisation will be acknowledged on the transcript for the degree, as will the achievement of a Merit level award.

Selection for admission to the degree will be on the basis of an appropriate balance between academic qualifications, managerial experience, and career intent. In addition to the requirement of the standard University Application Form candidates are required to submit a detailed statement with supporting documentation of their previous work/managersial experience and a statement of their career strategy. A typical applicant may be expected to have a recognised University degree, 2 years of relevant managerial experience, and be committed to a career in management. Applicants may be required to demonstrate an adequate command of English in a commercial context.

The MBA is intended to be completed in 3-4 sessions full-time and 3-4 years part-time. It is expected that the 8 core subjects will normally be studied first, followed by the specialisation selected. Within each specialisation there is the option of 24 credit points of project studies. The project must be within in the area of specialisation and wherever possible participants are encouraged to relate their studies into issues or problems connected with their current working environment. The degree concludes with the study of a “capstone subject” which integrates the ideas of the program, and is normally studied in the final session of the program or before the commencement of the project.

Course approval: The program of study for each student must be approved by MBA Director. Students who have substantially covered the content of any of the compulsory subjects, may be exempted by the MBA Director from any such subjects, but will be required to substitute an optional subject for each subject for which exemption is granted.

NOTE: Due to different entry criteria and schedules of study, students will NOT be permitted to transfer between MBA/Graduate Diploma Certificate and MCom programs.

2. GRADUATE DIPLOMA IN COMMERCE (MANAGEMENT)

In accordance with the General Rules for graduate diplomas, candidates for the Graduate Diploma in Commerce must have been admitted to the degree of Bachelor in the University or other approved institution. In special circumstances an applicant holding other academic or professional qualifications and with relevant work experience and/or employer support may be admitted as a candidate.

The objective of the Graduate Diploma is to provide a meaningful introductory study of the core concepts of management and management practice. The Graduate Certificate is deliberately structured to provide different programs of study, including off campus programs for specific employment groups (eg the NSW Police Service) or specified professional groups (eg Public Sector managers). There is an on-campus program of study, each
approved program is discrete, and when successfully completed will lead to the award of the Graduate Certificate in Management.

The Graduate Certificate is intended to be completed in one session of full-time study or in two sessions by part-time study. Students qualifying for the Graduate Certificate in Management who have achieved an average of a credit grade or better over all subjects, may be admitted to the Graduate Diploma program. They will receive a credit of up to 24 credit points, depending upon the particular program of study undertaken. On successful completion of the Graduate Diploma in Commerce (Management) they will not be entitled to receive a Graduate Certificate in Management.

Applicants for the Graduate Certificate may be required to demonstrate an adequate command of English in a commercial context.
COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Commerce by Coursework and Research
   Honours Master of Arts by Coursework and Research
3. Master of Commerce by Coursework
4. Graduate Diploma in Commerce (Industrial Relations)

POSTGRADUATE PROGRAM

Industrial Relations

CURRENT RESEARCH AREAS

The areas of research in which staff can offer supervision are indicated by the area covered in Schedules 12 and 13 listed below and by the subjects within those schedules. Other areas may be offered subject to consultation with the Head of Department.

SCHEDULE OF PROGRAMS

SCHEDULE 12: INDUSTRIAL RELATIONS

leading to the Master of Commerce or the Honours Master of Commerce.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
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<tr>
<td>ECON913</td>
<td>Industrial Economics</td>
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<tr>
<td>ECON944</td>
<td>Advanced Topics in Economics - D</td>
<td>8</td>
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<tr>
<td>ECON945</td>
<td>Advanced Topics in Economics - E</td>
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<tr>
<td>ECON946</td>
<td>Advanced Topics in Economics - F</td>
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<tr>
<td>ECON948</td>
<td>Employers and Industrial Relations</td>
<td>8</td>
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<tr>
<td>ECON952</td>
<td>Workplace and Enterprise Industrial Relations</td>
<td>8</td>
</tr>
<tr>
<td>ECON953</td>
<td>Political Economy of Australian Wage Determination</td>
<td>8</td>
</tr>
<tr>
<td>ECON955</td>
<td>Comparative Studies in Industrial Relations</td>
<td>8</td>
</tr>
<tr>
<td>ECON957</td>
<td>Productivity and Labour</td>
<td>8</td>
</tr>
<tr>
<td>ECON958</td>
<td>Industrial Relations and Management Thought</td>
<td>8</td>
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<tr>
<td>MGMT953*</td>
<td>Human Resource Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT962*</td>
<td>Environmental and Occupational Health</td>
<td>6</td>
</tr>
<tr>
<td>LAW966*</td>
<td>Studies in Industrial Law</td>
<td>6</td>
</tr>
<tr>
<td>LAW969*</td>
<td>Occupational Health and Safety Law</td>
<td>6</td>
</tr>
<tr>
<td>GMHC954*</td>
<td>Organisational Psychology</td>
<td>8</td>
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<tr>
<td>PSYC956*</td>
<td>Occupational Psychology</td>
<td>8</td>
</tr>
</tbody>
</table>

*Subject available only to those doing ECON992 Research Report (24 credit points).

For further details, see Subject Requirements in Economics section.

SCHEDULE 13: OTHER POSTGRADUATE SUBJECTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>ECON954</td>
<td>Industrial Relations in Australia</td>
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<tr>
<td>ECON956</td>
<td>Advanced Industrial Relations Processes</td>
<td>8</td>
</tr>
<tr>
<td>ECON973</td>
<td>Employers and Industrial Relations - A</td>
<td>6</td>
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<tr>
<td>ECON975</td>
<td>Advanced Industrial Relations Processes</td>
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<td>ECON991</td>
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<td>ECON992</td>
<td>Research Report</td>
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<tr>
<td>ECON993</td>
<td>Thesis</td>
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</tr>
</tbody>
</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

For the degree of Doctor of Philosophy, candidates enrol in the subject ECON993 Thesis.

2. HONOURS MASTER OF COMMERCE

HONOURS MASTER OF ARTS

The purpose of the Honours Masters degree is to provide graduate students, who have completed the Industrial Relations specialisation for the BCom or BA degree or equivalent, with the opportunity for further in-depth study of advanced topics in industrial relations in preparation for a professional career as an industrial relations expert. Entry requires a BCom or BA degree with a specialisation in Industrial Relations or an equivalent degree.

The Course Rules governing the Honours Masters degree will apply.

The degree of 96 credit points can be studied full-time over two years, or may be studied part-time.

For the Honours Master Degree students must, subject to the subsequent advanced standing or exemption clause, complete:

Either

ECON993 Thesis - 48 credit points together with 48 credit points of approved subjects chosen from Schedules 12 and 13;

or

ECON992 Research Report - 24 credit points

and together with 72 credit points of approved subjects chosen from Schedules 12 and 13.

Students who have completed the BCom(Hons) or BA(Hons) in Industrial Relations, or an equivalent degree, and who have graduated in Honours with a standard of Class II, Division 2 or higher may be given advanced standing or exemption up to a maximum of 48 credit points of the required 96 credit points.
3. MASTER OF COMMERCE

The purpose of this pass degree is to provide graduate students who have completed the Industrial Relations specialisation for the BCom degree or equivalent with the opportunity for further in-depth study of advanced topics in Industrial Relations in preparation for a career in industrial relations. Entry requires a BCom degree with a specialisation in Industrial Relations or an equivalent degree.

The Course Rules governing the Masters Degree will apply. For the Master of Commerce degree students must complete 48 credit points chosen from Schedule 12, including at least 24 credit points of ECON subjects.

In special circumstances the Head of the Department may substitute an approved 900-level subject for a subject or subjects in Schedule 12.

4. GRADUATE DIPLOMA IN COMMERCE

The purpose of this diploma is to provide graduate students who have not completed an Industrial Relations specialisation in their undergraduate degree with the opportunity for advanced study in Industrial Relations.

The Graduate Diploma in Commerce shall be subject to the Course Rules for the award of Graduate Diploma.

The Graduate Diploma will normally occupy two sessions of full-time study or the part-time equivalent.

SUBJECT DESCRIPTIONS

Composition of Subjects
Three hours lectures/seminars per week.

Assessment
Continuous assessment by written assignments, essays and Departmental examinations.

ECON948 Employers and Industrial Relations
8 credit points.
The objective of this subject is to develop a better understanding of the role of management/employers in industrial relations. The subject matter divides into two main areas. First, the role of management in industrial relations within the individual enterprise or organisation, which involves a critical analysis of various theories about management and the enterprise and a survey of management strategies in industrial relations, including negotiating and advocacy techniques. The second area concerns the combination of individual managements into coalitions in the individual enterprise or organisation, and a comparison of Australian employer associations with those in other countries.
Co-ordinator: Dr C Nyland.

ECON952 Workplace and Enterprise Industrial Relations
8 credit points.
This subject will focus on the employment relationship at the level of the firm and workplace with particular reference to contemporary micro-level reform, in a variety of countries in Asia and Pacific Rim. The nature and effects of the economic environment on managerial styles and trade union organisation will also be examined.
Co-ordinator: Ms D Kelly.

ECON953 Political Economy of Australian Wage Determination
8 credit points.
An examination of the broad political and economic contexts which have shaped wage-effort bargaining and the major institutions of industrial relations in Australia from 1850 to the present. Some comparative perspectives will also be developed.
Textbook: Not applicable.
Co-ordinator: Associate Professor R Markey.

ECON954 Industrial Relations in Australia
6 credit points.
Topics include: the structure and nature of trade Unions; the structure and nature of Employer Organisations; issues in Industrial Relations; strategies and tactics in Industrial Relations; the role of the state in Industrial Relations.
Note: ECON954 is available only to students enrolled in the Diploma in Management or in the Master of Business Administration.
Co-ordinator: to be advised.

ECON955 Comparative Studies in Industrial Relations
8 credit points.
A comparative examination of the development and organisation of industrial relations systems in a variety of different countries.
Textbook:
Co-ordinator: Associate Professor R Markey.

ECON956 Advanced Industrial Relations Processes
8 credit points.
This subject will develop concepts, theories and techniques for the choice and evaluation of strategies and tactics in collective bargaining and advocacy. Much of subject will involve case studies and role playing.
Co-ordinator: Ms D Kelly.

ECON957 Productivity & Labour
8 credit points.
An examination of the meaning and measurement of labour productivity, and its relationship to wage bargaining at national industry and enterprise levels. The subject also examines the impact of productivity based wage bargaining on unions, employer organisation and the economy.
Textbook: Readings as prescribed.
Co-ordinator: Associate Professor R Castle.

ECON958 Industrial Relations and Management Thought
8 credit points.
An examination of the ideas and strategies which modern management theorists have developed in order to deal effectively with the open-ended nature of the employment relationship. Particular attention is paid to the reasons why management has developed and applied these theories and the extent to which they have proven successful.
Textbook:
Co-ordinator: Dr C Nyland.

ECON973 Employers and Industrial Relations - A
6 credit points.
Not to count with ECON948.
The subject aims to develop an understanding of the role of employers/management in industrial relations, at the level of the firm and at the level of employer association. It examines theories and strategies of IR management in the firm, and the structure and function of employer associations in Australia and overseas.
Co-ordinator: Dr C Nyland.

ECON975 Advanced Industrial Relations Processes
6 credit points.
Not to count with ECON956.
The subject develops concepts and techniques for the choice and evaluation of strategies and tactics in collective bargaining and advocacy. Much of subject will involve case studies and role playing.
Co-ordinator: Ms D Kelly.

For descriptions of subjects not listed here, refer to Economics section.

* Not on offer in 1996.
MANAGEMENT

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Commerce
3. Honours Master of Arts by Coursework or Research
4. Master of Commerce
5. Master of Business Administration
6. Graduate Diploma in Commerce (Management)
7. Graduate Certificate in Management

MASTER OF COMMERCE PROGRAMS

Human Resource Management
Marketing
Operations Management
Organisational Behaviour
Public Sector Management

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking research degrees.

Advertising and customer satisfaction
Business policy
Enterprise development and entrepreneurship
Human resource management
International management
Interorganisational relations
Management of Change
Management training
Manufacturing strategy
Marketing communication and consumer behaviour
Marketing Research
Operations management
Organisational behaviour and structure
Organisational politics and culture
Professional services marketing
Public sector management
Regional Development
Sociology of Work
Services marketing
Strategic management
Technology and Organisational Change
Total quality management
Women in management

SCHEDULE OF PROGRAMS

GRADUATE CERTIFICATE IN MANAGEMENT

This is a 24 credit point course which may be taken from several approved schedules.
Refer Graduate Business and Professional Education Unit, page 69.

GRADUATE DIPLOMA IN COMMERCE (MANAGEMENT)

This is a 48 credit point course.
Refer Graduate Business and Professional Education Unit, page 69.

MASTER OF BUSINESS ADMINISTRATION

This is a 96 credit point course, offered at Pass or Merit level.
Refer Graduate Business and Professional Education Unit, page 69.

A number of subjects in this schedule have been annotated for further explanation. A key to the numbering of the notes is provided below:

Key to Notes
1. Core subjects only available to MBA/Graduate Diploma/Graduate Certificate students.
2. This subject requires prerequisites - see subject descriptions.
3. MGMT931 will normally be taken as the concluding subject in the MBA sequence, except where specifically stated otherwise by a specialisation schedule or approval by Head of Department of Management.
4. Subject to approval, Head of Department of Accountancy.
5. Students with a sufficient prior background in Economics may be permitted by the Head, Department of Economics to substitute two other subjects listed for these subjects.
6. Enrolment only with permission from the Graduate Co-ordinator, Industrial Relations.
7. Not on offer in 1996.
8. Subjects only available in MCom Program.
9. Subject to the approval of the Program Director.
### GENERAL POSTGRADUATE PROGRAM SCHEDULE

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<td>BUSS903</td>
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<tr>
<td>LAW961</td>
<td>Selected Legal Topics in Management</td>
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<td>ACCY976</td>
<td>Special Topic in Accounting B</td>
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<td>MGMT911</td>
<td>Organisational Behaviour</td>
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<tr>
<td>MGMT915</td>
<td>Management of Change</td>
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<td>MGMT916</td>
<td>Management and Employment Relations</td>
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<tr>
<td>MGMT917</td>
<td>Business Ethics</td>
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<td>MGMT918</td>
<td>Organisational Processes</td>
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<tr>
<td>MGMT919</td>
<td>Human Resource Strategies and TQM</td>
<td>6</td>
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<tr>
<td>MGMT920</td>
<td>Organisational Analysis</td>
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<tr>
<td>MGMT924</td>
<td>Organisations and their Environments</td>
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<tr>
<td>MGMT925</td>
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<td>Selected Topics B</td>
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<td>MGMT927</td>
<td>Australian Government Administration</td>
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<tr>
<td>MGMT928</td>
<td>Public Policy Administration</td>
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<td>MGMT931</td>
<td>Strategic Planning &amp; Policy</td>
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<td>MGMT933</td>
<td>Management of Process Innovation 1</td>
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<td>Management of Process Innovation 2</td>
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<td>MGMT935</td>
<td>Marketing Planning and Strategy</td>
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<td>MGMT936</td>
<td>Consumer Behaviour</td>
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<td>MGMT937</td>
<td>Relationship Marketing and Communications</td>
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<td>MGMT938</td>
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<td>MGMT939</td>
<td>Contemporary Issues in International Marketing</td>
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<td>MGMT940</td>
<td>Innovation and Entrepreneurship</td>
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<td>Small Business Management</td>
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<td>MGMT948</td>
<td>Project in Regional Administration</td>
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<td>MGMT952</td>
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<td>Human Resource Management</td>
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<td>New Product Marketing</td>
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<td>International Marketing Strategy</td>
<td>6</td>
</tr>
<tr>
<td>MGMT960</td>
<td>Case Study</td>
<td>6</td>
</tr>
<tr>
<td>MGMT961</td>
<td>International Business Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT963</td>
<td>Management of Occupational Health and Safety</td>
<td>6</td>
</tr>
<tr>
<td>MGMT965</td>
<td>Occupational Hazards I</td>
<td>6</td>
</tr>
<tr>
<td>MGMT966</td>
<td>Occupational Hazards II</td>
<td>6</td>
</tr>
<tr>
<td>MGMT967</td>
<td>Quantitative Methods</td>
<td>6</td>
</tr>
<tr>
<td>MGMT968</td>
<td>Communication</td>
<td>6</td>
</tr>
<tr>
<td>MGMT970</td>
<td>Contemporary Issues in Services Quality</td>
<td>6</td>
</tr>
<tr>
<td>MGMT976</td>
<td>Competitive Strategy &amp; Analysis</td>
<td>6</td>
</tr>
<tr>
<td>MGMT977</td>
<td>Research for Marketing Decisions</td>
<td>6</td>
</tr>
<tr>
<td>MGMT978</td>
<td>Cross Cultural Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT979</td>
<td>Financial Decision Making</td>
<td>6</td>
</tr>
<tr>
<td>MGMT980</td>
<td>Business Research Methods</td>
<td>6</td>
</tr>
<tr>
<td>MGMT981</td>
<td>MBA Project</td>
<td>24</td>
</tr>
<tr>
<td>MGMT982</td>
<td>Project</td>
<td>18</td>
</tr>
<tr>
<td>MGMT996</td>
<td>Managing for Innovation</td>
<td>6</td>
</tr>
<tr>
<td>ECON907</td>
<td>Cost Benefit Analysis</td>
<td>8</td>
</tr>
<tr>
<td>ECON954</td>
<td>Industrial Relations in Australia</td>
<td>6</td>
</tr>
<tr>
<td>GHMA914</td>
<td>Ergonomics</td>
<td>8</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.

### MASTER OF COMMERCE PROGRAMS

The MCom is currently under review and students are required to obtain an approved program of study in conjunction with their MCom Specialisation Director.

Subjects in approved programs will be selected from, but not necessarily confined to, the specialisation outlines described below.

MCom Program Director: Dr Robert Jones.

### MASTER OF COMMERCE - HUMAN RESOURCE MANAGEMENT SPECIALISATION

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT911</td>
<td>Organisational Behaviour</td>
<td>6</td>
</tr>
<tr>
<td>MGMT920</td>
<td>Organisational Analysis</td>
<td>6</td>
</tr>
<tr>
<td>MGMT919</td>
<td>Human Resource Strategies and TQM</td>
<td>6</td>
</tr>
</tbody>
</table>
**MASTER OF COMMERCE - HUMAN RESOURCE MANAGEMENT SPECIALISATION (cont'd).**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>MGMT915</td>
<td>Management of Change</td>
<td>6</td>
</tr>
<tr>
<td>MGMT916</td>
<td>Management and Employment Relations</td>
<td>6</td>
</tr>
<tr>
<td>MGMT953</td>
<td>Human Resource Management</td>
<td>6</td>
</tr>
<tr>
<td>LAW960</td>
<td>Law for Professionals</td>
<td>6</td>
</tr>
</tbody>
</table>

*and an Industrial Relations Subject approved by the Course Director*

For further details, see Course Requirements below.

Specialisation Director: Associate Professor C Romm.

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**MASTER OF COMMERCE - MARKETING SPECIALISATION**

Subjects to be taken from the following list after discussion and approval from the MCom-Marketing director:

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT922</td>
<td>Marketing Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT931</td>
<td>Strategic Planning and Policy</td>
<td>6</td>
</tr>
<tr>
<td>MGMT938</td>
<td>Managing Services Marketing</td>
<td>6</td>
</tr>
<tr>
<td>MGMT939</td>
<td>Contemporary Issues in International Marketing</td>
<td>6</td>
</tr>
<tr>
<td>MGMT967</td>
<td>Quantitative Methods</td>
<td>6</td>
</tr>
<tr>
<td>MGMT976</td>
<td>Competitive Strategy and Analysis</td>
<td>6</td>
</tr>
<tr>
<td>MGMT977</td>
<td>Research for Marketing Decisions</td>
<td>6</td>
</tr>
<tr>
<td>MGMT936</td>
<td>Consumer Behaviour</td>
<td>6</td>
</tr>
<tr>
<td>MGMT937</td>
<td>Relationship Marketing and Communications</td>
<td>6</td>
</tr>
<tr>
<td>MGMT956</td>
<td>New Product Marketing</td>
<td>6</td>
</tr>
<tr>
<td>MGMT957</td>
<td>International Marketing Strategy</td>
<td>6</td>
</tr>
<tr>
<td>MGMT970</td>
<td>Contemporary Issues in Services Quality</td>
<td>6</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.

Specialisation Director: Associate Professor P Patterson.

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**MASTER OF COMMERCE - PUBLIC SECTOR MANAGEMENT SPECIALISATION**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT911</td>
<td>Organisational Behaviour</td>
<td>6</td>
</tr>
<tr>
<td>MGMT920</td>
<td>Organisational Analysis</td>
<td>6</td>
</tr>
<tr>
<td>MGMT915</td>
<td>Management of Change</td>
<td>6</td>
</tr>
<tr>
<td>MGMT927</td>
<td>Australian Government Administration</td>
<td>6</td>
</tr>
<tr>
<td>MGMT928</td>
<td>Public Policy and Administration</td>
<td>6</td>
</tr>
<tr>
<td>MGMT924</td>
<td>Organisations and their Environments</td>
<td>6</td>
</tr>
<tr>
<td>ACCY983</td>
<td>Studies in Government Accounting</td>
<td>6</td>
</tr>
<tr>
<td>ECON903</td>
<td>Public Finance</td>
<td>8</td>
</tr>
</tbody>
</table>

*plus a subject from the General Postgraduate Schedule.*

For further details, see Course Requirements below.

Specialisation Director: to be advised.

This specialisation is not on offer in 1996.

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**MASTER OF COMMERCE - OPERATIONS MANAGEMENT SPECIALISATION**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT911</td>
<td>Organisational Behaviour</td>
<td>6</td>
</tr>
<tr>
<td>MGMT947</td>
<td>Quality Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT952</td>
<td>Production and Operations Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT953</td>
<td>Human Resource Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT967</td>
<td>Quantitative Methods</td>
<td>6</td>
</tr>
<tr>
<td>MGMT979</td>
<td>Financial Decision Making</td>
<td>6</td>
</tr>
<tr>
<td>MGMT933</td>
<td>Management of Process Innovation 1</td>
<td>6</td>
</tr>
<tr>
<td>or MGMT934</td>
<td>Management of Process Innovation 2</td>
<td>6</td>
</tr>
</tbody>
</table>

*plus a subject from the Postgraduate Schedules.*

For further details, see Course Requirements below.

Specialisation Director: Mr J Flanagan.
MASTER OF COMMERCE - ORGANISATIONAL BEHAVIOUR SPECIALISATION

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT911</td>
<td>Organisational Behaviour</td>
<td>6</td>
</tr>
<tr>
<td>MGMT920</td>
<td>Organisational Analysis</td>
<td>6</td>
</tr>
<tr>
<td>MGMT915</td>
<td>Management of Change</td>
<td>6</td>
</tr>
<tr>
<td>MGMT924</td>
<td>Organisations and their Environments</td>
<td>6</td>
</tr>
<tr>
<td>MGMT933</td>
<td>Human Resource Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT979</td>
<td>Financial Decision Making</td>
<td>6</td>
</tr>
<tr>
<td>plus either</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGMT918</td>
<td>Organisational Processes</td>
<td>6</td>
</tr>
<tr>
<td>or</td>
<td>MGMT961 International Business Management</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>plus a subject from the Postgraduate Schedules.</td>
<td></td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.
Specialisation Director: to be advised.
This specialisation is not on offer in 1996.

GRADUATE DIPLOMA IN COMMERCE (OCCUPATIONAL HEALTH AND SAFETY)

Course Director: Dr M Zanko.
This course will not be offered in 1996.

HONOURS MASTER OF ARTS, AND HONOURS MASTER OF COMMERCE
Compulsory subjects for students not holding an Honours degree in Management or similar and undertaking a 96 credit point Masters degree.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>MGMT986</td>
<td>Special Topic A</td>
<td>12</td>
</tr>
<tr>
<td>MGMT987</td>
<td>Special Topic B</td>
<td>12</td>
</tr>
<tr>
<td>MGMT988</td>
<td>Special Topic C</td>
<td>12</td>
</tr>
<tr>
<td>MGMT989</td>
<td>Special Topic D</td>
<td>12</td>
</tr>
<tr>
<td>plus</td>
<td>MGMT991 Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

For students with an Honours degree or equivalent, an agreed combination of course work from the list of 900-level subjects offered by Management and one of the following:

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT990</td>
<td>Minor Thesis</td>
<td>24</td>
</tr>
<tr>
<td>MGMT991</td>
<td>Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

Course Director: Dr M Cicic

DOCTOR OF PHILOSOPHY

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT991</td>
<td>Major Thesis</td>
<td></td>
</tr>
</tbody>
</table>

Course Director: Professor S Linstead.

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY
Candidates for this degree enrol in MGMT991. Candidates should refer to the University's general PhD Rules.

2. HONOURS MASTER OF COMMERCE

(i)(a) Candidates who have completed the requirements for the award of the BCom (Hons) in Accountancy, Economics, Management, or Marketing at a standard of Class II, Division 2 or higher, or an equivalent degree, may qualify for the award of the MCom (Hons) degree by completing at honours standard any one of the following courses of study -

(i) Thesis (48 credit points), or (ii) Research report (24 credit points) and coursework aggregating not less than 24 credit points,

(b) Subjects are to be selected from 900-level subjects offered by the Department of Management or from the Department of Accountancy or the Department of Economics and included in the Schedule of Graduate Subjects; provided that:

(i) A combination of subjects may be approved by the Heads of the relevant units, and

(ii) Subjects aggregating not more than 12 credit points may be selected from those offered by other Departments, where approval is given by the Heads of the respective Departments (ie the Department offering the subject on one hand, and on the other, either Accountancy, Economics or Management as appropriate in each case. The appropriate Department would be the Department in which the student had taken or planned to take more than 48 credit points in Honours subjects for the undergraduate degree and graduate subjects for this degree).

(c) A candidate may not include for this degree subjects similar in content to subjects included in the honours part of the undergraduate course.

(2) Candidates who have completed the requirements for the BCom degree at a standard less than Honours Class II, Division 2, or equivalent degree, may, subject to the attainment of a satisfactory standard in that degree, be permitted to register as candidates for the MCom (Hons) degree. Such candidates may qualify for the award of the degree by completing at honours standard subjects aggregating not less than 96 credit points of which subjects aggregating not less than 48 credit points shall be selected from the specialisation Schedule.

(3) Candidates holding the combined BCom(Hons) degree including the compulsory 400-level subjects aggregating 30 credit points may
proceed to the 48 credit point MCom(Hons) degree; other candidates (with the combined Honours degree who have not completed all the compulsory subjects) will be required to complete any of the compulsory subjects plus subjects aggregating 48 credit points.

(4) Candidates required to undertake a preliminary program or required to complete designated subjects at an appropriate standard in accordance with the Honours Master Rules may have their enrolment cancelled in the event that the preliminary program of designated subjects is not completed at the appropriate standard.

3. HONOURS MASTER OF ARTS

(1) Candidates who have completed at an acceptable standard the requirements for the BA(Hons) degree in Accountancy, Economics or Management at a standard of Class II, Division 2 or higher, or an equivalent degree, may qualify for the award of the MA (Hons) degree by completing at honours standard any one of the courses of study listed below under the Honours Master of Commerce degree.

(b) See corresponding comments under the Honours Master of Commerce degree, Management.

(2) Candidates who have completed the requirements for the BA (Hons) degree at a standard less than Class II, Division 2, or equivalent degree, may subject to the attainment of a satisfactory standard in that degree, be permitted to register as candidates for the MA (Hons) degree by completing at honours standard any one of the courses of study listed below under the Honours Master of Commerce degree.

A candidate who has not completed a BCom or BBus and not studied any commerce subjects at undergraduate level will be required to take a 96 credit point course, which may include 48 credit points of undergraduate subjects from the Commerce Schedule, as determined by the Program Director. 24 credit points of this undergraduate course work must be taken at the 300-level.

5. MASTER OF BUSINESS ADMINISTRATION

Refer Graduate Business and Professional Education Unit.

6. GRADUATE DIPLOMA IN COMMERCE (MANAGEMENT)

Refer Graduate Business and Professional Education Unit.

7. GRADUATE CERTIFICATE IN MANAGEMENT

Refer Graduate Business and Professional Education Unit.

SUBJECT DESCRIPTIONS

MGMT903 Investment
Management

Assessment: seminars, essay(s) and examinations.


Textbook: to be advised.

Coordinator: to be advised.

MGMT905 Business Ethics and Law**

Assessment: projects, tutorials and examination.

The legal studies component covers the following: legal basis of business and organisations; the liabilities of managers and company directors in law; legal processes that impinge on the managerial function eg EEO, FOI, IR, and discrimination legislation. The ethics component will cover both Australian and international business environments to deal with the ethical issues of: codes of conduct and practice; morality and business; controlling and coding ethical practices within organizations; ethical issues in running organizations; environmental and personal factors affecting ethical choices; professional codes of conduct.

Textbook: to be advised.

Coordinator: to be advised.

MGMT906 Managing People At Work***

Assessment: seminar(s), assignment(s) and examination.

Students taking MGMT906 cannot also enrol in MGMT911. It is recommended that MGMT906 and MGMT907 be studied in parallel or MGMT906 taken before MGMT907.

This subject focuses on the individual and group skills needed by managers to function in organisational settings. The skill focus will include: communication skills; team building; interpersonal relationships; conflict and stress management; time and stress management; leadership and communication; organisation design and job design; appraisal of performance; processes of organisational change and development.

Textbook: to be advised.

Coordinator: Dr R Jones.

MGMT911 Organisational Behaviour

Assessment: seminars, case studies, essay(s) and examination(s).

This subject examines the process of change within an organisation. Issues under

MGMT915 Management of Change

Assessment: seminars, case studies, essay(s) and examination(s).

This subject examines the process of change within an organisation. Issues under

** This subject is only available to MBA/GDipCom(MGMT)/GCertMgmt students unless specific approval is sought from the MBA Director.

*** This subject is only available to MBA/GDipCom(MGMT)/GCertMgmt and GCert/GDipTQM students unless specific approval is sought from the MBA Director.
discussion will be: change models; characteristics of innovative organisations; acceptance/resistance of change; factors of change; reasons for change; intervention strategies; planning and monitoring change; sustaining change.

Textbook: to be advised.

Co-ordinator: Dr R Jones.

MGMT916 Management and Employment Relations
6 credit points (3 hrs per wk).

Assessment: assignments, seminars, examination.

The subject explores the use of different social theories of management for the analysis of the managerial policies that cover the employment relationship. The impact of technical, administrative skill, of negotiation and of culture creation in the management of work and employment relationships are assessed. The development of policies on recruitment and selection, training and career development, job design, organisational design, job evaluation, performance appraisal and incentive payment schemes are analysed.

Textbook: to be advised.

Co-ordinator: Dr R Jones.

MGMT917 Business Ethics*
6 credit points (3 hrs per wk).

Pre-requisite: To not count with MGMT351
Assessment: essay, case study, examination.

An examination of central issues in business ethics. Topics covered will be ones such as: the concept of social responsibility; individual values and corporate values; competing models for making ethical decisions, i.e. consequentialist and non-consequentialist; ethics for the employee, the customer, the environment, the community, the government and the multinational context. Specialised assignments and tutorials will relate these topics to postgraduate levels of analysis and experience in the business environment.

Textbook: to be advised.

Co-ordinator: to be advised.

MGMT918 Organisational Processes
6 credit points (3 hrs per wk).

Assessment: assignments, seminars, examination.

This subject will examine the nature of organisational processes using three primary levels of analysis: the organisation, the work group and the individual. The focus will be on advanced theoretical and applied skills in a range of topic areas including: inter and intra-organisational power, emergence and social boundaries of organisations, self-directed work arrangements, goal setting, organisational aspects of communication, and substantive problem solving techniques in the human resource domain.

Textbook: to be advised.

Co-ordinator: Dr W Rifkin.

MGMT919 Human Resource Strategies and TQM
6 credit points (3 hrs lectures/seminars per wk).

Assessment: assignments, seminars, examination.

This subject will examine the human resource management aspects of Total Quality Management (TQM). TQM developed as a set of managerial practices, a focus on teamwork and cultural change intended to create management systems able to compete in world markets. The specific elements of TQM that relate to the management of people will be analysed in terms of their theoretical and practical implications for management. Case studies on the implementation of TQM will be discussed. Future trends in management practice and management theory arising from the development of TQM will be assessed.

Textbooks:

Co-ordinator: Professor G Palmer.

MGMT920 Organisational Analysis
6 credit points (3 hrs per wk).

Assessment: seminars, essays, examinations.

This subject examines organisations and the development of organisation design, structure and control. Topics will include: major components of structure, determinants of structure and organisational design. Application of theory in the areas of job design, the management of change, management of the firm, new technology, organisation culture, and organisation-environment relations will also be considered.

Textbook: to be advised.

Co-ordinator: Dr G Sewell.

MGMT922 Marketing Management**
6 credit points (3 hrs per wk).

Assessment: case studies, essays, examination.

The subject examines the contemporary view of marketing and focuses on the following areas: identification of market opportunities; segmentation and target marketing; marketing mix decisions; service marketing; international marketing.

Textbook: to be advised.

Co-ordinator: Dr M Cicic.

MGMT924 Organisations and their Environments
6 credit points (3 hrs/ wk lectures/seminars).

Assessment: assignments, seminars, examination.

Relations between the different levels of Australian government, public-private sector interactions, relations between unions, government and business, and inter-departmental relations. The inter-organisational relations will be examined as bases for collaborative planning and action within regions, including processes and problems of developing such bases.

Textbook: to be advised.

Co-ordinator: Dr J Zapp.

** This subject is only available to MBA/GDipCom(MGMT)/GCerrMgmt students unless specific approval is sought from the MBA Director.

MGMT925 Selected Topic A
6 credit points.

A special topic selected from any area of management. The selection would be made by the Head of the Department, taking into account the expertise of academic staff, including visiting staff, and the interests of students.

Co-ordinator: to be advised.

MGMT926 Selected Topic B
6 credit points.

A special topic selected from any area of management. The selection would be made by the Head of the Department, taking into account the expertise of academic staff, including visiting staff, and the interests of students.

Co-ordinator: to be advised.

MGMT927 Australian Government Administration
6 credit points (2 hrs per wk lectures/seminars).

Assessment: assignments, tutorials, examinations.

An introduction to the development of government administration in the Australian States, the Commonwealth and Local Government. Inter-governmental relations within a federal system. Basic principles of government administration including the Westminster parliamentary system and features of Australian Government administration such as federal and statutory authorities. An introduction to regional government administration, including an overview of its development in Australia and the political and administrative issues raised.

Textbook: to be advised.

Co-ordinator: to be advised.

MGMT928 Public Policy and Administration
6 credit points (2 hrs per wk lectures/seminars).

Assessment: assignments, tutorials, examinations.

The process of formulating public policy through existing governmental machinery, the pressures created by present and emerging public policy issues, problems and issues in regional public policy formulation, and the role and problems of regional administration.

Textbook: to be advised.

Co-ordinator: to be advised.

MGMT931 Strategic Planning and Policy
6 credit points (3 hrs per wk).

Pre-requisite: This is the Capstone course for the MBA and as such is to be taken only during the Final semester of the MBA program.

Assessment: examination and essays.

The subject will use case studies as a key teaching vehicle and will examine strategy in the context of organisations. Key topic areas may include: strategy formulation, choice and implementation; strategy and structure and the organisational context; strategy and competitive advantage; interrelationships, diversification, integration, acquisition, and internal development; global strategies.

Textbook: to be advised.

Co-ordinator Associate Professor AB Sim.
MGMT933 Management of Process Innovation

6 credit points (3 hrs per wk).
Assessment: group project, essays, and examination.

A key concern of contemporary technology management is improving the rate and quality of process innovation by adopting new methods to successfully integrate the human, organisational and technological factors. This subject introduces the student to the interdependent human and technological character of production systems and methods for integrating technical and organisational expertise in new production system designs. The nature of production systems and process innovation is introduced through a critique of traditional technological determinist and contingency models, and the use of contemporary configurational theory. The different approaches to production system design are introduced through a critical examination of the changing perspectives within organisations of process engineering, employee management, information systems management, and workers representatives.

Textbooks:
- Co-ordinator: Associate Professor RJ Badham.

MGMT934 Management of Process Innovation

6 credit points (3 hrs per wk).
Assessment: group presentation, essays, and examination.

Contemporary management literature on process innovation is dominated by universalistic contingency models of 'best practice'. In contrast, this subject develops a more 'contextual' model of innovation, critically reviews alternative explanations of the nature and direction of process innovation, and examines a range of integrated models and methods for integrating technical and organisational innovation in the effective realisation of new production systems. This subject introduces students to the following models of process innovation: sequent-engineering model; labour process and socio-technical models; strategic choice and processual models; paradigm, trajectory and configurational models; and inter-organisational and network models of incremental learning and innovation. Implementation strategies and methods are investigated through a discussion of the implied strategies in different models of innovation, strategic choices in implementing strategies, and contemporary strategic planning, cross functional team formation, participation, and problem solving methods.

Textbooks:
- Co-ordinator: Associate Professor RJ Badham.

MGMT935 Marketing Planning and Strategy

6 credit points (3 hrs per wk).
Pre-requisite: MGMT922.
Assessment: case studies, presentations and examination.

With the use of case studies, this subject will examine the development and implemen-
tation of marketing plans and strategies at the organisational level. Key issues may include: marketing's strategic role in the organisation, marketing strategy and competitive advantage, including marketing mix strategies, marketing strategy formulation, implementation and control.

Textbook: to be advised.
Co-ordinator: Ms L White.

MGMT936 Consumer Behaviour

6 credit points (3 hrs per wk).
Pre-requisite: MGMT922 or equivalent.
Assessment: group project, assignment, final examination.

The subject will explore the motives of consumers during the purchase of products and services. It will investigate sociological and psychological concepts as they specifically apply to the behaviour of consumers in order to learn how to make more effective marketing decisions. In addition to a required text that will be used to understand the theory, readings and case studies will be assigned for practical application of the concepts.

Textbook: to be advised.
Co-ordinator: Dr C Hill.

MGMT937 Relationship Marketing and Communications

6 credit points (2 hrs lectures/seminars per wk).
Pre-requisite: MGMT922.
Assessment: case studies and essays.

Traditionally marketing has been about getting customers. Relationship marketing addresses the twin concerns - getting and keeping customers. The subject also examines the nature of communication in marketing and critically evaluates the promotional strategy planning process: situation analysis; promotional objectives; promotional budget; management of advertising and sales promotion efforts; evaluation of the effectiveness of promotion. This subject only available to MCom students.

Textbook: to be advised.
Co-ordinator: Mr P Scott.

MGMT938 Managing Services Marketing

6 credit points (3 hrs lectures per wk).
Pre-requisite: MGMT922 or equivalent.
Assessment: assignment, class presentation, examination.

This advanced course is designed to provide an in-depth analysis of the problems facing services marketing managers in both consumer and business-to-business service firms. Through lectures, class discussions, readings and case analysis, plus observation of firms in actual service situations, students will develop insights concerning the unique characteristics of marketing in the services sector. Major topics include: Problems and Strategies in Services Marketing; Understanding the Service Experience; Application of Consumer Decision Models to Service Marketing; Role Theory Perspectives on Dyadic Interactions; Dimensions of Service Quality; Services Marketing Mix; Growth Strategies for Service Firms; Marketing Implementation Issues. This subject is only available to MCom students.

Textbook: to be advised.
Co-ordinator: Associate Professor P Patterson.

MGMT939 Contemporary Issues in International Marketing

6 credit points (3 hrs per wk lectures/seminars).
Pre-requisite: MGMT922.
This subject examines the role of marketing in national economic development and the major focus will be Developing countries as a market segment. Topics will include: marketing to developing countries the applicability of marketing concepts, marketing channels, the formal and informal marketing system and conditions associated with entrepreneurship, marketing consumer issues in developing countries and the role of government in marketing.

Textbook: to be advised.
Co-ordinator: to be advised.

MGMT940 Innovation and Entrepreneurship

6 credit points (2 hrs lectures per wk).
Assessment: essay(s) and examinations.

The nature and role of entrepreneurs and entrepreneurship. The economic, behavioural and institutional conditions associated with entrepreneurship, Entrepreneurship and new high technology enterprises: empirical analysis at a firm and industry level, spin-off enterprises. Entrepreneurship and managing the corporate venture during development.

Textbook: to be advised.
Co-ordinator: Mr L Kirchmajer.

MGMT941 Small Business Management I

6 credit points (2 hrs lectures per wk).
Assessment: essay(s) and examinations.

This subject develops financial, marketing, organisational and production strategies for established and growing small businesses. It integrates functional knowledge developed in earlier subjects and examines this in a small business context through the development of business planning procedures.

Textbook: to be advised.
Co-ordinator: Mr L Kirchmajer.

MGMT942 Small Business Management II

6 credit points (3 hrs per wk).
Assessment: essay(s) and examinations.

Selected issues in small business management. These may draw from a wide field depending on student interest. Topics may include licensing, franchising, use of advisory services, negotiating skills, stress management, service sector management and marketing, co-operatives, family business and management succession.

MGMT943 Enterprise Project

12 credit points (2 hrs lectures per wk).
Assessment: project work.

Students will develop their own small business project. This would normally involve them in developing new product/service proposals and planning the establishment of a new enterprise. The completion of a business plan in a form that could be assessed by potential investors and/or financiers would be a major goal of this project.

* Not on offer in 1996.
MGMT945 Technology Enterprise Project  
6 credit points (2 hrs lectures per wk).  
Assessment: assignment, examination, seminar.  
This subject will cover the preparation of feasibility studies, sources of business opportunities, key elements of business plans and development of a business plan. Not to be taken with MGMT944.  
Textbook: to be advised.  
Co-ordinator: Mr L Kirchenmayer.

MGMT947 Quality Management  
6 credit points (2 hrs lectures per wk).  
Assessment: assignments and examination.  
This subject provides the student with an understanding of how an organisation can successfully make the transition to Total Quality Management (TQM). Specific topics will include: Japanese management practices and the impact on competitive advantage; TQM as part of corporate strategy; Kanban and JIT production management; quality circles; statistical tools and controls; Kaizen management; applications, implementation and auditing of TQM. Special emphasis is placed on the necessary changes in organisational structure and culture. Textbook: to be advised.  
Co-ordinator: Mr J Flanagan.

MGMT948 Project in Regional Administration*  
6 credit points (3 hrs per wk lectures/seminars).  
Assessment: major project.  
Participants will be challenged to investigate a regional issue or the application of a wider public policy to a region and develop proposals for effective strategies, working in the mode of a governmental task force.  
Co-ordinator: to be advised.

MGMT952 Production and Operations Management  
6 credit points (3 hrs per wk).  
Assessment: case studies, essay(s) and examination.  
A study of the design and operation of activities for the production of goods and services. Topics include: qualitative and quantitative forecasting, production planning and scheduling, management of quality and productivity, project management, and flexible manufacturing systems (FMS). Particular emphasis will be placed on a comparison of Japanese production and quality management methods with the traditional Western methods, total quality management (TQM), computer aided manufacturing (CAM), and implications for human resource management.  
Textbook: to be advised.  
Co-ordinator: Mr J Flanagan.

MGMT953 Human Resource Management  
6 credit points (3 hrs per wk).  
Assessment: seminars, case studies, essay(s) and examination(s).  
Managing people at work, including recruitment and selection, human resource planning, performance appraisal, training and development, compensation, health and safety, and ergonomics.  
Textbook: to be advised.  
Co-ordinator: Dr G Sewell.

MGMT954 Special Topic in Management A*  
6 credit points.  
Assessment: seminars, case studies, essay(s) and examination(s).  
A special topic selected from any area of management. The selection would be made by the Head of the Department, taking into account the expertise of academic staff, including visiting staff, and the interest of students.  
Co-ordinator: to be advised.

MGMT955 Special Topic in Management B*  
6 credit points.  
Assessment: seminars, case studies, essay(s) and examination(s).  
A special topic selected from any area of management. The selection would be made by the Head of the Department, taking into account the expertise of academic staff, including visiting staff, and the interest of students.  
Co-ordinator: to be advised.

MGMT956 New Product Marketing  
6 credit points (3 hrs per wk).  
Pre-requisite: MGMT922 or equivalent  
Assessment: seminars, case studies and examination(s).  
The subject will be taught in two parts. The first part will involve critical analysis of certain concepts that can be used to obtain a deeper understanding about the nature of products. This includes product life cycle, segmentation, product positioning and the product portfolio concepts. The major emphasis of the subject will be placed on the second part which will be concerned with the new product development process. This process will be examined in detail and special consideration will be given to new industrial products. In essence, the subject will be concerned with the question of how to reduce the risk of new product failure.  
Textbook: to be advised.  
Co-ordinator: Ms L White.

MGMT957 International Marketing Strategy  
6 credit points (3 hrs lecture/seminar).  
Pre-requisite: MGMT922  
Assessment: class participation, two essays and final examination.  
The course will encompass the issues involved in International Marketing. Primary focus will be on the strategic aspects with particular emphasis on environmental consideration and international marketing decisions in the global context. A managerial perspective will be adopted and decision-making skills will be imparted through the case method of instruction.  
Textbook: to be advised.  
Co-ordinator: Dr M Cicic.

MGMT960 Case Study  
6 credit points.  
An in depth analysis of a particular managerial problem encountered in a specific company or industry situation.  
Textbook: to be advised.  
Co-ordinator: Dr M Zanko.

1 Enrolment subject to approval by Head of Department of Management.

MGMT961 International Business Management  
6 credit points (2 hrs lectures/tutorials/seminars).  
Assessment: examination and/or coursework.  
This course will deal with the identification, analysis and resolution of strategic and functional issues of strategy and action within the context of firms operating in international and global business environment. Through the study of major issues in strategic and functional areas of international business operations and the analysis of complex cases and project topics, students will develop skills in analysing competitive forces in global markets and in understanding the basis for successful international strategies.  
Textbook: to be advised.  
Co-ordinator: Associate Professor AB Sim.

MGMT963 Management of Occupational Health and Safety*  
6 credit points (3 hrs per wk).  
Assessment: assignments, seminars, examination.  
This subject examines issues associated with the establishment of programs for the effective management of Occupational Health, Safety and Rehabilitation. Topics include: Technical and motivational programs; the role of the specialist; benefit-cost analysis, emergency and disaster management, networking within and between organisations, design of accident investigation and hazard assessment reporting systems, and the impact of work organisation on occupational health and safety.  
Textbook: to be advised.  
Co-ordinator: to be advised.

MGMT965 Occupational Hazards I*  
6 credit points (3 hrs per wk lecture/seminar).  
Assessment: assignments, tutorials, examination(s).  
This subject will deal with the various hazards which may affect the health of employees; significant agents of injury or disease encountered in work places; their effects, methods of avoidance or control and preliminary as well as rehabilitative treatment of workers affected by those agents will be discussed.  
Textbook: to be advised.  
Co-ordinator: to be advised.

MGMT966 Occupational Hazards II*  
6 credit points (3 hrs per wk lecture/seminar).  
Assessment: research report.  
This subject extends the study initiated in Occupational Hazards I, and affords the opportunity for students to make an intensive study of a hazard or group of hazards of particular interest to them.  
Textbook: to be advised.  
Co-ordinator: to be advised.

MGMT967 Quantitative Methods  
6 credit points (3 hrs per wk lecture/seminar).  
Assessment: assignments, tutorials, examinations.  
This subject introduces the quantitative techniques used to compile, interpret and analyze data. A particular emphasis will be given on the role of the computer, and the subject will provide a coverage of the main quantitative techniques used in business as an aid to decision-making.  
Textbook: to be advised.  
Co-ordinator: to be advised.

* Not on offer in 1996.
MGMT968 Communication*
6 credit points (3 hrs per wk lecture/seminar).
Assessment: assignments, tutorials, examinations.
This subject enables a study of effective communication techniques, with a view to optimising students' intervention on organisational issues. This subject requires a high standard of English. Students with limited fluency will be encouraged to take MGMT961 as an alternative.
Textbook: to be advised.
Co-ordinator: to be advised.

MGMT970 Contemporary Issues in Services Quality
6 credit points (3 hrs per wk).
Pre-requisite: MGMT938 - not applicable to TQM students.
Assessment: critique of academic literature, case presentations, assignments.
This advanced course is designed to follow on from MGMT938 (Managing Services Marketing). It will focus on advanced topics in service quality, customer satisfaction with services, and strategic issues relating to the marketing of service firms. Emphasis will be placed on reviewing contemporary readings in the academic and professional literature. Available only to MCom and TOM students.
Co-ordinator: Associate Professor P. Patterson.

MGMT976 Competitive Strategy and Analysis
6 credit points (3 hrs per wk).
Assessment: seminars, essays and examination.
This subject introduces a conceptual framework for analysing competitors and competition in industry. Topics include: strategic group analysis; industry-structure analysis; market power and rivalry; entry and exit barriers; and organisational strategies of industry leaders. Emphasis will be placed on developing practical skills in analysis of empirical research methods in business. The subject is designed to familiarise students with the basic tools and techniques of empirical research methods in business.
Textbook: to be advised.
Co-ordinator: to be advised.

MGMT977 Research for Marketing Decisions
6 credit points (3 hrs per wk).
Assessment: seminars, essays and examination.
Pre-requisite: MGMT922. If students have not studied Quantitative Methods in their previous undergraduate work, it is strongly recommended that they take MGMT967 prior to, or concurrently with MGMT977. This subject is concerned with examining the techniques and principles for systematically collecting, recording, analysing, and interpreting data that can aid decision makers who are involved with marketing products, services, or ideas. Topics covered include: the structure and function of research information; problem definition and research design; the measurement of consumer attitudes and preferences; design of sampling plans; collecting primary and secondary data; analysing and interpreting statistical research results.
Textbook: to be advised.
Co-ordinator: Associate Professor P. Patterson.

MGMT978 Cross Cultural Management
6 credit points (3 hrs per wk).
Assessment: case analysis, seminar presentation, project and/or examination.
Pre-requisite: MGMT961. This course will cover management practices, issues and theory across cultures in international business. Topics include the impact of different cultural dimensions on international management, comparative management practices and implications for international/global managers. On successful completion of this course, students will have an appreciation and knowledge of managing across cultural boundaries in international business.
Textbook: to be advised.
Co-ordinator: to be advised.

MGMT979 Financial Decision Making**
6 credit points (3 hrs per wk).
Assessment: seminars, assignments, essays, and examination.
This subject focuses on the quantitative and qualitative techniques available to managers in problem solving and decision making in organizations. The quantitative dimensions will be based on decision models and criteria for rational decision making under conditions of risk and uncertainty. Emphasis will be given to financial decision making in areas such as capital investments, forecasting, budgeting and financial planning.
Textbook: to be advised.
Co-ordinator: to be advised.

MGMT980 Business Research Methods
6 credit points (3 hrs per wk).
Assessment: seminars, assignments, essay(s), examination(s).
The subject is designed to familiarise students with the basic tools and techniques of empirical research methods in business. A part of the assessment procedures will include a problem identification project in which students will be given some 'hands-on' experience in identifying suitable business problems and formulating an appropriate research design. These 'problem identification' projects would normally form the basis for the students' research project. Topics include the following: Introduction to philosophy of research; Problem identification and hypothesis development; Modes of designing research; Validity and reliability problems; Techniques for measuring characteristics; Sample size and response rates; Analysis of data.
Textbook: to be advised.
Co-ordinator: Associate Professor C. Romm.

MGMT981 MBA Research Project
24 credit points.
Pre-requisite: MGMT980 and completion of at least 42 credit points of MBA subjects at an undergraduate work and reading as prescribed by the Head of the Department of Management. This subject constitutes the second component of the research proposal developed in MGMT980. Students will have an appreciation and understanding of various problems in research and the ability to design and conduct a research project. This subject is to be taken concurrently with MGMT981 MBA Research Project and provides a substantive project report to an approved format will be the output from this subject.
Co-ordinator: Professor M. Hough.

MGMT982 Project Management
18 credit points (individual contact with supervisor).
Pre-requisite: MGMT980. This subject constitutes the second component of the project study option within the MBA. This subject enables the student to implement a learning experience in the project management discipline.
Textbook: to be advised.
Co-ordinator: Professor M. Hough.

MGMT986 Special Topic A
12 credit points.
NB. May be taken only with permission of the Head of Department of Management.

MGMT987 Special Topic B
12 credit points.
NB. May be taken only with permission of the Head of Department of Management.

MGMT988 Special Topic C
12 credit points.
NB. May be taken only with permission of the Head of Department of Management.

MGMT989 Special Topic D
12 credit points.
Master of Commerce Honours qualifying subjects consisting of a program of course work and reading as prescribed by the Head of the Department of Management.
Co-ordinator: to be advised.

MGMT990 Minor Thesis
24 credit points.

MGMT991 Major Thesis
48 credit points.

MGMT996 Managing for Innovation
6 credit points (2 hrs per wk).
Assessment: assignments, examinations.
This subject will deal with the development and creation of innovative business opportunities for both the start-up entrepreneurial team and the existing organisation. The material to be covered shall include: Developing an innovative culture in organisations; Sourcing innovative opportunities for the organisation both internally and externally; Overcoming barriers to innovation; Changing bias towards creativity in employees and management; Initial screening and evaluation of innovative opportunities; Critique of contemporary innovation literature.
Textbook: to be advised.
Co-ordinator: to be advised.

** This subject is only available to MBA/GDipCom(MGMT)/GCertMgmt students unless specific approval is sought from the MBA Director.

* Not on offer in 1996.
FACULTY OF CREATIVE ARTS

FACULTY OFFICE

Dean: Professor Sharon Bell  
Associate Dean: Associate Professor Peter Shepherd  
Sub Dean: Dr Lindsay Duncan  
Faculty Officer: Ms Ötusa Cullen  
Administrative Assistant: Ms Jenny Railings

(042) 214621  
(042) 213985

MEMBER UNITS

The Graduate School of Journalism is a member unit of the Faculty of Creative Arts.

RESEARCH COURSES AVAILABLE

The Faculty offers Master of Creative Arts, Honours Master of Arts, Doctor of Creative Arts and Doctor of Philosophy degrees by research.

POSTGRADUATE PROGRAMS

Postgraduate programs are available in the Faculty in the following areas:

Creative Writing  
Journalism  
Music  
Theatre  
Visual Arts

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Dean
Professor Sharon Bell, BA PhD Syd

Associate Dean
Associate Professor Peter L Shepherd, TC

Sub-Dean
Lindsay J Duncan, BA MCA DCA

Faculty Officer
Olena Cullen, BA DipEd

Administrative Assistant
Jenny Railings, T Diploma

Associate Professors
Ronald K Pretty, BA MA Syd, Assoc Inst Ed Lond
Andrew N Schultz, BMus PhD Q'ld, MMus Lond

Senior Lecturer and Music Development Officer
David C Vance, BA UNSW, BMus Syd, LMusA

Lecturers
Merlinda Bobis, BA MA Manila, DCA
Lynd Brunet, BCA MA (Hons)
Diana Wood Conroy, BA Syd
Gregor Cullen, DipArt Alex Mackie
Wayne Dixon, AMusA, LTCL, MA
Houston Dunleavy, BMus Melb, MM(Comp) MM(Choral Cond) Cleveland, PhD Buffalo
Frances Dyson, BA ANU, PhD UTS
Ian Gentle, DipArt Alex Mackie, MCA
Clem German, DipArtsAdmin Lond Cent Poly, BA Syd
Janys Hayes, BSc Melb, DipAct Drama Centre Lond
Christian Heim, BMus DipMusComp Syd, MMus Manhattan S of M, AMusA
Richard Hook, BA WMin, PostGradCertEd Lond, MFA Tas
Liz Jenew, DipTeach STC, MCA
Jeff Kevin, Dip Act PG Act NIDA, MCA
Ian F McGrath, MCA DCA
Marilyn Meier, BMus (Hons) Art Dip Cincinnati, Diplom Mozarteum, DCA
Leonie Molloy, BFA Syd Coll Arts, MA
Ken Orchard, BAFA South Aust Coll, MAFA Syd Coll of Arts
John A Scott, BA DipEd Monash
John Senczuk, DipDesign NIDA
Jelle van den Berg, Dip Ed HeerentorenAcP, Art Cert GroningenAcP, Grad Dip Art GroningenAcVisArts
Mitchell Whitelaw, BCA(Hons)

Professorial Fellow
Herbert Flugelman

Director Permanent Collection
Guy Warren

Administrative Assistants
Jenny Fullerton
Sheila Hall
Cindy Kazmar-Hall, BA

Technical Staff Co-ordinator
Kevin Bowley, Mgt Cert W'gong TAFE

Technical Officers, Theatre
John Hamilton
Simon Luckhurst

Technical Officer, Visual Arts
Michael Young, AssocDipMusicology, BCA

Technicians, Visual Arts
Didier Balez
Lynn Brunet, BCA MA (Hons)
John Telford, BCA

GRADUATE SCHOOL OF JOURNALISM

Head and Professor
Clement Lloyd, BA BEd Syd, BLegSt Macq, MA PhD ANU, AO

Senior Lecturer
Eric Loo, BA BComm Malaysia, MA Uni of Philippines

Lecturer
David Blackall, DipAppSc CSU, DipEd MA(Jour)

Technical Officer
Vicky Wallace, MA(Jour)

Administrative Assistant
Lorraine Lynch

FACULTY VISITING COMMITTEE

Katherine Brisbane, Co-founder and Editor, Currency Press
Ian Collie, Director, Arts Law Centre of Australia
Gerald English, holder of a Keating Fellowship, former Dean of the Victorian College of Arts-Opera School
Ross Gibson, Lecturer in Film and Cultural Studies, University of Technology, Sydney

Yasmine Gooneratne, Professor in English and Foundation Director, Postcolonial Literatures and Language Research Centre, Macquarie University
Leon Paroissien, Director, Museum of Contemporary Art
Keith Yates, retired Technical Manager, Sydney Opera House

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Keith Yates, retired Technical Manager, Sydney Opera House
COURSES OFFERED

The following postgraduate courses are available:
1. Doctor of Philosophy
2. Doctor of Creative Arts
3. Honours Master of Arts by Research
4. Master of Creative Arts

POSTGRADUATE PROGRAMS

Creative Writing
Music
Theatre
Visual Arts

CURRENT RESEARCH AREAS

The following areas are available to students undertaking research degrees:

Creative Writing
Poetry
Prose Fiction
Script Writing

Music
Composition
Musicology and Analysis
Performance

Theatre
Acting and Movement
Directing
Drama Studies
Lighting Design
Stage Management
Theatre Design
Theatre Technology
Theories of Theatre

Visual Arts
Ceramics
Design
Drawing
Media Arts
Painting
Printmaking
Sculpture
Textiles
Visual Arts Theory

The Faculty also conducts interdisciplinary research relating to the above areas.

SCHEDULE OF PROGRAMS

POSTGRADUATE SUBJECTS

leading to the Doctor of Philosophy, Doctor of Creative Arts, Honours Master of Arts.

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<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>CREA901</td>
<td>Thesis Creative Arts</td>
<td>48</td>
</tr>
<tr>
<td>CREA905</td>
<td>Advanced Topics in Creative Arts</td>
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</tbody>
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POSTGRADUATE PROGRAM IN CREATIVE WRITING

leading to the Master of Creative Arts.

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<tr>
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<tbody>
<tr>
<td>CREA913</td>
<td>Major Presentation</td>
<td>24</td>
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<tr>
<td>WRIT910</td>
<td>Analysis of Texts</td>
<td>12</td>
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<tr>
<td>WRIT911</td>
<td>Literary Composition</td>
<td>12</td>
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For further details, see Course Requirements below.
POSTGRADUATE PROGRAM IN MUSIC
leading to the Master of Creative Arts.

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<tr>
<td>CREA913</td>
<td>Major Presentation</td>
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<tr>
<td>MUS910</td>
<td>Musical Analysis</td>
<td>12</td>
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<tr>
<td>MUS911</td>
<td>Studies in Technique</td>
<td>12</td>
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For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN THEATRE
leading to the Master of Creative Arts.

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<tr>
<td>CREA913</td>
<td>Major Presentation</td>
<td>24</td>
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<tr>
<td>THEA910</td>
<td>Theatre Analysis</td>
<td>12</td>
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<tr>
<td>THEA911</td>
<td>Advanced Techniques in Theatre</td>
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</tbody>
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For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN VISUAL ARTS
leading to the Master of Creative Arts.

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<tr>
<td>CREA913</td>
<td>Major Presentation</td>
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<tr>
<td>VIS910</td>
<td>Visual Arts Theory</td>
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</tr>
<tr>
<td>VIS911</td>
<td>Studio Analysis</td>
<td>12</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for the PhD in Creative Arts shall normally submit a written thesis in an approved area of research. However, with the approval of the Dean of Faculty a candidate may be permitted to submit by a combination of written thesis and creative work. The written thesis shall constitute the major part of the work. In all cases a candidate must perform satisfactorily in both components to be awarded the degree.

Requirements for Admission

Applicants should have a relevant first degree with Honours Class II, Division 2, or higher, or possess equivalent qualifications. In certain circumstances students may be required to commence their enrolment in the MA (Hons) and seek transfer to the PhD at a later stage.

Candidates for this degree enrol in CREA901.

2. DOCTOR OF CREATIVE ARTS

The Doctor of Creative Arts is a doctoral degree based on presentation of creative work and supported by written documentation of the work.

Requirements for Admission

Applicants for admission to the DCA should hold a relevant Bachelor degree with Honours Class II, Division 2 or higher (or its equivalent) and be able to demonstrate evidence of high artistic attainment. If this degree or equivalent is not in creative arts practice, the applicant must also submit evidence of artistic attainment to an approved standard.

In some circumstances, outstanding arts practitioners without the required formal qualifications may be permitted to enrol in the DCA provided that the applicant submits evidence of such artistic, professional and academic attainments as may be approved. Candidates for this degree enrol in CREA901.

3. HONOURS MASTER OF ARTS

Candidates may undertake a study which deals with the relationships between specific areas of arts practice.

For students with an Honours Class II, Division 2 degree or higher (or its equivalent) in an appropriate discipline, the Master of Arts (Honours) involves one year of full-time research (or part-time equivalent) presented in the form of a thesis.

Candidates for this degree enrol in the subject CREA901 Thesis Creative Arts. Other students will be required to complete an additional preliminary year of coursework (two years for part-time students) by enrolling in CREA905 Advanced Topics in Creative Arts.

4. MASTER OF CREATIVE ARTS

The Master of Creative Arts is a pass masters degree which consists of a major presentation of creative work and two coursework units in related practical and theoretical studies.

Applicants for the MCA shall have qualified for a degree of the University in an appropriate area or possess an equivalent qualification from another approved institution.

An applicant who does not hold a degree or its equivalent may be permitted to enrol provided that the applicant submits evidence of such tertiary, academic and professional attainment as may be approved. Such candidates may be required to complete up to 48 credit points additional study of relevant subjects prior to, or in conjunction with, commencement of the MCA program.

SUBJECT DESCRIPTIONS

CREA901 Thesis Creative Arts

Double session (A); 48 credit points per year.

Assessment: external examination of thesis, or of thesis and presentation or performance of creative work.

The submission of the PhD will normally be by written thesis.

The submission of the DCA will normally be by exhibition, performance or publication, supported by substantial written documentation analysing such aspects as origins of the work, structures and techniques used, artistic theories underpinning the work and critical evaluation of the work. In many cases it will be appropriate to support written documentation with documentation in other forms e.g. photographic material, sound and video recordings, etc.

Textbooks:
Reference list supplied by Faculty.
Co-ordinator: Associate Professor A Schultz.

CREA905 Advanced Topics in Creative Arts

Double session (A); 48 credit points.

Assessment: combination of essays, thesis, and presentation or performance of creative work.

Research areas available include a wide range within the creative writing, music, theatre and visual arts disciplines as previously listed. Candidates may undertake a study of the relationships of more than one of these areas.

Textbooks:
Reference list supplied by Faculty.
Co-ordinator: Associate Professor A Schultz.
CREA913 Major Presentation
Double session (A); 24 credit points.
Co-requisite: any two of MUS910, MUS911,
THEA910, THEA911, VIS910, VIS911,
WRIT910, WRIT911 as approved by the
Faculty of Creative Arts.
Assessment: based on report of External and
Internal Examiners on candidate’s Major
Presentation and accompanying documentation.
Candidates will be required to undertake a
major project on a topic decided upon after
consultation with their supervisor. This
project may be either research based or
performance based. That is, presentation
may be by thesis, or it may be by exhibition,
performance, presentation of a fictional text
etc. Some theoretical explication of the
work, however, will normally be required in
the case of performance-based
presentation.
Textbooks:
Reference list supplied by Faculty.
Co-ordinator: Associate Professor A Schultz.

MUS910 Musical Analysis
Autumn or Spring or Double (A) session; 12
credit points.
Assessment: 10,000 word analytical dissertation
on a topic approved by the supervisor.
Students will be expected to have a secure
grounding in analytical techniques (from
Tovey to Schenker and beyond). Attractive Musical Analyses seminars
will be compulsory. In addition, the
candidate will be expected to make detailed
analyses in specialist areas (eg: late
Beethoven string quartets; piano works of
Boulez; Schumann symphonies) which display original, creative and thorough
thinking to an advanced level. Work should
be in dissertation form.
Textbooks:
Reference list supplied by Faculty.
Co-ordinator: Associate Professor A Schultz.

MUS911 Studies in Technique
Autumn or Spring or Double (A) session; 12
credit points.
Assessment: completion of a project in one of
the following areas, following consultation with
the supervisor: orchestration; studies in counterpoint
or imitative compositional style; preparation of
a new performance edition; studies in computer
music; multi-media collaborative project.
Students may study in any practical musical
area (composition, conducting, instrumental
playing or singing). Students will be required
to develop and refine their techniques until
they have achieved a high professional
standard. The course will include working
with University Ensembles and will
culminate in a recital, concert or public
performance.
Textbooks:
Reference list supplied by Faculty.
Co-ordinator: Associate Professor A Schultz.

THEA910 Theatre Analysis
Autumn or Spring or Double (A) session; 12
credit points.
Assessment: two seminar papers, each of 5,000
words.
This course will be presented through
weekly tutorials dealing with research into a
particular aspect of theatre production or
technology, according to the needs and
specialisation of the students involved.
Examples of previous topics include such
topics as Theatre in Education in NSW or
Types and Styles of Professional Productions
in Sydney over the past decade. The
student will be expected to apply
appropriate procedures and methodology in
further research.
Textbooks:
Reference list supplied by Faculty.
Co-ordinator: Dr I McGrath.

THEA911 Advanced Techniques in Theatre
Autumn or Spring or Double (A) session; 12
credit points.
Assessment: written evaluations of the
techniques explored, 2 x 5,000 word papers.
in weekly tutorials, students will examine
the latest techniques in their chosen field in
Theatre. This will be a practical course, with
the emphasis upon developing and refining
techniques, some of which may be
unfamiliar to students.
Textbooks:
Reference list supplied by Faculty.
Co-ordinator: Dr I McGrath.

VIS910 Visual Arts Theory
Autumn or Spring or Double (A) session; 12
credit points.
Assessment: two seminar papers of 5,000 words
on topics approved by the subject co-ordinator.
Candidates will be required to attend and
participate fully in a series of lectures and
tutorials dealing with visual arts theory and
the history of art.
Textbooks:
Reference list supplied by Faculty.
Co-ordinator: to be advised.

VIS911 Studio Analysis
Autumn or Spring or Double (A) session; 12
credit points.
Assessment: documentation of studio work of
approximately 5,000 words and appropriate
visual material 50%; review of studio work 50%.
Candidates will be expected to work at an
advanced level and with a high degree of
independence in their chosen studio
discipline. Work presented at the Review
must demonstrate a questioning and
exploratory attitude to form and content.
The work must be imaginative, original and
considered, with a high level of technical
proficiency. Students will be expected to
discuss their ongoing studio projects, ideas
and preparatory work with their supervisors
each week. Informal reviews of work will
take place. Students may be required to
give a seminar presentation of their work to
other students. Students will prepare a
documentation of their work, which may be
presented as the documentation of the
Major Presentation. The Documentation
should include a record of the work by the
student in an appropriate visual form, such
as photographs, slides, videos, etc. A
suitably presented copy of the
Documentation will be retained by the
Faculty of Creative Arts.
Textbooks:
Reference list supplied by Faculty.
Co-ordinator: to be advised.

WRIT910 Analysis of Text
Autumn or Spring or Double (A) session; 12
credit points.
Assessment: three seminar papers of 3,000 words
each based on close analysis of texts chosen for
study.
This course will be concerned with a
detailed study of relevant texts in the
candidate’s specialisation, which may be in
poetry, prose fiction or scriptwriting. The
course aims to develop and refine the ability
to trace in detail the relationship between
the effects gained by a text and the
techniques of writing used to achieve them.
To some extent the course will resemble
advanced literary criticism, except that the
emphasis will be on the techniques used by
the writer rather than the reader’s response.
Textbooks:
Reference list supplied by Faculty.
Co-ordinator: Associate Professor R Pretty.

WRIT910 Literary Composition
Autumn or Spring or Double (A) session; 12
credit points.
Assessment: based on 10,000 words of
experimental writing, including written self-
evaluation of the effectiveness of the techniques
used.
In this course, candidates will be required to
develop and refine their awareness of the
techniques and processes of literary
composition, and to demonstrate their
control of these techniques and processes in
their own writing. Candidates will be
required to develop additional techniques they are
seeking in their writing, and to describe and
evaluate the techniques they are using to
achieve those effects.
Textbooks:
Reference list supplied by Faculty.
Co-ordinator: Associate Professor R Pretty.
COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Arts (Journalism) by Research
3. Honours Master of Arts (Journalism) by Coursework
4. Master of Arts (Journalism) by on-campus coursework and by distance education through the PAGE Consortium
5. Graduate Diploma in Journalism by distance education through the PAGE Consortium
6. Graduate Certificate in Multicultural Journalism by on-campus coursework and distance education

POSTGRADUATE PROGRAM
Journalism

CURRENT RESEARCH AREAS
Journalism practice and history
Australian media structure
Journalism and multi-media applications
On-line journalism

PAGE CONSORTIUM COURSES
Distance education courses offered by the Graduate School of Journalism through the PAGE Consortium are not listed in this Calendar. For information on these distance education courses, please contact the PAGE Consortium at the University of Wollongong, or the Graduate School of Journalism Office.

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN JOURNALISM
leading to the Graduate Certificate (in Multicultural Journalism), Master of Arts or Honours Master of Arts by coursework.

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Not all courses are offered in each academic year. For further details, see Course Requirements below.

POSTGRADUATE SUBJECT
leading to the Doctor of Philosophy and Honours Master of Arts by Research.

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COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY
Candidates for this degree enrol in JOUR999.

2. HONOURS MASTER OF ARTS (JOURNALISM) BY RESEARCH
Candidates for this degree enrol in JOUR999.

3. HONOURS MASTER OF ARTS (JOURNALISM) BY COURSEWORK
Candidates for this degree enrol in JOUR992.
4. MASTER OF ARTS (JOURNALISM)

1. The purposes of the Master of Arts in Journalism are:
   (a) to provide a sound education in vocational journalism;
   (b) to allow graduates in journalism to proceed to higher studies in that discipline;
   (c) to provide the same opportunity for those whose professional experience is judged as an equivalent in attainment to a pass degree;
   (d) to assist students in categories (b) and (c) to prepare for, and adjust to, structural and technological change in journalism;
   (e) to promote a critical and scholarly evaluation of journalism through teaching and research.

2. Students shall be admitted under the rules covering the Master of Arts degree, with the additional provisions below:
   (a) admission to candidates shall be on the recommendation of the Professor of Journalism, who may recommend an advanced standing;
   (b) pass students are required to complete successfully a program of studies approved by the Professor of Journalism which must total 72 points, except where advanced standing is given for professional experience or completion of equivalent subjects in a comparable course. All students must complete the core subjects, except where advanced standing is awarded or exemptions given, and such other compulsory subjects as the Professor of Journalism may prescribe. It is compulsory, also, for all students who are not overseas students to complete JOUR955 Journalism and the Law;
   (c) with the approval of the Professor of Journalism, and the relevant Faculties and Departments, students may also take a maximum of three subjects from other postgraduate and undergraduate courses where it can be shown that this will assist in the development of specialist skills in journalism. Recommended subjects for specialist sequences are set out in the Graduate School of Journalism Handbook;
   (d) students may also complete a major project approved by the Professor of Journalism, or an internship in a professional media organisation approved by the Professor of Journalism, or such field work as the Professor of Journalism may prescribe;
   (e) Honours students are required to complete successfully a program of studies approved by the Professor of Journalism which must total 96 credit points, except where advanced standing is given. As well as fulfilling the requirements of the pass degree, Honours students must undertake a major presentation or other advanced studies approved by the Professor of Journalism to the total value of 24 points;
   (f) students shall discuss their proposed program with an academic adviser from the School of Journalism prior to enrolment;
   (g) the Master of Arts in Journalism shall be available both as a full-time and part-time program. Full-time pass students are expected to complete the degree in three academic sessions, and part-time pass students in six sessions. Full-time Honours students are expected to complete the degree in four academic sessions. Part-time Honours students are expected to complete the degree in eight sessions.

Major Presentation
The topic for a major presentation by honours students must be approved by the Professor of Journalism or the Professor's nominee. The length of the presentation should be at least 15,000 words, or its equivalent, and the candidate may submit sound, video and multi-media material. In addition to excellence in Journalism, the presentation will need to demonstrate the candidate's ability to research individually, to construct a scholarly argument, and to evaluate professional practice in national and international contexts. The major presentation will be worth 24 credit points.

5. GRADUATE DIPLOMA IN JOURNALISM (BY DISTANCE EDUCATION)
Details available from the PAGE Consortium.

6. GRADUATE CERTIFICATE IN MULTICULTURAL JOURNALISM
1. The purposes of the Graduate Certificate in Multicultural Journalism are:
   (a) to provide a professional qualification for journalists working in the multicultural news media, both print and electronic;
   (b) to educate members of the multicultural communities wishing to contribute to multicultural news services in news writing, method, practice and law;
   (c) to provide a professional context in standard journalistic practice, ethics, law and organisation for specialist journalists working in multicultural print and electronic publications;
   (d) to provide a grounding in journalism for students who are not professional journalists but want to work in, or contribute to, multicultural print and electronic news publication.

2. Candidates for the course should usually hold a degree or be able to show evidence of at least two years of relevant work experience. In special circumstances, representatives of multicultural communities wishing to contribute to multicultural news media services may be admitted as candidates on the basis of other academic qualifications or relevant professional experience.

3. Students are required to successfully complete a program of studies which must total 24 credit points to include JOUR903 Journalism Ethics and Standards, JOUR932 Journalism Research and Investigation, JOUR949 Multicultural Journalism and, except where advanced standing has been given, one of the following three subjects: JOUR901 News and Feature Writing, JOUR931 Radio Journalism and JOUR932 Television Journalism. Students shall discuss their proposed program with an academic adviser from the School of Journalism prior to enrolment.

4. Advanced standing will be given only on the basis of substantial professional experience in either print, radio or television journalism.

SUBJECT DESCRIPTIONS

JOUR901 News and Feature Writing
Autumn session; 6 credit points (3 hrs newsroom work a wk plus practical work).
Assessment: written assignments and practical work.
This subject develops news and feature writing skills from basic news stories to extended feature writing for newspapers and magazines. Attention will also be given to subjective aspects of news and feature writing, including the use of comment and opinion; colour stories; editorial writing; and evaluation of journalism through critical and scholarly analysis.

Textbooks:
Graduate School of Journalism Course Materials.

JOUR902 Journalistic Method and Practice
Autumn session; 6 credit points (3 hrs per wk plus fieldwork).
Assessment: written assignments, practical exercises and an essay.
This subject considers the basic attributes of news, the nature of news content, notions of news value, the conventions of news sources, and the structure of news gathering. It introduces students to the initiation and conduct of a news assignment, the structure and conventions of a news report, use of recording devices, checking stories, interview techniques, working with photographers and camera teams, presentation of news copy, follow-ups, competition and co-operation in news gathering, news management and news manipulation.

Textbooks:
Graduate School of Journalism Course Materials.

JOUR903 Journalism, Ethics and Standards
Autumn session; 6 credit points (3 hrs lectures and practical work).
Assessment: written assignments, one hr examination in class.
This subject examines the ethical framework which governs the work of journalists. It considers the nature, efficacy and administration of ethical codes relevant to journalism, particularly the Australian
JOUR904 Journalism, History and Structure
Autumn session; 6 credit points (3 hrs lectures).
Assessment: written essays, 1 hr examination in class.
This subject provides a historical context for studying the contemporary structure of the Australian media and the professional milieu in which Australian journalists work. Principal subjects covered include the growth of contemporary news organisations; the development of the press in Colonial Australia; the emergence of contemporary media organisations; the growth of electronic media organisations in Australia; the transformation of Australian media ownership in the 1980s and the technological development of news organisations through the 1990s.
Textbooks:
Graduate School of Journalism Course Materials.
Co-ordinator: Mr E Loo.

JOUR905 Specialist Journalism 1
Spring and Summer session; 6 credit points (3 hrs lectures and project work).
Assessment: practical assignments and project.
This subject offers a range of options in specialist areas of journalism. It is designed to complement and amplify preliminary courses which cover broader aspects of news gathering and presentation. Specialist areas dealt with include environmental journalism, science and technology journalism, public affairs journalism, arts journalism, lifestyle and leisure journalism, economics and business journalism, sports journalism. Topics will cover conceptual approaches and skills in print and electronic journalism. NOTE: Usually, only one specialist area will be dealt with in this subject. A further option for study in specialist journalism will be available in JOUR906 Specialist Journalism 2 below.
Textbooks:
Graduate School of Journalism Course Materials.
Co-ordinator: Professor C Lloyd.

JOUR906 Specialist Journalism 2
Autumn and Summer session; 6 credit points (3 hrs lectures and project work).
Assessment: practical assignments and project.
This subject provides an additional option of specialist study in a major area of contemporary journalism. Specialist areas are set out under JOUR905 Specialist Journalism 1 above.
Textbooks:
Graduate School of Journalism Course Materials.
Co-ordinator: Professor C Lloyd.

JOUR931 Radio Journalism
Autumn session; 6 credit points (3 hrs lectures, field and studio work).
Assessment: assignments and studio work.
This subject provides advanced skills in writing, editing, producing and presenting radio news and current affairs programs. The course has a strong practical component and will involve use of the School's radio studio.
Textbooks:
Co-ordinator: Mr D Blackall.

JOUR932 Television Journalism
Spring session; 6 credit points (3 hrs lectures, field and studio work).
Assessment: assignments and assessment of field work.
This subject provides advanced skills in survey material, producing and presenting television news and current affairs programs. A primary emphasis will be placed on techniques for gathering television news in the field.
Textbooks:
Co-ordinator: Mr D Blackall.

JOUR933 Journalism, Research and Investigation
Autumn or Spring session; 6 credit points (3 hrs lectures and practical work).
Assessment: written and field assignments.
This subject is designed to develop a range of research and investigative skills for practical journalism. It will include the use of data bases, information retrieval, statistical analysis packages, library and archival work, registry offices and other sources of public information. The use of survey material in journalism will be studied, particularly the presentation of this data in a news format. The organisation of news investigation teams, the techniques that they use, and what they produce will be analysed.
Textbooks:
Graduate School of Journalism Course Materials.
Co-ordinator: Professor C Lloyd.

JOUR934 Print Production and Publication
Autumn session; 6 credit points (3 hrs lectures and workshop production).
Assessment: written assignments and workshop assessment.
This subject provides advanced skills in copy editing, proofreading, application of house styles in preparing news copy, typographical style, news layout, use of graphics and desktop publishing applications.
Textbooks:
Graduate School of Journalism Course Materials.
Co-ordinator: Mr E Loo.

JOUR936 International Journalism
Autumn or Spring session; 6 credit points (3 hrs lectures and seminars).
Assessment: assignments and one hr examination in class.
This subject comprises three parts: (a) the organisation and technology of international news gathering; (b) a comparative account of the organisation of news gathering in other countries, particularly the nations of East and South East Asia and the Pacific; and (c) news coverage of limited conflict.
Textbooks:
Co-ordinator: Mr E Loo.

JOUR942 Current Affairs Journalism
Spring session; 6 credit points (3 hrs lecture/field work).
Assessment: assignments and fieldwork.
This subject provides practical instruction in preparation of current affairs programs in radio, television and multi-media applications. The subject will give a broad introduction to current affairs production in each of the three media areas. Field and practical work will provide opportunities for specialisation in one of the three media areas.
Textbook: no set text.
Co-ordinator: Mr D Blackall.

JOUR943 Directed Readings in Journalism
Autumn, Spring and Summer sessions; 6 credit points (1 hr tutorial, directed reading).
Assessment: tutorial paper and major written evaluation of the selected reading program.
This subject enables students to extend their knowledge of the history, theory and practice of journalism by directed reading courses in a major topic. The readings are designed to complement and develop topics studied in earlier subjects. Topics available include: the journalism of Colonial Australia; structure of the Australian news media; media management; current affairs radio and television; principles of layout and design; the role of the editor; studies of individual journalists and their work.
Textbooks: There are no prescribed textbooks. Reading lists will be issued according to topics chosen.
Co-ordinator: Professor C Lloyd.

JOUR945 Applied Journalism Project
Autumn, Spring and Summer sessions; 6 credit points (one hr tutorial, directed research).
Assessment: written evaluations of progress; final research report which may include electronic media and print production material. This subject provides a shorter alternative project for final session students not wanting to undertake the major project, or electing to do additional course work, or wanting to develop skills acquired in previous vocational subjects. Project areas available include: historical issues in Australian journalism; defamation law; structure of Australian news gathering; electronic news gathering; electronic print production.
Textbooks: no set text.
Co-ordinator: Professor C Lloyd.

JOUR948 News Design
Spring session; 6 credit points (3 hrs lecture/fieldwork).
Assessment: assignments and publications.
This subject provides practical instruction in imaging, graphics and design applicable to print news publications. Students are instructed in the latest digital software for producing print news materials.

Textbooks:
Graduate School of Journalism Course Materials.
Co-ordinator: Mr E Loo.

JOUR949 Multicultural Journalism
Spring session; 6 credit points (3 hrs lecture/fieldwork per wk).
Assessment: assignments and publications.
This course provides an historical, cultural and social background for students wanting to work in Australia's growing multicultural media. It will give practical instruction in multicultural print, electronic and multi-media news applications. Particular emphasis is placed on differences between multicultural media and traditional media.

Materials.
Textbooks:
Graduate School of Journalism Course Materials.
Co-ordinator: Mr E Loo.

JOUR954 Journalism and Multi-media
Autumn or Spring session; 6 credit points (3 hrs lectures, practical and laboratory work).
This subject prepares journalists for the impact on their profession of rapidly-developing interactive multi-media technology. It emphasises both theoretical and practical aspects of multi-media relevant to print and electronic media journalism. Particular attention is given to prospective changes generated by interactive multi-media to news gathering, news delivery, and news presentation.

Materials.
Textbooks:
Graduate School of Journalism Course Materials.
Co-ordinator: Mr E Loo.

JOUR955 Journalism and the Law
Autumn session: 6 credit points.
Assessment: long essay and problem assignments.
This subject describes and analyses the legal framework within which Australian journalists work. It considers in detail the principal elements of media law which influence the conduct of news gathering and presentation. Subjects covered include the constitutional basis of press freedoms, the Australian judicial system, defamation, contempt, privilege, intellectual property, obscenity, blasphemy, official secrets legislation, restrictions on publications and broadcasting, Freedom of Information legislation.

Materials.
Textbooks:
Co-ordinator: Professor C Lloyd.

JOUR956 On-Line Journalism
Autumn session: 6 credit points (3 hrs instruction and project work).
Assessment: assignment and project.
This subject introduces students to news research and production on Internet and the World Wide Web (WWW). Projects will include publishing of home pages, on-line magazines and newspapers. Students will learn to link specific Web resources, navigate Webspace, use a variety of searching tools, and apply principles of page design to publishing on the Web. Content will also cover on-line information networking, editorial framing and composition for on-line presentation, typography and graphic design for on-line publications. The subject aims to expand the definition of print editorial design to include presentation in on-line format and provide a basis for the critical examination of existing and future non-print news media.

Materials.
Textbooks:
Graduate School of Journalism Course Materials.
Co-ordinator: Mr E Loo.

JOUR961 Community Journalism
Autumn and Summer sessions; 6 credit points (3 hrs lectures and project work).
Assessment: assignments and project work.
This subject offers a theoretical and practical introduction to the role of the journalist as a mediator in the community and in the production of community news material. It aims to develop in students a critical understanding of their community functions and responsibilities and to identify ways in which they can assist in adapting new technologies and skills for community usage and enhancement. Finally, it looks at ways in which communities acquire access to media production facilities and how they may use these facilities most effectively in the production of news material at the community level.

Materials.
Textbooks:
Graduate School of Journalism Course Materials.
Co-ordinator: Mr E Loo.

JOUR991 Major Journalism Project
Autumn, Spring and Summer sessions; 12 credit points (supervised research and fieldwork).
Assessment: two interim reports and major research or fieldwork report.
This subject is designed to give students the opportunity to undertake either a major research project or substantial supervised practical work. In particular, it allows students to take an employment placement or internship in a news media or related area. Such placement should generally have a minimum duration of three to four weeks. Students undertaking such placement or internship are required to submit detailed records and assessments of their work experience, supported by certificates of verification from news media or related agencies. Research projects should be linked directly to subject areas represented in the journalism schedule, and may include essay, visual, sound and multi-media components.

Materials.
Textbooks: no set text.
Co-ordinator: Professor C Lloyd.
FACULTY OF EDUCATION

FACULTY OFFICE

Dean: Associate Professor John Patterson
Associate Dean: Professor Ken Gannicott
Associate Dean: Associate Professor Malcolm Harris
Sub Dean: Ms Yvonne Kerr
Faculty Executive Officer: Ms Jan James (042) 21 3572
Administrative Assistant: Ms Jacqui Collins (042) 21 3961

Pre-Service Education:
Head: Associate Professor Malcolm Harris
Administrative Officer: Ms Dawn Whitby (042) 21 3950
Administrative Assistant: Ms Pauline Stehr (042) 21 3981

RESEARCH COURSES AVAILABLE

The Faculty offers Doctor of Philosophy, Doctor of Education, Honours Master of Education and Honours Master of Arts by research.

POSTGRADUATE PROGRAMS

Postgraduate programs are available in the Faculty in the following areas:

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* Fee paying course through PAGE consortium only.
FULL TIME STAFF

Dean
Associate Professor John Patterson, DipPhysEd STC, MSc Oregon, MEd Syd, EdD N Colorado

Associate Deans
Professor Ken G Gannicott, MA Sus, PhD UNSW (Head, Graduate School)
Associate Professor Malcolm Harris, TC Armidale, BA UNE, MSc UNSW (Head, Pre-SERVICE Education)

Sub-Dean
Yvonne Kerr, DipPhysEd, CertHealthEd, MSc Oregon, MEd Syd

Faculty Executive Officer
Jan James, BA, DipEd, G DipEuroStud, MStudEd, MBA, MAITEA

Professors
Carla Fasano, MSc Bari, MSc Geneva, MSc Lond SchEd, PhD Geneva
Ken G Gannicott, MA Sus, PhD UNSW
Ronald C King, BCom BEd Melb, PhD Monash, PAIPs

Associate Professors
Brian Cambourne, BA LittB NE, PhD James Cook
Philip de Lacey, BSc UNSW, BA, MA Auck, PhD UNE, MAPs
Barry Harper, BSc DipEd UNSW, PhD
Malcolm Harris, TC Armidale, BA UNE, MSc UNSW
John Hedberg, BSc DipEd MEd Syd, GradDipHumcomm UNSW, GradDipLib RMIT, PhD Sydney
John Patterson, DipPhysEd STC, MSc Oregon, MEd Syd, EdD N Colorado

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Raymond J Crawford, BSc DipEd UNE, MSc UNSW
Beverly Derewianka, BA MA Syd, DipEd STC, DipMEd Armidale CAE, MEd Syd
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Jennifer M Jones, BEd Qld, MA Vic BC, PhD LondSchEd
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Nita Temmerman, DipMusTeach, BEd, MEd Qld, ATCL, PhD
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Michael Wilson, BSc St And, PGCE Hull, DipEd MA PhD Lond
William N Winner, BA DipEd MEd Syd, MA Oz, PhD, MACE
Janice E Wright, BEdSyd, MEd Syd, PhD

Lecturers
Deirdre Armstrong, DipArtEd Syd
Jan Brown, DipTeach BEd MEd Canb
Wing Cheung, BSc MSc EdD North Illinois
Patrick F Farrar, DipTeach Armidale CAE, BA UNE

Brian Ferry, BA Macq, MStudEd MEd, MACE
Christine Fox, BA PhD Syd, DipEd MA Lond
Max Gillett, BA UNE, BEd Qld, MA Syd, PhD Oregon
Tonia L Gray, BEd MA N.Colorado
Pauline Harris, BEd Syd, MA EdD Calif Berk
Doug Hearne, BEd
Deslea Konza, BA DipEd Macq, DipSpecEd Nepean, MEd
Neil McLaren, BSc UNE, DipEd
Grace Masselos, DipKTC Syd, DipAdEdStd MKTC Melb, GradDipMulticulturalStd Armidale, BA Macq, MA PhD Ohio State
Margaret Moroney, DipTeach MCAE, DipSpEd Nepean, MEd
Gregg S Rowland, DipPhys & HlthEd BEd MEd
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Wilma Viale, BEd, MEd Tas, PhD S Florida
Susan-Lee Walker, Dip STC, Dip Teach, MEd
Roslyn Westbrook, DipPhysEd, Cert Hlth Ed, MSc Oregon
Ronald Wilcox, MSc DipEd UNSW

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Honorary Fellow
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Penelope Murphy, BA, MSc Lond, PhD, NE PNG

FACULTY VISITING COMMITTEE

Chair of the Committee - Dr Greg Ramsey, Senior Executive Officer, NSW Public Service
Mr Steven Buckley, Assistant Director-General, South Coast Region, NSW Department of School Education
Mr Ray Cavenagh, Deputy President, NSW Teachers’ Federation
Mr Les Gregory, Divisional Training and Development Manager, BHP Sheet & Coil Products Division
Mrs Rae Mitchell, Principal, Smiths Hill High School
Mr Terry White, Director of Education, Catholic Education Office, Diocese of Wollongong
Professor Shirley Grundy, Faculty of Education, Murdoch University, Western Australia and Chair of AARE
Dr Terry Burke, Deputy Director-General, NSW Department of School Education, Sydney
Mr Alan Ruby, Deputy Secretary, Department of Employment, Education and Training, Canberra
The following postgraduate degrees and diplomas are available:

1. Doctor of Philosophy
2. Doctor of Education
3. Honours Master of Education
4. Honours Master of Arts
5. Master of Education
6. Master of Education (TESOL)
7. Graduate Certificate in Adult Career Development
8. Graduate Certificate in Computer-Based Learning
9. Graduate Certificate in Environmental Education
10. Graduate Certificate in Gifted Education
11. Graduate Certificate in Higher Education
12. Graduate Certificate in History Education
13. Graduate Certificate in Language Education (ESL)*
14. Graduate Certificate in Language Education (Literacy)*
15. Graduate Certificate in Literacy
16. Graduate Certificate in Special Education
17. Graduate Certificate in TESOL
18. Graduate Diploma in Adult Education and Training
19. Graduate Diploma in Education
20. Graduate Diploma in TESOL

*Fee paying course through PAGE consortium only.

The Graduate Schedule of subjects offered by the Graduate School of Education is structured to offer a series of articulated courses progressing from Graduate Certificate to Doctoral level. Candidates without the teacher training background of many of our traditional graduate students can enter postgraduate study in the School at either Graduate Certificate or Graduate Diploma level, and then proceed through the higher degree structure in their area of interest. A range of Graduate Certificates in the areas of Literacy, TESOL, Special Education, Gifted Education and Environmental Education have been introduced to provide access to graduate study in educational settings to holders of degrees in other disciplines and working in non-school areas. In addition the Graduate School offers a Graduate Certificate in Literacy (ESL or Literacy) and a Master of Education program in Literacy or TESOL as full-fee courses through the Professional and Graduate Education Consortium (PAGE) using SBS Broadcasting facilities.

The Graduate Diploma in Education is a professional pre-service course in education for graduates of this or another university who seek teacher qualifications. The main aim of the course is to provide a professional certification course of pre-service education for intending primary and secondary school teachers.

Study in all areas other than teacher training (the GDipEd) takes place in a framework provided by the Graduate School of Education, part of the Graduate Faculty of the University. The aim of the Graduate School of Education is to co-ordinate research and study in a way which provides an orderly and coherent exposure to critical issues in contemporary educational theory and practice, and also provides an avenue for professional development for committed educators. Postgraduate work is grouped into Programs which provide specialisations in areas in which staff have particular expertise. In 1996 it is expected that the major Programs will be as follows:

**Programs:**
- Adult Education and Training
- Curriculum Development and Evaluation
- Education Policy and Planning
- Information Technology in Education and Training
- Language and Literacy
- Physical and Health Education
- Special Education
- Teaching English to Speakers of Other Languages (TESOL)

In subsequent years there will be further changes to the Programs so as to reflect changes in both staffing resources and student interests. All students should obtain a copy of the relevant Graduate School of Education Handbook to check subject and course availability before enrolling. Any student who is unsure of their course progression as new Programs are introduced should consult the Teaching Program Co-ordinator for their specialisation regarding their enrolment in 1996. Students who maintain the University's normal progression patterns (for details see below) can be assured of completing their degree on terms no less favourable than at the time of their enrolment.

**CURRENT RESEARCH AREAS**

- Curriculum change and professional development in the Pacific
- Curriculum development and evaluation
- Education policy theory
- Educational information systems
- Educational policy and planning in Australia, the Asia-Pacific region and the OECD countries
- Equity in education
- Information technology in education and training
- Interactive multimedia, design and evaluation
- Language and education
- Learning
- Literacy development in education including functional language studies
- Literacy education and teacher development
- Performance technology and adult learning
- Policies for health and physical education
A. HIGHER DEGREES

The Master of Education, Master of Education (Honours), Master of Arts(Honours), Doctor of Philosophy and Doctor of Education do not lead to teaching qualifications, but are instead designed for those students already qualified in Education and working in the area who wish to undertake advanced study and/or research in education.

1. DOCTOR OF PHILOSOPHY

Entry to this degree is available to candidates who meet the University entry requirements for PhD candidature. In the first instance this requires the completion of a Bachelors degree with Honours Class II or higher in an appropriate area, or an equivalent qualification with an appropriate research component.

Candidates for this degree enrol in a major thesis, subject number EDGA905. Interested candidates should contact the Head of the Graduate School of Education to discuss their area of research and supervision. All new students enrolling in a research degree are expected to prepare and defend a research proposal early in their candidature and to become involved in Graduate School activities such as student colloquia. See subject descriptions for further information.

2. DOCTOR OF EDUCATION

The Doctorate of Education is a program to prepare professional leaders in Education. It is a doctoral level program completed by a combination of coursework and thesis, offered in 1996 in the areas of:

• Curriculum
• Information Technology in Education
• Language and Literacy
• Physical and Health Education
• Policy and Planning
• Special Education
• Teaching English to Speakers of Other Languages (TESOL, including TEFL)

Entry Requirements for the EdD Program

Entry to this degree is available to candidates who:

1. Meet the University entry requirements for Doctoral candidature. In the first instance this requires the completion of a Bachelors degree with Honours Class II or higher in an appropriate area, or an equivalent qualification. Normally this would be an appropriate Masters degree, completed at credit (65%) level or better.

Limited Advanced Standing may be available for candidates who have completed Masters level coursework at a credit level or better; and

2. Candidates must have completed a minimum of three years relevant professional experience.

Time Limits

Normally, the degree will be completed in not less than six, and not more than eight, academic sessions of full-time study. Completion of the degree in a minimum of five sessions will be permitted to those candidates granted Advanced Standing for previous graduate study.

Patterns of Study

1. The program for the degree will require successful completion of:

(i) at least 72 credit points (9 subjects) chosen from the Graduate Schedule of Subjects in the Graduate School of Education. At least five of these subjects must be chosen from one Program in line with the requirements for that Program (see 4 below). Where a student is granted advanced standing, additional subjects sufficient to make at least five including the advanced standing, must be chosen from one Program. A student who is awarded the maximum advanced standing of 3 subjects (24 cp) and who has already completed the equivalent of five subjects in one Program through previous studies at an appropriate level will be required to select at least two subjects from a related area in consultation with the Program Co-ordinator and the Head of the Graduate School.

(ii) a supervised thesis (EDGA909) on a topic in the Program chosen for specialisation, to be examined externally. This thesis will contribute fifty percent towards the final assessment. All new students enrolling in a research degree are expected to prepare and defend a research proposal early in the thesis component. See subject descriptions for further information.

2. Each candidate will be required to select a program of study in consultation with the Program Co-ordinator and the Head of the Graduate School to ensure that subjects chosen do not duplicate previous graduate work.

3. Candidates will be required to pass all coursework subjects at the first attempt, at not less than Credit (65%) level. Students who do not meet this requirement will have their doctoral candidature terminated, and may enrol in an appropriate Masters program.

4. The coursework requirements for each Program are as follows:

(1) Curriculum and Evaluation

The coursework component of a Doctorate of Education in the Program of Curriculum consists of:

(i) either EDGA901 Advanced Qualitative Research Methods or EDGA902 Advanced Quantitative Research Methods is compulsory. It is recommended that both of these subjects, or their equivalents, be completed. If there is satisfactory evidence that one of these subjects or their equivalents has already been completed the student will undertake another subject of his/her choice from the Graduate School of Education Schedule; and
(i) at least five subjects chosen from the
Curriculum Program in line with the
requirements listed in "Patterns of
Study". These subjects are listed below:

EDGA910 Curriculum in a changing
context
EDGA911 Managing curriculum change
EDGA912 Curriculum special topic
EDGA913 Program evaluation
EDGA915 Quality learning and teaching
EDGA917 International and intercultural
perspectives
EDGA918 Environmental education:
Pedagogy and curriculum
perspectives
EDGA919 Advanced studies in the Key
Learning Areas

(ii) at least five subjects chosen from the
Information Technology Program in line
with the requirements listed in
"Patterns of Study".
These subjects are listed below:

EDGA950 Information Technology
and education in technology
EDGA951 Information systems and
educational management
EDGA952 Designing instructional software
EDGA954 Interactive multimedia in
education
EDGA955 Information Technology and
cognitive processes
EDGA956 Advanced studies in interactive
learning
EDGA957 Implementation and evaluation
technology-based learning
EDGA958 Instructional strategies and
authoring

(iii) The balance of subjects may be chosen
from anywhere in the Schedule of
Subjects of the Graduate School of
Education (e.g. curriculum related
subjects in language, special education
and TESOL; curriculum policy related
subjects in the Policy Area; or
curriculum technology related subjects
in the Information Technology Area),
or from any 900-level Graduate
Schedule in the University, provided
that prior approval has been
obtained from the Head of the Graduate
School of Education and the Head of
the relevant School or Department.

(2) Education Policy and Planning

The coursework component of a
Doctorate of Education in the Program
Area of Policy and Planning consists of:

(i) EDGA902 Advanced Quantitative
Research Methods is compulsory. If
there is satisfactory evidence that
this subject or its equivalent has already
been completed the student will
undertake another subject of his/her
choice from the Graduate School
of Education Schedule;

(ii) at least five subjects chosen from the
Policy and Planning Program in line
with the requirements listed in
"Patterns of Study".
These subjects are listed below:

EDGA960 Foundations of policy studies
EDGA961 Policy research and policy
analysis
EDGA963 Education policy in Australia
EDGA964 Educational management and
administration
EDGA965 Resource allocation in education
EDGA966 Leadership and school
management

(iii) The balance of subjects may be chosen
from anywhere in the Schedule of
Subjects of the Graduate School of
Education, or from any 900 level
Graduate Schedule in the University,
provided that prior approval has been
obtained from the Head of the Graduate
School of Education and the Head of
the relevant School or Department.

(3) Information Technology in Education

The coursework component of a
Doctorate of Education in the Program
of Information Technology in Education
consists of:

(i) both EDGA901 Advanced Qualitative
Research Methods and EDGA902
Advanced Quantitative Research
Methods are compulsory. If there is
satisfactory evidence that one or both
of these subjects or their equivalent has
already been completed the student
will undertake another subject(s) of
his/her choice from the Graduate
School of Education Schedule; and

(ii) at least five subjects chosen from the
Information Technology Program in line
with the requirements listed in
"Patterns of Study".
These subjects are listed below:

EDGA950 Information Technology and
education in technology
EDGA951 Information systems and
educational management
EDGA952 Designing instructional software
EDGA954 Interactive multimedia in
education
EDGA955 Information Technology and
cognitive processes
EDGA956 Advanced studies in interactive
learning
EDGA957 Implementation and evaluation
technology-based learning
EDGA958 Instructional strategies and
authoring

(iv) The balance of subjects may be chosen
from anywhere in the Schedule of
Subjects of the Graduate School of
Education or from any 900 level
Graduate Schedule in the University,
provided that prior approval has been
obtained from the Head of the Graduate
School of Education and the Head of
the relevant School or Department.

(4) Language and Literacy

The coursework component of a Doctorate
of Education in the Program of Language
and Literacy consists of:

(i) either EDGA901 Advanced Qualitative
Research Methods or EDGA902
Advanced Quantitative Research
Methods is compulsory. It is
recommended that both of these
subjects, or their equivalent, be
completed. If there is satisfactory
evidence that one of these subjects or
their equivalent has already been
completed the student will undertake
another subject of his/her choice from
the Graduate School of Education
Schedule; and

(ii) at least five subjects chosen from the
Language and Literacy Program in line
with the requirements listed in
"Patterns of Study".
These subjects are listed below:

EDGA970 Language and literacy
devolution
EDGA971 Assessment and evaluation
of language and literacy
EDGA972 Literacy: theory into practice
EDGA973 Language, ideology and culture

EDGA975 Educational linguistics
EDGA976 Text and context
EDGA977 Communication and learning
EDGA978 Literacy Practices for Diverse
Needs

*If done in Literacy module through the
PAGE Consortium as part of the
GCertLangEd or MEd.

(iii) The balance of subjects may be chosen
from anywhere in the Schedule of
Subjects of the Graduate School of
Education, or from any 900 level
Graduate Schedule in the University,
provided that prior approval has been
obtained from the Head of the Graduate
School of Education.

(5) Physical and Health Education

The coursework component of a Doctorate
of Education in the Program of Physical
and Health Education consists of:

(i) either EDGA901 Advanced Qualitative
Research Methods or EDGA902
Advanced Quantitative Research
Methods is compulsory. It is
recommended that both of these
subjects, or their equivalent, be
completed. If there is satisfactory
evidence that one of these subjects or
their equivalents has already been
completed the student will undertake
another subject of his/her choice from
the Graduate School of Education
Schedule; and

(ii) at least five subjects chosen from the
Physical and Health Education
Program in line with the requirements
listed in "Patterns of Study".
These subjects are listed below:

EDGA920 Curriculum problems and issues
in physical and health education
EDGA921 Studies in the scientific bases of
health education and health
promotion
EDGA922 Theoretical and practical bases
of coaching
EDGA923 Sport, culture and education
EDGA924 Adolescent health status and
behaviour
EDGA925 Advanced seminar
EDGA926 Theory and practice of outdoor
education and recreation

(iii) The balance of subjects may be chosen
from anywhere in the Schedule of
Subjects of the Graduate School of
Education (e.g. PE/Health related
subjects in language, special education
and TESOL; PE/Health policy related
subjects in the Policy Area; or
PE/Health technology related subjects
in the Information Technology Area),
or from any 900 level Graduate
Schedule in the University, provided
that prior approval has been
obtained from the Head of the Graduate
School of Education and the Head of
the relevant School or Department.

(6) Special Education

The coursework component of a Doctorate
of Education in the Program of Special
Education consists of:
(i) both EDGA901 Advanced Qualitative Research Methods and EDGA902 Advanced Quantitative Research Methods. If there is satisfactory evidence that one or both of these subjects or their equivalent has already been completed the student will undertake another subject(s) of his/her choice from the Graduate School of Education Schedule; and
(ii) at least five subjects chosen from the Special Education Program in line with the requirements listed in "Patterns of Study". These subjects are listed below:
- EDGA936 Learning theories and exceptionality
- EDGA937 Approaches to reading difficulties
- EDGA938 Teaching students with learning difficulties
- EDGA939 Approaches to behaviour management
- EDGA946 Teaching gifted children
- EDGA947 Giftedness in special populations

(iii) The balance of subjects may be chosen from anywhere in the Schedule of Subjects of the Graduate School of Education, or from any 900 level Graduate Schedule in the University, provided that prior approval has been obtained from the Head of the Graduate School of Education and the Head of the relevant School or Department.

(7) Teaching English to Speakers of Other Languages (TESOL)

The coursework component of a Doctorate in Education in the Program of TESOL consists of:
(i) either EDGA901 Advanced Qualitative Research Methods or EDGA902 Advanced Quantitative Research Methods. It is compulsory. If there is satisfactory evidence that one of these subjects or their equivalent has already been completed the student will undertake another subject of his/her choice from the Graduate School of Education Schedule; and
(ii) at least five subjects chosen from the TESOL Program in line with the requirements listed in "Patterns of Study". These subjects are listed below:
- EDGA970 Language and literacy development
- EDGA976 Text and context
- EDGA978 Literacy practices for diverse needs
- EDGA981 Second language literacy
- EDGA983 Assessment in TESOL
- EDGA984 Language and Learning in TESOL
- EDGA985 English in specific contexts

*If done as TESOL module in GCertLangDev or MEd through the PAGE Consortium.

(iii) The balance of subjects may be chosen from anywhere in the Schedule of Subjects of the Graduate School of Education, or from any 900 level Graduate Schedule in the University, provided that prior approval has been obtained from the Head of the Graduate School of Education and the Head of the relevant School or Department.

Advanced Standing
Candidates in the Doctor of Education program may apply for up to 24 credit points of Advanced Standing for subjects completed at Masters level. This Advanced Standing will be granted as Specified Credit, i.e., there must be a direct correspondence between the prior subject and a subject in the Doctor of Education Schedule. Advanced Standing will only be granted if the subject has been passed at Credit (65%) level or better in the Masters degree.

3. HONOURS MASTER OF EDUCATION

The Honours Master of Education is a specialised research degree for students who either wish to pursue research careers in education or whose future career will require them to interpret and apply the findings of educational research. This degree is intended for students who are professionally qualified educators.

Entry requirements
The degree of Honours Master of Education (MEd(Hons)) in the Faculty of Education shall be subject to the University's rules for the award of the degree of Honours Master together with the following guidelines:

1. Entry to the degree program will normally be available to a person who has:
   (a) completed the requirements for an approved Bachelor's degree with Honours Class II Division 2 or higher and who holds an approved teaching qualification; or
   (b) completed the University's Master of Education Degree with results averaging credit level or better; or
   (c) completed qualifications deemed by the Graduate Faculty to be the equivalent of the University's Master of Education Degree with results averaging credit level or better; or
   (d) completed such other qualifications as might be approved by the Graduate Faculty on the recommendation of the Head of the Graduate School provided that in the view of the Graduate Faculty the person shall have already completed the equivalent of 48 credit points beyond a Pass degree.

2. Students who have completed an MEd degree in the professional development orientation (see section 5) or its equivalent with results averaging credit level or better must complete 24 credit points of coursework at Credit level or better, before proceeding to a 24 credit points thesis.

These 24 credit points will comprise:
(i) 8 credit points of an advanced methodology subject (EDGA901 or EDGA902)
(ii) EDGA903 Minor Project (8 credit points)
(iii) An elective subject, chosen in consultation with the thesis supervisor.

The first two subjects must be completed prior to enrolment in EDGA904 (Minor Thesis), and must be passed at credit level or better, at the first attempt. Failure to achieve a credit average in these two subjects at the first attempt will lead to termination of MEd(Hons) candidature.

Patterns of Study

Either
EDGA905 48 credit point thesis;
for candidates who have completed the research orientation in the Master of Education program, or an equivalent program.
or EDGA906 Directed Study in Education I,
and EDGA907 Directed Study in Education II,
and EDGA908 Directed Study in Education III
and EDGA904 24 credit point thesis;
Each Directed Study subject is an 8 credit point individualised program of study in an area supporting the 24 credit point thesis. Students will generally replace a Directed Study subject with subject(s) chosen from the Master of Education (Pass) schedule, in consultation with their supervisor(s) and the Head of the Graduate School. (See section 2 above) to satisfy the entry requirements for higher degree study.

Requirements for the Degree Program

1. The degree program will normally be completed in two sessions of full-time study or four sessions of part-time study.
2. The degree program shall involve:
   (a) a thesis embodying the results of an investigation to the value of 48 credit points; or
   (b) a minor thesis embodying the results of an investigation whose credit point value is 24 together with satisfactory completion of coursework subjects to the value of 24 credit points prior to commencing thesis.
3. A candidate may not include in this degree program any subject which the candidate has previously taken and had credited towards a qualification accepted for admission under Section 1 of these requirements.
4. The Graduate Faculty shall appoint supervisor/s for each candidate on the recommendation of the Head of the Graduate School of Education.

4. HONOURS MASTER OF ARTS

Candidates for the degree who have completed a Bachelors Honours Degree at the level of Class II, Division 2 or higher in an appropriate area will enrol in a 48 credit point major thesis, subject number EDGA905. Interested candidates should
contact the Head of the Graduate School of Education.

5. MASTER OF EDUCATION

The Master of Education is an introductory higher degree allowing two alternative patterns of study. One pattern focuses on a professional development orientation for educators, and the other pattern has a research orientation for candidates interested in pursuing study beyond this degree.

Entry Requirements for the Degree Program

The degree of Master of Education (MEd) in the Faculty of Education shall be subject to the University's rules for the award of the degree of Master together with the following guidelines:

1. To qualify for admission as a candidate for the Master of Education, a student shall have qualified for a Bachelors degree of the University, or an equivalent qualification from an approved institution, with a major study in Education, provided that the degree or equivalent qualification has a minimum study duration of four years. Other qualifications or substantial professional experience may be considered as meeting these requirements and should be discussed with the Head of the Graduate School of Education.

2. A candidate may not include in this degree program any subject which the candidate has previously taken and had credited towards a qualification accepted for admission under Section 1 of these requirements.

Patterns of Study

1. Either

(i) the professional orientation stream:

(a) EDGA900 Introduction to Research Methods in Education (8 credit points)

and

(b) at least 24 credit points (at least 3 subjects each of 8 credit points) from a single Program. The core of subjects to be covered to complete a specialisation will vary from Program to Program.

and

(c) at least 24 credit points (at least 3 subjects each of 8 credit points) from a single Program. The core of subjects to be covered to complete a specialisation will vary from Program to Program.

and

(d) EDGA903 Minor Project in Education (8 credit points) in the same Program.

2. Students who have completed an MEd degree in the professional development orientation may proceed to MEd(Hons), provided they meet the program requirements for students who do not have a research component in the MEd (see MEd(Hons) entry requirements).

Suggested progression patterns

The Master of Education degree will normally be completed in two sessions of full-time study, or in four to six sessions of part-time study. The first two sessions of part-time study are the same for both the professional and research orientation streams.

A part-time student will complete up to two subjects each session. The sequence of study in the specialisation will be determined by the subjects offered in each year and by the pattern of pre- and co-requisites in each Program. Any alternative patterns of study must be discussed with both the Program Co-ordinator and the Head of the Graduate School.

Note: EDGA900 Introduction to Research Methods in Education is a single session subject which is repeated each session. Students have the choice of session in which to complete it, but should consider the advice of the Program Co-ordinator for their specialisation. It is a compulsory component of the Master of Education program and must be completed as one of the first four subjects studied. No exemptions will normally be considered.

Course of study

It should be noted that not all the following subjects will necessarily be offered in 1996. Final arrangements will depend upon student numbers and staff resources. Prospective students are strongly recommended to discuss their program of study with the Co-ordinator responsible for the Program in which they are interested or the Head of the Graduate School and obtain a copy of the relevant Graduate School of Education Handbook.

Details of all offerings in the Graduate School are available from the Graduate School Office. A specialisation in this Program requires the completion of at least three subjects chosen from the Adult Education and Training Program. Variations must be approved by the Program Area Co-ordinator (Dr Max Gillett). Not all subjects are offered every year, and students must consult with the academic adviser before completing enrolment procedures.

Program: Curriculum Development and Evaluation

EDGA910 Curriculum in a changing context*
EDGA911 Managing curriculum change#
EDGA912 Curriculum special topic
EDGA913 Program evaluation
EDGA915 Quality learning and teaching#
EDGA917 International and intercultural perspectives
EDGA918 Environmental Education: Pedagogy and Curriculum Perspectives
EDGA919 Advanced Studies in the Key Learning Areas

* Compulsory subject for students wishing to complete a major specialisation in Curriculum and Evaluation.

# Run jointly with the NSW Department of School Education as part of a Joint Masters program.

A specialisation in this Program requires the completion of three subjects. Normally these subjects will be chosen from the Curriculum and Evaluation Program. Variations must be approved by the Program Co-ordinator (Dr Ted Booth). Not all subjects are offered every year, and students must consult with the academic adviser before completing enrolment procedures.

Program: Education Policy and Planning

EDGA960 Foundations of policy studies*
EDGA961 Policy research and policy analysis*
EDGA963 Education policy in Australia
EDGA964 Educational management and administration
EDGA965 Resource allocation in education
EDGA966 Leadership and school management#

* EDGA960 and EDGA961 are compulsory subjects for students wishing to complete a major specialisation in Educational Policy and Planning. In addition to these two compulsory subjects, students choose one other subject from the list to complete 24 credit points.

# Run jointly with the NSW Department of School Education as part of a Joint Masters program.
Program: Information Technology in Education and Training

EDGA950 Information Technology and education and training*
EDGA951 Information systems and educational management
EDGA952 Designing instructional software
EDGA954 Interactive multimedia in education
EDGA955 Information Technology and cognitive processes
EDGA956 Advanced studies in interactive learning
EDGA957 Implementation and evaluation of technology-based learning
EDGA958 Instructional design and authoring*

* Compulsory subjects for students wishing to complete a major specialisation in Information Technology in Education and Training. In addition to the compulsory subjects, students choose other subjects from the list to complete at least 24 credit points. The choice of subject will depend on the background of the students. Students with an interest, but little background, in the area, students should discuss their proposed course of study with the Program Co-ordinator (Associate Professor J Hedberg).

Program: Language and Literacy Education

EDGA970 Language and literacy development*
EDGA971 Assessment and evaluation of language and literacy
EDGA972 Literacy: theory into practice
EDGA973 Language, ideology and culture
EDGA975 Educational linguistics
EDGA976 Text and context
EDGA977 Communication and learning
EDGA978 Literacy Practices for Diverse Needs*

* Compulsory subject for students wishing to complete a major specialisation in Language and Literacy. A specialisation in this Program requires the completion of three subjects chosen from the Special Education Program. Students should discuss their proposed course of study with the Program Co-ordinator (Ms Deslea Konza) as teaching accreditation requirements in the Special Education and Gifted and Talented Education areas will depend on subject choice.

Program: Teaching English to Speakers of Other Languages (TESOL)

EDGA970 Language and literacy development*
EDGA976 Text and context*
EDGA978 Literacy practices for diverse needs*
EDGA981 Second language literacy
EDGA983 Assessment in TESOL
EDGA984 Language and Learning in TESOL
EDGA985 English in specific contexts

* Compulsory subject for students wishing to complete a major specialisation in TESOL. A specialisation in this Program requires the completion of three subjects chosen from the TESOL Program. Students should discuss their proposed course of study with the Program Co-ordinator (Dr Jan Wright) as teaching accreditation requirements in the TESOL area will depend on subject choice.

# If done as the Literacy Module in the Grad.Cert.LangDev or MEd offered through the PAGE Consortium.

Program: Physical and Health Education

EDGA920 Curriculum problems and issues in physical and health education
EDGA921 Studies in the scientific bases of health education and health promotion
EDGA922 Theoretical and practical bases of coaching
EDGA923 Sport, culture and education
EDGA924 Adolescent health status and behaviour
EDGA925 Advanced seminar
EDGA926 Theory and practice of outdoor education and recreation

A specialisation in Physical and Health Education requires the completion of three subjects. Normally these subjects will be chosen from the Physical and Health Education Program. Variations must be approved by the Program Co-ordinator Dr Paul Webb. Not all subjects are offered every year, and students must consult with the academic adviser before completing enrolment procedures.

Program: Special Education

EDGA936 Learning theories and exceptionality*
EDGA937 Approaches to reading difficulties
EDGA938 Teaching students with learning difficulties
EDGA939 Approaches to behaviour management
EDGA946 Teaching gifted children
EDGA947 Giftedness in special populations

* Compulsory subject for students wishing to complete a major specialisation in Special Education. A specialisation in this Program requires the completion of three subjects chosen from the Special Education Program. Students should discuss their proposed course of study with the Program Co-ordinator (Ms Deslea Konza) as teaching accreditation requirements in the Special Education and Gifted and Talented Education areas will depend on subject choice.

Program: Advanced Standing in TESOL

EDGA990 Introduction to Research Methods in Education
EDGA991 Advanced Qualitative Research Methods
EDGA992 Advanced Quantitative Research Methods
EDGA993 Minor Project in Education

Subjects in this group do not constitute a separate area of specialisation, but provide the various methodology and project subjects which are required for completion of the MEd and higher degrees as explained above in the section Patterns of Study.

Advanced Standing

The Faculty of Education has approved up to 8 credit points of Advanced Standing in the Master of Education to candidates who have completed any of the following:
ment of School Education and CEO, and further information regarding arrangements should be available from the relevant employer. Students must meet the normal entry criteria for the Master of Education program and follow the standard University application and enrolment procedures.

Requirements for the Degree Program
Please refer to the Pass Master Degree Rules and note the following additions:

1. Each 48 credit point program shall include a minimum of 24 credit points comprising a major specialisation within the degree. The area of specialisation shall be chosen from the Programs listed in the Schedule of Subjects for the Master of Education;

2. A candidate for the Master of Education degree, may, with the approval of the Head of School, include in his/her program subjects not exceeding 16 credit points in aggregate selected from the Schedule of Graduate subjects offered by other schools or departments, provided that the Head of the other Department or School approves such selection;

3. A person wishing to use the Master of Education degree as a qualifying program for admission to the Honours Master of Education or Doctoral degrees will normally be expected:
   (a) to complete satisfactorily those subjects in the research orientation strand of the Master of Education Degree;
   (b) to achieve results averaging credit level or better in the Master of Education Degree.

4. Students who have completed an MEd degree in the professional development orientation with results averaging credit level or better are eligible for admission to the Honours Master of Education, but should consult the entry requirements for this degree (Section 3) for the required pattern of study.

MASTER OF EDUCATION through the PAGE Consortium

Subjects at the Masters level in the areas of Language and Literacy Education and TESOL, are available through the PAGE Consortium on a full-fee basis to provide a specialist qualification at Masters level in the areas of ESL or Literacy Education for graduates interested in qualifying in these areas. Entry is available to candidates who satisfy the University's entry requirements for the Master of Education (ie a four year teaching qualification or equivalent).

The course consists of 48 credit points as follows:

EDGA900 Introduction to Educational Research Methodology
EDGA903 Master Project
EDGA976 Language and literacy development
EDGA977 Text and context
EDGA978 Literacy practices for diverse populations
EDGA983 Assessment in TESOL

Up to 16 credit points (two subjects) of appropriate graduate level subjects may be chosen from related subject areas in consultation with the Program Co-ordinator (Dr Jan Wright). These two subjects would replace two of the elective subjects in this program.

Interested candidates should contact the PAGE Consortium Office on (042) 214444 for course, enrolment and cost details.

6. MASTER OF EDUCATION (TESOL)

The Master of Education (TESOL) is a specialised Masters course which allows students to build on the practically oriented subject matter covered in previous specialised TESOL courses with the discussion of more theoretical issues. The course will be available as a full-fee off-campus program to selected cohorts, and as a HECS-fee course to on-campus students.

Entry requirements and course of study requirements as listed for the Master of Education (above) must be met.

Course of study

EDGA900 Introduction to Educational Research Methodology
EDGA976 Text and context
EDGA981 Second language literacy
EDGA983 Assessment in TESOL
EDGA984 Language and Learning in TESOL
EDGA985 English in specific contexts

Advanced Standing

Students who have successfully completed the Graduate Diploma in TESOL or the Graduate Certificate in TESOL will be credited with 24 credit points of Advanced Standing in the MEd(TESOL) providing the previous qualification is in addition to the normal Masters entry requirements.

B. GRADUATE CERTIFICATES

7. GRADUATE CERTIFICATE IN ADULT CAREER DEVELOPMENT

This is a specialised course aimed at those working with the development of adult careers. The course is offered on a full-fee basis in a self-study open-learning format, with many of the materials available on Macintosh CD-ROM disk. It consists of three subjects:

EDGA831 Career management and organisation
EDGA832 Career development and support
EDGA836 Practicum and project

8. GRADUATE CERTIFICATE IN COMPUTER-BASED LEARNING

The Graduate Certificate in Computer-Based Learning is designed to enable graduates to extend their knowledge of the use of computer technology in teaching. It replaces the Graduate Diploma in Computer-Based Learning and entry is available to candidates who satisfy the University's entry requirements for Graduate Certificates (ie a three year degree or equivalent). The Graduate Certificate in Computer-Based Learning comprises 24 credit points chosen as follows:

EDGA950 Information technology and education and training; and
EDGA958 Instructional strategies and authoring

plus one other subject chosen from the subjects listed in the Program Information Technology in Education and Training in the Graduate School schedule chosen in consultation with the Course Co-ordinator.

9. GRADUATE CERTIFICATE IN ENVIRONMENTAL EDUCATION

The Graduate Certificate in Environmental Education is designed to assist educators whose task it is to instruct the public about environmental issues. It focuses upon efficient management of the natural and built resources that are used daily by environmental educators, the delivery of effective instruction in, about and for the environment to all members of the community, and the critical evaluation of current teaching practices.

The structure of the Master of Education Degree and Graduate Diploma in Adult Education allows students from the Graduate Certificate in Environmental Education to extend into either of these degrees following successful completion of the award.

The Graduate Certificate in Environmental Education comprises 24 credit points (three subjects):

EDGA991 Instructional Design
EDGA918 Environmental Education: Pedagogy and Curriculum Perspectives
ENV1920 Scientific Basis of Environmental Management

10. GRADUATE CERTIFICATE IN GIFTED EDUCATION

The Graduate Certificate in Gifted Education is designed to provide a specialist qualification in the area of Gifted Education for graduates interested in qualifying in this area. Entry is available to candidates who satisfy the University's entry requirements for Graduate Certificates (ie a three year degree or equivalent). The course consists of 24 credit points completed over twelve months, as follows:

EDGA936 Learning theories and exceptionality
EDGA946 Teaching gifted children
EDGA947 Giftedness in special populations

11. GRADUATE CERTIFICATE IN HIGHER EDUCATION

The Faculty of Education introduced in 1993 the award of Graduate Certificate in Higher Education. This program is available to all existing and newly appointed academic staff of the University. The course will allow staff to develop their teaching capabilities and obtain a formal award as evidence of appropriate teaching skills.
The Graduate Certificate in Higher Education will comprise -
EDGA997 Introduction to tertiary teaching
EDGA991 Instructional design
EDGA993 Evaluation and assessment
EDGA997 Introduction to Tertiary Teaching may also be pursued independently as part of a staff development program. Staff who successfully complete the Graduate Certificate in Higher Education would be eligible to enrol in the Graduate Diploma in Adult Education and Training with Advanced Standing for three subjects on condition that the applicant surrender the Graduate Certificate.

12. GRADUATE CERTIFICATE IN HISTORY EDUCATION

The Graduate Certificate in History Education is a professional development course for qualified teachers of History in NSW secondary schools. It focuses on the development of modern inquiry techniques and new teaching approaches in History. Candidates for this award complete the following two subjects over one year of study:
EDGA922 New technologies and approaches to learning
HIST934 The re-making of Australian history

13. GRADUATE CERTIFICATE IN LANGUAGE EDUCATION (ESL)*

The Graduate Certificates in Language Education (ESL or Literacy) are designed to provide a specialist qualification in the areas of ESL or Literacy for graduates interested in qualifying in these areas. Entry is available to candidates who satisfy the University's entry requirements for Graduate Certificates (ie a three year degree or equivalent). The course consists of 24 credit points completed over twelve months, as follows:
EDGA970 Language and literacy development
EDGA976 Text and context
EDGA978 Literacy practices for diverse needs
* Interested candidates should contact the PAGE Consortium Office on (042) 214444 for course, enrolment and cost details. No enquiries will be handled through the Graduate School of Education.

14. GRADUATE CERTIFICATE IN LANGUAGE EDUCATION (LITERACY)*

The Graduate Certificates in Language Education (ESL or Literacy) are designed to provide a specialist qualification in the areas of ESL or Literacy for graduates interested in qualifying in these areas. Entry is available to candidates who satisfy the University's entry requirements for Graduate Certificates (ie a three year degree or equivalent). The course consists of 24 credit points completed over twelve months, as follows:
EDGA970 Language and literacy development
EDGA976 Text and context
EDGA978 Literacy practices for diverse needs

15. GRADUATE CERTIFICATE IN LITERACY

The Graduate Certificate in Literacy is designed to provide a specialist qualification in the area of Literacy Education for graduates interested in qualifying in this area. Entry is available to candidates who satisfy the University's entry requirements for Graduate Certificates (ie a relevant year degree or equivalent). The course consists of 24 credit points completed over twelve months, as follows:
EDGA970 Language and literacy development

16. GRADUATE CERTIFICATE IN SPECIAL EDUCATION

The Graduate Certificate in Special Education is designed to provide a specialist qualification in the area of Special Education for graduates interested in qualifying in this area. Entry is available to candidates who satisfy the University's entry requirements for Graduate Certificates (ie a three year degree or equivalent). The course consists of 24 credit points completed over twelve months, as follows:
EDGA936 Learning theories and exceptionality
EDGA937 Approaches to reading difficulties
EDGA938 Teaching students with learning difficulties
EDGA939 Approaches to behaviour management

17. GRADUATE CERTIFICATE IN TESOL

The Graduate Certificate in TESOL (Teaching English to Speakers of Other Languages) is designed to provide a specialist qualification in the area of TESOL Education for graduates interested in qualifying in this area. Entry is available to candidates who satisfy the University's entry requirements for Graduate Certificates (ie a three year degree or equivalent). The course consists of 24 credit points completed over twelve months, as follows:
EDGA970 Language and literacy development
EDGA976 Text and context
EDGA978 Language and Learning in TESOL
EDGA985 English in Specific Contexts

C. GRADUATE DIPLOMAS

The Graduate Diploma in Education is designed for those seeking a teaching qualification recognised by employing bodies in the NSW Primary and Secondary school systems.

The Graduate Diploma in Adult Education & Training is designed to extend existing three year qualifications and provide an educational/training qualification for candidates working in the adult education area.

The Graduate Diploma in TESOL is designed to extend existing three year qualifications and provide an educational qualification for candidates working in the English language teaching area.

The Graduate Diploma in Computer-Based Learning is no longer offered, and has been replaced by the Graduate Certificate in Computer-Based Learning. Interested candidates should consult Section 8 of this Handbook.

18. GRADUATE DIPLOMA IN ADULT EDUCATION AND TRAINING

The Graduate Diploma in Adult Education and Training is a coursework postgraduate Diploma designed to meet the specific educational development needs of a broad range of adult education practitioners. The course is designed to cover the generic professional skills for all those who work in the training and education of adults in a variety of settings - business, industry, community education, government and private organisations. Candidates will pursue studies in five major subject areas and demonstrate their skills and knowledge in a special project/practicum. The course is designed on the assumption that students undertaking the course will have already obtained their first professional qualification and that their current employment requires that they obtain professional qualifications in the training and development of adults. It may also serve as an alternative form of entry into the Master of Education, which requires a formal background in the discipline of Education.

Advanced Standing
Candidates enrolled in the Graduate Diploma in Adult Education and Training who have completed the BHP in-house program in Curriculum and Instructional Design are eligible for 8 credit points of Advanced Standing specified as EDGA991 Instructional Design.

Advanced standing for other professional development courses may also be available.

Pattern of study
The course will consist of a core of four subjects,
EDGA991 Instructional design
EDGA993 Evaluation and assessment
EDGA994 Learning strategies and communication
EDGA806 Practicum and project
plus two electives chosen from EDGA831, EDGA832, EDGA992, EDGA995, or other subjects in the Graduate School Schedule chosen in consultation with the Course Coordinator, Dr M Gillett.

19. GRADUATE DIPLOMA IN EDUCATION

The Graduate Diploma in Education (GDE) is a professional pre-service course in education for graduates of this or another approved university to seek teacher qualifications. It also serves as an introduction to the study of education for those who will later pursue further studies in the field, for example at the Masters level.

Intending applicants for the Graduate Diploma course are advised that it may be necessary to restrict enrolments. If this is necessary, selection to the course will be made on the basis of academic merit and suitability of the first degree to teaching requirements. Preference will be given to
graduates of the University of Wollongong. A statement of interests and experience in education will also be requested from applicants and will be considered as part of the selection process.

The main aim of the course is to provide a professional course of pre-service education for intending primary and secondary school teachers. The structure of the program seeks to combine the practical and theoretical elements of teaching by engaging students in professional and work aspects, including methods of work and classroom practice, from the beginning of the course. Underpinning and integrated with the professional aspects are curriculum studies and the "Foundation" disciplines of education.

Each component is intended to contribute to the development of concepts and skills relating to an understanding of and competence in teaching. It is expected that prospective teachers will develop as autonomous professionals who will be competent, innovative, capable of contributing to the formulation of curriculum in schools and most important committed to their own continuous professional growth.

The course is for one year full-time, over an extended academic year of 36 teaching weeks from early February to early December and it is not possible to commence the course in the middle of the year. The GDE program involves lectures, seminars, tutorials, individual assignments, group exercises and nine weeks of full-time work in local schools. Methods work and practice teaching are provided in cooperation with local schools. Students are advised that the structure of the course makes it preferable that it be undertaken full-time. Students who wish to pursue the course part-time should consult the GDE Director (Dr Michael Wilson) or the Professional Officer before enrolling.

Assessment
Students must satisfactorily complete every subject and major component in their program of study before the Diploma will be awarded. Assessment for each subject in the GDE program will be determined by individual lecturers. More specific details of assessment will be given in individual subject outlines.

Attendance
Each session is divided into a number of blocks, each of which is either school or University based. As a result the course timetable changes several times during the year. Details of lecture contact hours, and other time commitments expected of students, are outlined in the Graduate Diploma of Education Handbook distributed to students at the beginning of the academic year.

Course Outline
Students are required to complete subjects as set out below, with a total of 48 credit points:

- **EDUC800 Professional Studies A**
  8 credit points

The Graduate Diploma in TESOL is a coursework postgraduate Diploma designed to meet the specific educational development needs of a broad range of English language teachers and educators. The course is designed to cover the generic professional skills for all those who work in the TESOL area in a variety of settings - business, industry, community education, government and private organisations. Candidates will pursue theoretical studies and demonstrate their skills and knowledge in a special project/practicum.

The Graduate Diploma in TESOL may also serve as an alternative form of entry into the Master of Education, which requires a formal background in the discipline of Education.

Entry
Candidates must meet the normal University requirements for Graduate Diploma entry, ie a three year Bachelor degree or equivalent.

Advanced standing
Candidates who have successfully completed the undergraduate Diploma in TESOL in addition to meeting these entry requirements, will be granted 24 credit points of Specified Credit in the Graduate Diploma in TESOL for the subjects taken as part of the DipTESOL.

Pattern of study
Candidates will be required to complete

1. 24 credit points chosen from 300-400 level subjects listed in the B.Ed schedule, chosen in consultation with the Course Co-ordinator, plus

2. The following three subjects:
   - **EDGA976** Text and Context 8 credit points
   - **EDGA981** Second Language Literacy 8 credit points
   - **EDGA984** Language and Learning in TESOL 4 credit points

Enquiries regarding this program should be directed to the TESOL Program Coordinator, Dr Jan Wright.

Full details of entry requirements, patterns of study, and the schedule of subject descriptions for the Diplomas are given in Sections 18, 19 and 20.

**SUBJECT DESCRIPTIONS**

Due to the articulated structure of the postgraduate degree program in the Graduate School of Education, many subjects are listed in more than one Degree schedule. Candidates must consult the course requirements for the Degree in which they are enrolled to ensure they are following the correct sequence for their course of study.

All subjects are listed in alphanumerical order in the subject descriptions following.

The subjects EDGA900-997 form the MEd, MA(Hons), MAG(Hons), EGD and PhD programs. See previous sections for details of course structures and requirements.

**EDGA806 Practicum and Project**

Autumn or Spring session or Annual (A); 8 credit points (3 hrs tutorial).

Pre-requisite: Students must have completed three subjects in the Grad Dip Adult Ed and Training.

Assessment: one major report/essay 100%.

The project/practicum allows students to demonstrate their knowledge and performance skills in their work environment. The project must demonstrate that the student has acquired the basic professional competencies of presentation, needs assessment, design, development, evaluation, implementation, and change management required of an adult learning program.

The project/practicum is an individually defined and negotiated topic. Some initial meetings will focus on refining ideas and the development of a learning contract proposal. Students would then undertake their project with some help from a nominated supervisor.
This subject will address current trends in career development theory and introduce their application to individuals as they move from early career choice through life changes. The subject will focus on the organisation's perspective and identify the tools, resources and technologies available to the employer to provide for career development within the training and human resource development function.

The importance of organisational change and planning on career development will be considered in the provision of facilities and resources to support the process by the organisation. It will discuss methods for linking career development to organisational strategies and financial plans within the human resource and training functions. Specific facilities such as computer-based career information and guidance systems, action planning, for current job enrichment, promotion and transfer, mentoring, redeployment, coaching and upplacement will be discussed and demonstrated.

Textbooks:
Co-ordinator: Associate Professor J Hedberg.

EDGA832 Career Development and Support
Autumn or Spring session or Annual (A); 8 credit points. (Self-study using CD–Rom materials equivalent to approximately 9 hrs study per wk).
Assessment: 4 essays 25% each. Available as full-fee subject only.
This subject will focus upon the understandings and skills required of a person providing career development support services. It will identify the differences between this role and other counselling roles. In order to address these issues, the subject will examine styles of helping and identify methods of conflict resolution. It will examine specific work life issues and the importance of work–life relationships, milestones, personal events in an employee's work life. The subject will develop specific career support skills including, problem exploration and clarification, client agreements, dynamics of the helping relationship and client occupational decision-making. The context will be examined through issues such as ethics and privacy, effective outcomes for the client, accreditation, possible conflict of interest. The effective career outcomes will be examined by reference to roadblocks, constraints, mapping and implementing options, action planning, resources and the problems of transition.

Textbooks:
Additional articles and specific readings will be provided.
Co-ordinator: Associate Professor J Hedberg.

EDGA836 Practicum and Project
Autumn or Spring session or Annual (A); 8 credit points. (Self study equivalent to 3 hrs tutorial per week).
Pre-requisite: EDGA831 and EDGA832. Assessment: one major report/essay 100%. Available as full-fee subject only.
This subject is the final subject in the Graduate Certificate in Adult Career Development. It is offered on a full-fee basis in an open-learning format. Students must contact the subject co-ordinator before enrolling. The project/practicum allows students to demonstrate their knowledge and performance skills in their work environment. The project must demonstrate that the student has acquired the basic professional competencies of presentation, needs assessment, design, development, evaluation, implementation, and change management required of an adult learning program. The project/practicum is an individually defined and negotiated topic. Some initial meetings will focus on refining ideas and the development of a learning contract proposal. Students would then undertake their project with some help from a nominated supervisor.

Textbooks:
No set text, reference lists to current journals and monographs will be provided as relevant to each student's project.
Co-ordinator: Associate Professor J Hedberg.

EDGA900 Introduction to Educational Research Methodology
Autumn or Spring session; 8 credit points (3 hrs per wk lectures and seminars).
Assessment: 1 major assignment 40%, 2 minor assignments 15% each, 1 examination 30%.
This subject is compulsory for all Master of Education students. Topics to be studied will be chosen from: Principles and Epistemology of Educational Research; Descriptive and Inferential Techniques; Case Study and Action Research; Problem Identification; Design and Analysis; Interpretation of Findings; Information and Computer Based Technology in Research; Overview of Research Paradigms (qualitative and quantitative); Ethics in Education Research. The subject should be included in the first four subjects studied in an MEd program.

Textbooks:
Co-ordinator: Dr P Harris.

EDGA901 Advanced Qualitative Research Methods
Autumn or Spring session; 8 credit points (2 hrs lecture and 2 hr seminar each fortnight plus one full-day workshop).
Assessment: research proposal or case study and literature review 40%, seminar 20%, critical essay 20% review of research paper 20%.
An examination of the rationale for the use of the qualitative research paradigm will be undertaken. More of the details of the research process are discussed. Topics will include: selection of samples, role of the ethnographer, data collection strategies, interpretation of data and the communication of findings.

Textbooks:
Bogdan, R C and Biklen, S K, Qualitative Research for Education, Allyn and Bacon, 1992.
EDGA902 Advanced Quantitative Research Methods

Autumn session; 8 credit points (2 hrs lecture and 1 hr laboratory per wk).
Assessment: assignments 20%, examinations 80%

Topics will include: experimental and quasi-experimental designs for research, planning research, sampling, interviewing questionnaires, data processing, personality assessing, attitude measurement, observation and case studies, interpreting results and report writing.

Textbook:

EDGA903 Minor Project in Education

Autumn or Spring or Double session (A); 8 credit points (3 hrs per wk on a single session basis: lectures and seminars).
Co-requisite: three subjects from the student's appropriate coursework, including EDGA901 or EDGA902.
Assessment: research oriented project.

This subject is part of the research orientation in the MED program. It enables a student to explore a research issue in a sustained piece of writing, as preparation for higher degree studies. No project work should be commenced without approval from the Program Area Co-ordinator and/or the Head of the Graduate School.

EDGA904 Minor Thesis

Double session(A); 24 credit points.
Prerequisite: completion of 24 credit points of appropriate coursework, including EDGA901 or EDGA902, completed at Credit level or better.

This is the thesis subject for candidates enrolling in the Minor Thesis component of the Master of Education (Honours) program in the Faculty of Education. Candidates are required to submit a research thesis in line with the relevant University Rules. No thesis work should be commenced without approval from an appropriate academic supervisor and the Head of the Graduate School of Education. Candidates in this subject will be required as part of their candidature to participate in and present reports of their research to seminars and in other appropriate forums.

Assessment: assignments and associated projects, optional examination.

For each Directed Study, the student in consultation with his or her supervisor outlines a program of study to support the student's on-going development. The subject will be required as part of their candidature.

Co-ordinator: Program Co-ordinator.

EDGA905 Major Thesis

Double session (A); 48 credit points per year.

This is the thesis subject for candidates enrolling in a Major Thesis (MED(Hons) or PhD), supervised in the Faculty of Education. Candidates are required to submit a research thesis in line with the relevant University Rules. No thesis work should be commenced without approval from an appropriate academic supervisor and the Head of the Graduate School of Education. Candidates in this subject will be required as part of their candidature to participate in and present reports of their research to seminars and in other appropriate forums.

Assessment: assignments and associated projects, optional examination.

EDGA906 Directed Study in Education I

EDGA907 Directed Study in Education II

EDGA908 Directed Study in Education III

EDGA909 Doctoral Thesis

Double session (A); 48 credit points per year.
Prerequisite: completion of required coursework at appropriate level.

This is the thesis subject for candidates enrolled in the Doctorate of Education, supervised in the Faculty of Education. Candidates are required to submit a research thesis in line with the relevant University Rules. No thesis work should be commenced without approval from an appropriate academic advisor and the Head of the Graduate School of Education.

Candidates in this subject will be required as part of their candidature to participate in and present reports of their research to seminars and in other appropriate forums.

Assessment: assignments and associated projects, optional examination.

EDGA910 Curriculum in a Changing Context

Autumn or Spring session; 8 credit points (1 hr lecture and 2 hr tutorial per wk).
Assessment: 1 major assignment 30%, 2 minor assignments 15% each, short tasks and exercises 20%, class test 20%.

An introduction to a number of broad and contrasting approaches to and models of the curriculum and their relation to contemporary curriculum issues, policies and concerns. Curriculum decision making - school based curriculum development and the common core curriculum. Curriculum development and implementation at the classroom and institutional levels.

Textbook:

EDGA911 Managing Curriculum Change

Spring session (1 hr lecture, 2 hrs tutorials per wk).
Assessment: literature review 30%, seminar paper 40%, seminar 10%, major assignment 20%.

This subject will critically examine curriculum theory, instructional design and curriculum evaluation, including contemporary approaches to change theory, change processes and the management of change.
Different types of change as reflected at the international, national, state and school-levels will be examined in relation to curriculum policies and pedagogical practices. The subject will focus on theoretical and policy issues related to leading and evaluating change processes. Students will be encouraged throughout the session critically to reflect on their own professional involvement in the management of curriculum change.

Co-ordinator: Dr C Fox.

EDGA912 Curriculum Special Topic Autumn or Spring session; 8 credit points (supervision based, or group tutorials if group size allows)
Pre-requisite: EDGA910.
Co-requisite: 8 credit points of curriculum specialisation.
Assessment: major review 60%, project report 40% (or by negotiation).

The Special Curriculum Topic will allow students following a subject-specific specialisation to appraise, extend and apply understanding and skills in their area of professional or academic concern. Students will be required to undertake a critical reading and reporting program. Some students may extend their investigation via a field based inquiry project which will explore the related theory and program issues in a professional setting.

Co-ordinator: Dr E Booth.

EDGA913 Program Evaluation Autumn or Spring session, 8 credit points, (3 hours of lectures/tutorial and workshops per week which may be scheduled on alternative weeks plus a full day workshop).
Pre-requisite: EDGA900 or EDGA993.
Assessment: two seminar papers 40%, critical review 20% and project 40%. (Weightings are negotiable)

Program Evaluation identifies the range of evaluation approaches which may be applicable in formal educational, non-formal and business and industry environments. A range of evaluation models will be reviewed. Each of the models’ assumptions and major methodologies will be critiqued in relation to a number of evaluation scenarios. Students will have the opportunity to participate in evaluation simulations and undertake their own evaluation as part of the subject. Issues to be addressed in the subject will include: QA, accreditation, skill transfer and site based action research. The assessment components will encourage the participants to critically review each phase of the evaluation model selected for specialist study and to critique the overall fit of the approach to the various stakeholders’ interests and purposes.

Hopkins, D, Evaluation for School Improvement, Open University, Milton Keynes, 1992.

EDGA915 Quality Learning and Teaching Autumn or Spring Session; 8 credit points (3 hrs per week of lectures and seminars).
Prerequisite: EDGA910 for students specialising in the Curriculum Program, eight credit points in the major specialisation for students from any other Program.
Assessment: Critical review paper (30%), seminar presentation (30%), project report (40%).

This subject will critically examine the notion of ‘quality learning and teaching’ in contemporary educational theory, policy and practice in the context of schools and their curricula. Participants will review recent research on learning styles, curriculum process, approaches to assessment of learning outcomes, and the influences of learning environments on quality learning and teaching. The literature on school improvement and schools as learning organizations will be examined and ‘best practice’ approaches to the enhancement of learning outcomes will be critiqued. In relation to these studies, participants will reflect critically on the impact on learning communities of changing instructional needs and the introduction of new information technology. A range of developments in instructional methodology will be examined, including such concepts as collaborative learning, accelerated learning, reflective learning, and interactive multimedia teaching and learning strategies.

On successfully completing this subject class participants will be able to: reflect and critique their own beliefs about learning; become more knowledgeable about the teaching practices which best align these beliefs with their students’ learning styles to maximise learning outcomes; demonstrate a knowledge and understanding of contemporary theory, policy and approaches to quality learning and teaching; undertake an action orientated inquiry in a learning setting; report on the results of this inquiry and the manner in which it has improved their own professional practice.

Co-ordinator: Dr C Fox.

EDGA917 International and Intercultural Perspectives Autumn or Spring session; 8 credit points (3 hrs per week).
Assessment: major paper 40%, seminar presentation 30%, 2 short critical reviews 15% each.

The curriculum including curriculum change and classroom practice, is strongly influenced by international developments in education and multicultural contexts in the classroom. Students will critically analyse curriculum developments and curriculum resources from contemporary international and intercultural perspectives. Topics will include: implementing Key Learning Areas in a multicultural classroom; international publishers and their influence on curriculum through texts; critical theories about intercultural communication in the classroom; issues of ethnicity and classroom participation; and a comparative view of education in cultural contexts both inside and outside Australia.

Co-ordinator: Dr C Fox.

EDGA918 Environmental Education: Pedagogy and Curriculum Perspectives Annual (A,B): 8 credit points (3 hrs per week lectures and seminars).
Methods of Assessment: 2 major assignments totalling 80%, 1 minor assignment 20%.
Pre-requisites: nil.

This subject explores pedagogical models used by various successful centres for environmental education. It critically evaluates the educational research that supports these models and then develops methods for the development, implementation and modification of environmental education programs that are appropriate to the context of the student.

Objectives: Students are required to critically evaluate environmental education programs in the context of their own work situation. The methods of evaluation employed will then be used to establish whether a clear link exists between the broad learning outcomes of the educational programs administered by students and the educational theory that supports them. Students will use the findings from this process to help them improve the environmental education programs that they currently offer.


Set readings: will also be provided from the Australian Journal of Environmental Education, the Journal of Environmental Education and other sources.
Co-ordinator: Mr B Ferry.

EDGA919 Advanced Studies in the Key Learning Areas Autumn or Spring session; 8 credit points (3 hour per week of lectures and seminars).
Prerequisite: EDGA910 for students specialising in the Curriculum Program; eight credit points in the major specialisation for students from any other Program.
Co-requisite: EDGA900.
Assessment: Seminar presentation (25%), Review paper (25%) Project report (50%).

This subject will require students to identify the factors that are driving current curriculum changes in their Key Learning Area (KLA) and examine these factors in relation to their source and area of impact. An analysis of these change processes will be
undertaken within the context of contemporary curriculum theory and through a critical review of the current literature. Students will negotiate the planning, conduct and reporting of an educational investigation about an educational issue in a Key Learning Area. On successfully completing this subject, students will be able to identify the change processes and forces in their KLA of specialisation; discuss the implications of change for their own professional work; negotiate and undertake an investigation of change within in a KLA; report the findings of their investigation in a formal report and as a seminar to the class group.

Textbook: to be advised
Co-ordinator: Dr N Temmerman.

**EDGA920 Curriculum Problems and Issues in Physical and Health Education**

**Autumn or Spring or Double session (A); 8 credit points (3 hrs per wk on a single session basis); lectures, seminars, workshops)***

**Assessment:** assignments 60%, examinations 40%.

The subject is concerned with an expansion of the conceptual framework of curriculum theory, planning and instructional design with special application to Physical and Health Education. Specific problems and issues associated with curriculum development in the secondary school will be examined.

**Textbooks:**
None specified - students will draw from an extensive bibliography of selected primary and secondary literature.

**Co-ordinators:** Dr J Wright.

**EDGA921 Studies in the Scientific Bases of Health Education and Health Promotion**

**Autumn or Spring or Double session (A); 8 credit points (3 hrs per session on a single session basis)**

**Assessment:** 1 examination 50%, 2 assignments 20% each, 10% probles.

Health promotion has progressed through its infancy and is here to stay. The literature on health promotion and risk factor reduction is substantial and compelling. The purpose of this subject will be to examine epidemiological, physiological and intervention studies related to health promotion and disease prevention. Special emphasis will be given to educational components of health promotion programs and health promotion in educational settings.

**Textbooks:**
Journal articles and portions of books will be used in lieu of a set text.

**Co-ordinator:** Dr J Patterson.

**EDGA922 Theoretical and Practical Bases of Coach Education**

**Spring session; 6 credit points (3 hrs per wk).**

**Assessment:** student presentation 25%, seminar paper 25%, practical assessment 25%, practical field work 25%.

Pedagogical issues, time management and overseas developments in coaching will be covered. Students will undertake an in-depth analysis of behavioural coaching, assessment and skill acquisition as applied to coaching. A conceptual framework of coaching both in Australia and overseas will be used with practical implications related to practice sessions and the athletic environment.

**Textbooks:**

And other selected primary reference material.

**Co-ordinator:** Dr P Webb.

**EDGA923 Sport, Culture and Education**

**Spring session; 8 credit points (3hrs lecture/seminar).**

**Pre-requisite: EDGA900.**

**Assessment:** seminar presentation and paper 30%, minor assignment 20%, major assignment 50%.

This subject will examine physical education, sport and other physical activities such as dance, as social forms that are produced by and in specific historical and social contexts. The economic, political and cultural forces influencing this production in the present and recent past will be discussed generally and in the context of schooling. As a major social institution, sport contributes to the reproduction of systems of beliefs and practices that constitute a particular culture. In this context the function of sport in maintaining and changing attitudes and practices that relate to class, age, gender, and ethnicity will be discussed, particularly in relation to the representations of sport in the media. Various forms of analysis, including text analysis, surveys and interviewing will be examined as they apply to this field of study. Students will be expected to complete at least one assignment that includes primary data collection and analysis.

**Textbook:**
No set text. Students will draw from a variety of current journal and monograph materials.

**Co-ordinator:** Dr J Wright.

**EDGA924 Adolescent Health Status and Behaviour**

**Autumn or Spring session; 8 credit points (3 hrs per uk).**

**Assessment:** assignments 60%, examinations 40%.

Adolescence provides a crucial access point for the improvement of health, not only now but in adult life and in the next generation. Health Education is recognised as a valuable means of realising this goal. A necessary precursor to the development of effective health education programs is the understanding of adolescent health status and behaviour and its relationship to the programming task. Subject content, therefore, will include an appraisal of health status indices and health behaviour patterns among young people. Factors affecting health behaviour will be discussed and models of adolescent health behaviour explored. An investigation of selected health behaviour-oriented programs for adolescents will be examined.

**Textbooks:** no set text.

**Co-ordinators:** Dr J Patterson and Ms Y Kerr.

**EDGA925 Advanced Seminar**

**Autumn or Spring session; 8 credit points (3 hrs per wk seminars and workshops).**

**Pre-requisite: EDGA900; one subject of Health and Physical Education specialisation completed.**

**Assessment:** 2 seminar presentations 25% each, written paper 50%.

The advanced seminar will allow students to evaluate and extend knowledge in a specific area of physical and health education. Students will be required to undertake a critical reading program in this area and extend their work by applying their understanding in a school or community based project which integrates the theory and application. Regular seminars will be presented detailing issues, understandings, progress & final outcome.

**Textbook:** to be advised

**Co-ordinator:** Dr P Webb.

**EDGA926 Theory and Practice of Outdoor Education and Recreation**

**Autumn or Spring session; 8 credit points; (3hrs per wk, lecture/seminar).**

**Assessment:** seminar paper 20%, major project 25%, minor project 10%, fieldwork 25%, logbook 20%.

Increasing pressure in urban and contemporary living has placed greater awareness on environmental and outdoor opportunities for educational, community and corporate groups. A variety of learning experiences will be presented which enable students to gain an insight into how Outdoor Education is used as a catalyst for social and personal development and/or environmental sensitivity. Topics include: the philosophy of Outdoor Education; innovations in National Curriculum for Outdoor Education; an exposure to various school programs incorporating Outdoor Education; and an examination of technical skills required in this field. Practical fieldwork experiences on a regular basis also form part of this course.

**Textbook:** to be advised

**Co-ordinator:** Ms T Gray.

**EDGA936 Learning Theories and Exceptionality**

**Autumn session; 8 credit points (3 hrs per wk).**

**Assessment:** essay 40%, seminar presentation 30%, case study 30%.

This subject will require students to engage in a critical review of a range of explanations of human learning and their application to children with special needs. Learning will be examined from psychological, sociological and sociolinguistic perspectives. Topics to be considered will include: behaviourist learning theories and their educational applications; the impact of Piaget on educational practice and critiques of his theory; socio-cultural accounts of learning and their implications for teaching practice; information processing perspectives including the development of metacognition and self-regulation; the relationship between language, learning and thought; and issues in the assessment of intelligence.

**Textbooks:** to be advised.

**Co-ordinator:** Dr W Vialle.
EDGA937 Approaches to Reading Difficulties
Autumn or Spring session; 8 credit points
Assessment: reading response 30%, essay 20%, case study 10%
Pre- or co-requisite: EDGA936 for students specialising in the Special Education Program.
This subject examines the relevant research literature and empirical evidence regarding the acquisition of reading skills. Individual differences in reading development will be explored from both theoretical and practical frameworks in order to identify the most relevant assessment and remediation strategies.
Co-ordinator: Ms D Konza.

EDGA938 Teaching Students with Learning Difficulties
Autumn or Spring session; 8 credit points (3 hrs per wk)
Assessment: seminar presentation and paper 30%, major study paper 40%, examination 30%
Pre-requisite: EDGA936 for students specialising in the Special Education Program.
This subject aims to develop an understanding of how the teacher and the teacher's beliefs about learning affect classroom practice. Students will examine a range of teaching strategies derived from the behaviourist and cognitive models, social learning theories and other interventions used in the education of students with particular learning needs. Both critical reviewing of the literature and practical application of the theories will be included in the structure of the subject.
Co-ordinator: Ms D Konza.

EDGA939 Approaches to Behaviour Management
Autumn or Spring session; 8 credit points
Assessment: minor assignment 15%, transcript analysis 15%, major assignment 40%, examination 30%
Pre- or co-requisite: EDGA936 for students specialising in the Special Education Program.
This subject examines a range of approaches to behaviour management and the theoretical principles upon which they are based. (e.g. Rogers' microskills approach, Canter and Canter's Assertive Discipline, Dreikurs and Adlerian approaches, Compliance Training, Glasser's Reality Therapy among others). The problems associated with non school attendance, aggressive and withdrawn disorders, attention deficit disorders and other commonly occurring behaviour disorders are critically examined within the context of increasing academic engaged time and developing social and cogntive resolution skills.
A number of other texts are also required reading.
Co-ordinator: Ms D Konza.

EDGA946 Teaching Gifted Children
Autumn or Spring session, 8 credit points (1 hr lecture, 2 hrs seminar per wk)
Pre-requisite: EDGA936 for students wishing to specialise in Special Education.
Assessment: literature review 10%, seminar paper 20%, essay 30%, research paper 40%
This subject will identify and critically examine the current issues related to the education of gifted and talented students. It will also prepare teachers to meet effectively the needs of such students through curriculum modification and application of special educational strategies. Topics will include: definition and identification issues; instructional models; educational strategies; creativity and thinking skills; counselling needs; special educational populations; and the implications of policy on educational practice. The subject will also provide opportunity for individualised study of a topic of special interest within the subject guidelines.
Co-ordinator: Dr W Vialle.

EDGA947 Giftedness in Special Populations
Spring session; 8 credit points (3 hrs per wk lecture/seminar)
Assessment: literature review 10%, seminar paper 20%, essay 30%, case study 40%
Pre-requisite: EDGA936 Learning Theories & Exceptionality for students wishing to specialise in Special Education.
This subject will critically examine the needs of special populations of students who are generally under-represented in programs for gifted and talented children. It offers a philosophical approach to gifted education that emphasises inclusiveness in student identification and programming as opposed to more traditional approaches which focus on exclusiveness. The subject will also prepare teachers to meet the needs of these children through analysing and evaluating alternative forms of assessment and developing appropriate strategies for curriculum design and delivery. Possible focus groups will include: Aboriginal children, ethnic minority children, low SES, girls, underachievers, preschoolers, prodigies, and students with physical and learning disabilities.
Co-ordinator: Dr W Vialle.

EDGA950 Information Technology, Education and Training
Autumn session; 8 credit points (1 hr lecture, 2 hrs seminar/workshop)
This subject provides the opportunity to study information technology in the context of instructional software. Overview of instructional systems design and evaluation for educational software.
Textbooks: No set text, reference lists to current journals and monographs will be provided.
Co-ordinator: Associate Professor J Hedberg.

EDGA951 Information Systems and Educational Management
Spring session; 8 credit points (2 hrs lecture, 1 hr seminar/workshop).
Assessment: 1 computer based project 40%, 1 essay 40%, 1 seminar presentation 20%
Topics include: Information Systems and their impact on educational management, development of information analysis techniques, writing specifications for systems, linking information systems with management processes and organising structures, issues for educational management, course delivery, logistics, records management, databases, and curriculum organisation.
Textbooks: No set text, reference lists to current journals and monographs will be provided.
Co-ordinator: Associate Professor J Hedberg.

EDGA952 Designing Instructional Software
Autumn or Spring session; 8 credit points (1 hr lecture, 2 hrs seminar/workshop).
Pre-requisite: EDGA950.
Assessment: 1 computer based project 40%, 1 essay 40%, 1 seminar presentation 20%
This subject will examine the underlying cognitive implications of advanced information technology for independent learning systems. The focus is on supportive learning environments emphasising interactivity and individual learning with particular reference to hypertexts. It will include research into learning strategies using alternative structures of knowledge.
Textbooks: No set text, reference lists to current journals and monographs will be provided.
Co-ordinator: Associate Professor J Hedberg.

EDGA954 Interactive Multimedia in Education
Spring session; 8 credit points (2 hr lecture, 1 hr seminar/workshop).
Pre-requisite: EDGA950.
Assessment: 1 computer based project 40%, 1 essay 40%, 1 seminar presentation 20%
This subject will develop the skills for designing integrated learning environments which are to be delivered or experienced through computer-based systems. It will enable the research into learning from such systems, impact on educational organisation and delivery, design, instructional and evaluation strategies for these programs.
Textbooks: No set text, reference lists to current journals and monographs will be provided.
Co-ordinator: Associate Professor J Hedberg.

EDGA955 Information Technology and Cognitive Processes
Autumn session; 8 credit points (1 hr lecture, 2 hrs seminar/workshop).
Assessment: 1 computer based project 40%, 1 essay 40%, 1 seminar presentation 20%
This subject provides the opportunity to study information technology in the context of cognitive processes.
of learning processes, especially as it relates to cognitive science and artificial intelligence. It will include research into the use of LOGO and other "programming" environments, artificial intelligence and cognition, development and implementation of intelligent tutoring systems, use of expert systems, embedded training and performance support systems.

Textbooks:
No set text, reference lists to current journals and monographs will be provided.

Co-ordinator: Mr N Hall.

EDGA956 Advanced Studies in Interactive Learning

Spring session; 8 credit points (1 hr lecture, 2 hrs seminar/workshop).
Pre-requisite: at least 24 credit points (three subjects) chosen from the subjects listed for the Information Technology Program in the Master of Education Schedule.

Assessment: 1 computer based project 40%, 1 essay 40%, seminar presentation 20%.

Advanced study on a specific topic which reflects the current state of research in the field of information technology in teaching and learning. Development of the skills for designing integrated learning environments which are to be delivered or experienced through computer-based systems. Research into learning from such systems, impact on educational organisation and delivery, design, instructional and evaluation strategies for these programs.

Textbooks:
No set text, reference lists to current journals and monographs will be provided.

Co-ordinator: Associate Professor J Hedberg.

EDGA957 Implementation and Evaluation of Technology-Based Learning

Spring or Autumn session, 8 credit points, (2 hrs lecture/1 hr seminar per wk).
Pre-requisite: EDGA950.

Assessment: completion of two essays each 30% and one essay 40%.

This subject allows students to investigate the links between educational theory and teaching and learning practice with integrated technologies. Research into the implementation of information technology in education and training contexts, and the assessment of effective project implementation for technology-based learning. Evaluation of interactive instructional software, especially interactive multimedia software, and the cognitive aspects for interfaces. The subject will also address evaluation and implementation of current innovations and classroom-based learning strategies using information technologies.

Textbook:
Reeves, T., Evaluation of Interactive Multimedia, Athens, University of Georgia, 1993.

Co-ordinator: Associate Professor J Hedberg.

EDGA958 Instructional Strategies and Authoring

Summer or Spring or Autumn session, 8 credit points. (2 hours lecture/1 hour laboratory per week).
Pre- or co-requisite: EDGA950.

Assessment: programming assignments 60%, examination 40%.

This subject will enable the students to develop sophisticated concepts of using authoring tools to present their ideas for computer based learning. The subject will focus on the use of object oriented programming tools such as HyperCard and how different instructional strategies can be implemented with such tools. Comparisons will also be made with standard authoring packages available for cross platform delivery of instructional software.

Textbooks:

Co-ordinator: Dr W Cheung.

EDGA960 Foundation of Policy Studies

Autumn or Spring session; 8 credit points (3 hrs per wk seminar alternating fortnightly with 3 hrs per wk workshop).

Assessment: 4 minor assignments totalling 20%, 1 major assignment 30%, 1 examination 30%, policy simulation 20%.

Elements of policy theories. Critical examination of rationalist models, incrementalist models, models of power and location of influence, implementation theory. Cost/benefit approaches to policy making.

Textbooks:

Co-ordinator: Professor C Fasano.

EDGA961 Policy Research and Policy Analysis

Autumn or Spring session; 8 credit points (3 hrs per wk seminar alternating fortnightly with 3 hrs per wk workshop).

Pre-requisite: EDGA960.

Assessment: 4 minor assignments totalling 20%, 1 major assignment 30%, 1 examination 30%, policy simulation 20%.

Policy analysts and researchers construct the information base out of which analysis can be carried out and efficient decisions can be made along the way from policy formulation to implementation and evaluation of policy programs. Knowledge of discipline-oriented policy enquiry methodologies - tools of the trade of policy analysts and researchers - is indispensable in understanding how and why Australian educational policies take on their specific outlook.

Textbooks:

Co-ordinator: Professor C Fasano.

EDGA963 Education Policy in Australia

Autumn session; 8 credit points (3 hrs per wk seminar alternating fortnightly with 3 hrs per wk workshop).

Pre-requisite: EDGA960.

Assessment: 4 minor assignments totalling 20%, 1 major assignment 30%, 1 examination 30%, policy simulation 20%.

Many of the issues and debates in educational policy at any given point in time rest on situations emerged and decisions taken at various points in the past. This subject focuses on the evolution of educational policy in Australia as it has been shaped by political, social, economical, institutional and pedagogical factors. Current policy debates such as those on public and private education, federal and state roles in education, participation, special programs, representation and financing will be approached from a historical perspective on the basis of relevant policy and other documents as well as through the direct contribution from key protagonists in the Australian policy arena.

Textbook:

Co-ordinator: Professor K Gannicott.

EDGA964 Educational Management and Administration

Autumn or Spring session; 8 credit points (2 hrs lectures and 1 hr seminar per wk).
Pre-requisite: EDGA960.

Assessment: 3 seminar papers 15% each, final examination 55%.

This subject examines some of the ways in which improved management and administration can contribute to more effective planning and policy implementation in education. Topics covered include devolution/centralised control and the accountability of management, and the role of program budgeting in the management of resources. Case studies are drawn from Australia and overseas.

Textbook:

Co-ordinator: Professor K Gannicott.

EDGA965 Resource Allocation in Education

Autumn or Spring session; 8 credit points (2 hrs lectures and 1 hr seminar per wk).
Pre-requisite: EDGA960.

Assessment: 3 seminar papers 15% each and final examination 55%.

This subject examines the allocation of economic and financial resources to education in Australia and overseas. The extensive literature on the economic benefits from education is explored, with particular reference to the implications for educational policy and planning at both state and national level in Australia. The pattern and sources of educational expenditure are analysed and a study is made of cost concepts and their measurement in education. Particular attention is paid to the role of output budgeting in education, and the introduction of school-based budgeting in NSW and elsewhere.

Textbooks:

Co-ordinator: Professor K Gannicott.
EDGA966 Leadership and School Management
Autumn session; 8 credit points (1 hr lecture, 2 hrs tutorials/workshops per wk).
Assessment: paper 10%, paper 20%, critique of policy document 20%, project report 40%, seminar 10%.
This subject is designed to provide educational leaders with the knowledge and skills needed to facilitate the effective management of human resources in the implementation of policies and programs in education. The content will include a critical examination of planning strategies, analysis of professional development models and current practices as applied to working with people in schools. This subject will require a critical examination of the relationship between relevant theories, organisational structures and current professional development programs. Students will demonstrate competence in the design, implementation and evaluation of pertinent aspects of professional development.
Textbooks: to be advised.
Co-ordinator: Associate Professor B Cambourne.

EDGA972 Literacy: Theory into Practice
Autumn session; 8 credit points (3 hrs per wk).
Pre-or co-requisite: EDGA970 for students specialising in the Language and Literacy Program.
Assessment: reflective journal 30%, two assignments 30% each, seminar 10%.
In this subject students will examine the nexus between literacy theories and classroom practice. The emphasis in this subject will be on literacy process and pedagogy rather than analysis of language. It will examine the processes which underpin effective and ineffectice literacy behaviour in instructional practices. Students will critically analyse a range of past and current instructional strategies and identify their theoretical underpinnings. Finally students will examine the methodology for integrating literacy within Key Learning Areas.
Textbooks: Readings and papers to be selected.
Co-ordinator: Dr J Turbili.

EDGA976 Text and Context
Autumn or Spring session; 8 credit points (1 hr lecture, 2 hr tutorial per wk).
Pre-or co-requisite: EDGA970 for students specialising in the Language and Literacy Program.
Assessment: assignments 60%, field report 40%.
This subject explores the relationship between texts and their contexts, focusing on the nature of language and its role in the learning process. It draws on a functional model of language behaviour, and it will focus on the development of analytic techniques which can be used in studies where texts and language are the data base.
Textbooks: no set text.
Co-ordinator: Dr B Wimsen.

EDGA977 Communication and Learning
Spring Session, 8 credit points (3 hrs lecture/seminar per wk).
Pre-requisite: EDGA970 for students specialising in the Language and Literacy Program.
Assessment: essay (30%), seminar presentation (30%) and text analysis (40%).
This subject is designed to make students familiar with the work of those developmental psychologists and educators who have attempted to explain the relationship which exists between communication, comprehension and learning. The ways in which children use social knowledge both to communicate effectively and to solve problems will be of special interest. Research into the characteristics of effective theories of language and literacy learning. It will draw on recent research and theory related to the areas of psychometrics, qualitative evaluation, and linguistics. Students will also be required to trial and evaluate a range of assessment and evaluation instruments and procedures.
Textbooks: No set text. Students will be advised of appropriate readings.
Co-ordinator: Associate Professor M Harris.

EDGA973 Language, Ideology and Culture
Autumn or Spring session; 8 credit points (3 hrs lecture/seminar per week).
Pre-or co-requisite: EDGA970 for students specialising in the Language and Literacy Program.
Assessment: seminar 25%, text analysis 30%, project 45%.
This subject will draw on current writing in sociology, cultural studies, semiotics and linguistics to study the relationship between language, ideology and culture. Students will examine the contribution of language to the (re)production of cultural values and social meanings through an analysis of written and spoken texts such as curriculum documents, journal articles, school text books and other resource materials, teacher/student talk and interaction in other educational settings. It has particular relevance to those teaching in literacy and/or literature contexts but with a more general relevance to those examining policy or curriculum documents and other written and spoken texts. Topics to be covered include: theories of ideology; the relationship between discourse(s) and ideology, subjectivity and language; power and language; the operation of ideology through texts and developing a critical reading position.
Co-ordinator: Dr J Wright.

EDGA974 Assessment and Evaluation of Language & Literacy
Autumn or Spring session; 8 credit points (3 hrs per wk of workshops and tutorials).
Pre-requisite: EDGA970 for students specialising in the Language and Literacy Program.
Assessment: two projects 40% each and a log book 20%.
This subject will require students to examine the relationship between the axioms and assumptions underlying different paradigms of evaluation in literacy education. In particular the subject examines both past and current issues and theoretical underpinnings of evaluating student learning. It will critically examine these issues in terms of contemporary programmes of Graduate Certificate in Literacy and Master of Education.
Textbooks: No set text. Students will be advised of appropriate readings.
Co-ordinator: Ms B Derewiacka.

EDGA978 Educational Linguistics
Autumn or Spring session; 8 credit points (1 hr lecture, 2 hr tutorial per wk).
Pre-or co-requisite: EDGA976 for all students, and EDGA970 for students specialising in the Language and Literacy Program.
Assessment: assignments 50%, text analysis 50%.
This subject will extend the understandings about language introduced in EDGA976 and continue through a more detailed study of language and how it works. It will draw principally on a functional model of language which focuses on the effective use of language in order to understand the world and to interact socially. This knowledge will be applied to classroom contexts and deal with issues such as programming with a language focus, assessing students' language and evaluating teaching materials. It will also be applied to research, particularly with a view to developing analytic techniques which can be used in studies where texts and language are the data base.
Textbooks: no set text.
Co-ordinator: Dr B Wimsen.
communication and instruction, and the nature of classroom discourse will be critically analysed and its significance for teaching practice will be considered.

Problem solving in peer groups, and adult-child and peer-child interactions will also be examined. The subject will conclude with a consideration of the ways in which collaborative talk might contribute to the learning of literacy.

Textbook:

**EDGA978 Literacy Practices for Diverse Needs**

**Spring session**; 8 credit points (42 hrs - this subject will ONLY be offered off campus through the PAGE consortium).

Pre-requisites: EDGA970. 
Assessment: examination 50%; assignments 50%.

The subject is intended to introduce students to mainstream classroom practices with regard to literacy development, but will look in particular at how mainstream teachers might cater for the literacy needs of a wider range of students, especially those from various `minority' backgrounds (e.g. NESB students, students with reading difficulties, gifted and talented). It will examine programming and classroom management for diverse groups, the specific ways in which mainstream programs can be adapted to meet particular literacy needs, the ways in which mainstream teachers can work with specialist teachers, the diagnosis and assessment of students' literacy proficiency, and evaluation of literacy programs. The subject will also consider the importance of preparing students for the world of work.

Textbooks: No set text. Course notes provide basic readings.

Co-ordinator: Ms B Derewianka.

**EDGA981 Second Language Literacy**

**Spring session**; 8 credit points (1 hr lecture, 2 hr seminar per wk).

Pre- or co-requisite: EDGA976 for students specializing in the TESOL program. 
Assessment: three written assignments of equal weighting.

This subject will explore the social, cultural and ideological nature of literacy through a consideration of what it means to be literate (and illiterate) within Australia and other cultures. It will consider the role of literacy within a range of social, educational and vocational contexts. As well it will cover the following: a critical analysis of theories of reading and writing and their relevance for second language literacy development; an analysis of approaches to teaching literacy with a consideration of their relationship to approaches to TESOL; the relationship between spoken and written language; their similarities and differences and the challenges to literacy educators they pose in learning; implications of this relationship for developing effective literacy programs for second language learners; principles for developing effective literacy programs; strategies for supporting the learning of literacy for ESL/EFL learners at beginner through to advanced levels.

Textbooks:
No set text. Students will be advised of approximate readings.

Co-ordinator: Ms B Derewianka.

**EDGA983 Assessment in TESOL**

**Spring session**; 8 credit points (1 hr lecture and 2 hr seminar per wk).

Pre- or co-requisite: EDGA976 for students specializing in the TESOL program.
Assessment: examination 50%, essay 50%.

This subject will examine various approaches to language assessment, from informal observation and self-assessment through to formal testing. In order to develop appropriate programs, TESOL teachers must be able to identify the needs of their students. This requires a solid grounding in the assessment of learners' oral language, reading and writing. In addition, they need to be able to critically analyse and evaluate formal assessment procedures and if necessary, learn how to design assessment tasks and prepare their students to sit for external tests. Students will take into account the views of various stakeholders and will review various reporting practices.

Textbooks:
No set text. Students will be required to buy a set of student readings.

Co-ordinator: Ms B Derewianka.

**EDGA984 Language and Learning in TESOL**

EDGA990 Foundations of TESOL. A student may not include both EDGA980 and EDGA994 in their course of study.

**Autumn session**; 8 credit points (1 hr lecture, 2 hr seminar per wk).

Pre- or co-requisite: none.
Assessment: two assignments 30% and 40%, one examination 30%.

This subject aims to familiarise students with the concepts, theories and the methodology, including current issues and areas of research. In particular, it will introduce students to various theoretical discourses in the field, comparing and contrasting relevant models of language and examining research and theory in the area of second language learning. Links will be made to classroom practice and materials as appropriate.

Textbooks:
Students will be required to buy a set of prepared course notes and readings.

Co-ordinator: Dr W Winer.

**EDGA985 English in Specific Contexts**

**Spring session**; 8 credit points (1 hr lecture, 2 hr seminar per wk).

Pre-requisite: none.
Assessment: two assignments 30% and 40%, one examination 30%.

The aim of this subject is to prepare students to design and teach English programs which address the needs of a specific clientèle (e.g. English for Business Communication, English for the Workplace, English for Science and Technology). The subject will examine how language varies across contexts. Students will develop their analytical and thinking skills relating to different contexts (academic, vocational, social, personal) and use these analyses in the development of teaching programs and materials.

Textbooks:

**EDGA991 Instructional Design**

**Autumn session**; 8 credit points (2 hrs lecture/1 hr seminar per wk).

Assessment: completion of three short essays 20% each, one essay 40%.

This subject is designed to provide students with necessary information, modelling and practice in applying principles of instructional design to training or other adult education settings. The topics include an introduction to needs assessment, task analysis, writing objectives and focusing on performance outcomes, analysis of learners and their styles of learning, implications of learning theories for instructional design, instructional strategies, media decisions and evaluation planning. Ultimately the capabilities developed through this process should transfer to the individual workplaces and complement or supplement existing skills and capabilities.

Textbook:

**EDGA992 Psychology of Adult Learning**

**Autumn session**; 8 credit points (2 hrs lecture/2 hr seminar per wk).

Assessment: two seminar papers 20% each, essay 30%, examination 30%.

This subject is designed for professionals engaged in adult education and training. Through the participation in the direct and related activities of the subject they will develop an understanding of the dynamics, theories, principles and styles commonly identified with adult learning environments. The subject will link theory to practice in the process of developing, implementing and evaluating teaching practices and strategies appropriate to adult learners. Theories considered will be drawn from the learning, motivation and personality areas. The subject will include a review of assessment procedures and the relation between these and the metacognitive strategies employed by learners.

Textbook:

**EDGA993 Evaluation and Assessment**

**Spring session**; 8 credit points (2 hrs lecture/1 hr seminar per wk).

Pre-requisite: EDGA991 Instructional Design. 
Assessment: completion of two essays 30% each, one essay 40%.

This subject is designed to develop in the student the essential knowledge, skills, understandings and attitudes which will ensure the sound assessment and evaluation of learners' performance. It also aims to develop the student's understanding of the establishment and consolidation of logical links between evaluation and instructional design. Students will design instruments for needs
assessment, the assessment of trainee/student learning and facilitator performance in an instructional setting. They will apply these instruments to collect data about a training/instructional intervention, and be able to argue their approach within the framework of an appropriate evaluation methodology.

Textbooks:
Co-ordinators: Associate Professor J Hedberg/Dr M Gillett.

EDGA994 Learning Strategies and Communication
Spring session; 8 credit points (2 hrs lecture/1 hr seminar per wk).
Pre-requisite: EDGA991 Instructional Design.
Assessment: completion of two essays 40% each; one essay 20%.
This subject is designed to develop the capabilities of students to (a) select and implement appropriate training/strategic instructional strategies for stated training objectives and (b) design and produce high quality support materials for effective learning in a range of educational contexts. There will be support to build upon the student's prior studies in psychology and instructional design and contribute to their insight into the implementation stage of the design process. It comprises practical workshops in the development of instructional plans and strategies for learning. It considers the development of a climate conducive to learning and the design of appropriate learning sequences. It also requires the student to understand group process and reflect upon and refine personal practice as a facilitator of learning.

Textbooks:
Co-ordinator: Dr M Gillett.

EDGA995 Management and Organisational Context of Learning
Autumn session; 8 credit points (2 hrs lecture/1 hr seminar per wk).
Assessment: completion of one essay 50%; one seminar presentation and paper 50%.
This subject will focus on the organisational and management aspects of adult education and training. It will also focus on the political context in which the adult educator or trainer must operate. From each of the spheres in which adult educators work the subject will identify the common and disparate elements through which they achieve their course and performance outcomes. The subject will focus on the role of training and adult learning within the human resource function of organisations, and examine concepts such as the learning organisation. It will cover current issues in the training context such as: The Competency Debate; Government reports - Mayer, Finn, Carmichael, etc; general issues in performance improvement and change management.

Textbook: none.
Co-ordinator: Associate Professor J Hedberg.

EDGA996: Issues in Adult Education and Training
Spring session: 8 credit points (3 hours: 2 lectures and 1 tutorial/seminar).
Pre-requisite: at least two subjects in the Adult Education and Training Program.
Assessment: two essays each worth 40%, seminar presentation 20%.
This subject is designed to provide students with an examination of current issues facing professionals in the field. Attention will be given to current international issues in adult teaching and learning such as problembased learning, access to technology, distance education of adults, implementation of government policy in adult development, working with third age learners, equity and renewal of the workforce, and literacy in the workplace. In examining these issues students will be encouraged to consider the psychological bases for adult teaching and learning, different workplace and other learning contexts and the management of adult teaching and learning. They will take part in a review of literature in one chosen area, present the outcomes of this research in a seminar.

Co-ordinator: Dr M Wilson.

EDGA997 Introduction to Tertiary Teaching
Formerly EDGA807 Introduction to Tertiary Teaching.
Spring session/Autumn session; 8 credit points (1 hr lecture, 2 hr workshop).
Assessment: direct observation of performance 50%, assessment of prepared materials 20%, reflective diary 30%.
This subject will be presented in cooperation with the Centre for Staff Development. It is only available to staff employed at the University of Wollongong and forms the introductory subject for the Graduate Certificate in Higher Education. It will introduce staff to a range of basic skills of tertiary teaching: planning, questioning managing, communicating and evaluating. It will deal with a range of teaching methods relevant to particular faculties and consider appropriate ways of assessing student performance. The principles and practices of subject and course design will be introduced and attention will be directed towards the counselling and feedback methods which are crucial to the teaching-learning process at the tertiary level. Ultimately this subject should lead staff to an awareness of avenues for continuing professional development and a desire to continue the refinement of their teaching capabilities. Intending students must consult with the course co-ordinator before enrolling in this subject.

Co-ordinator: Dr M Gillett.

GRADUATE DIPLOMA IN EDUCATION
The subjects EDUC800 - EDUC882 form the Graduate Diploma in Education program. This is an integrated course of study leading to a professional teaching qualification. Some areas of the program are classroom-based, others relate to the theoretical components of teaching. Full details of the course requirements and assessment are available in the Course Handbook and Subject Outlines distributed at enrolment.

EDUC800 Professional Studies A
Double session (A); 8 credit points.
Assessment: school practice teaching reports.
This is the practice teaching component of the course. Students will be required to complete successfully nine weeks of practice teaching. In addition, students will be required to attend field experience days during which they will undertake a wide variety of activities in preparation for the periods of full-time practice teaching. Students are advised that they will be expected to carry out their practice teaching experience in the Wollongong area.

Co-ordinator: Dr M Wilson.

EDUC801 Learners with Special Needs
Double session (A); 4 credit points (2 lectures, 1 tutorial).
Assessment: tutorial presentation 30%, major assignment 30%, minor assignment 10%, examination 30%.
This subject aims at developing an understanding of those learners in regular classrooms who do not succeed at the same rate as their peers, either through behaviour disorders or through some learning difficulty. The main focus of the subject is the development of teaching strategies and behaviour management skills which will enable teachers to increase the effectiveness of their teaching and facilitate the learning of all students.

Co-ordinator: Ms D Konza.

EDUC815 Perspectives in Education A
Double session (A); 4 credit points (4 hrs lectures, 4hrs tutorial per week for 10 wks).
Assessment: 2 essays 30% each, exam 40%.
The subject aims to introduce students to basic concepts in Philosophy, Psychology, Sociology and the History of Australian Education in relation to the contribution each can make to an understanding of the process of education in the classroom and beyond. Lectures in each of the four areas will be supported by tutorials which examine the relationships between the four areas and their educational implications. The subject forms a foundation for studies in more depth offered as electives in EDUC819 and EDUC820.

Textbooks: to be advised.
Co-ordinator: Ms N Southall.
EDUC816 Professional Studies B
Double session (A); 8 credit points (2hrs per week).
Assessment: attendance, exercises, essays.
The aim of the subject is to assist students in a number of aspects of their professional development as a teacher. This subject includes components in Physical Education, Health and Communication Skills required by the New South Wales Department of School Education to fulfill professional requirements. Teaching techniques and classroom dynamics will be emphasised and current policy documents as they affect the lives of pupils, teachers and the community will be discussed. A further component covers a variety of professional issues related to the beginning of a career in teaching.
Co-ordinator: Dr M Wilson.

EDUC817 Curriculum Studies
Double session (A); 8 credit points (2hrs per week).
Assessment: major essay 30%, two minor essays 40%, weekly exercises 30%.
This subject aims to develop student understanding of the processes of curriculum construction, implementation, and evaluation. The intention is to assist beginning teachers to build a range of strategies which may be employed in developing classroom teaching programs. This subject will underpin work carried out in the Methods subjects and draw together work from other components of the program. Content will include the following: aims and objectives; principles of assessment and evaluation; state, national and international curriculum perspectives including those relating to issues of gender and ethnicity.
Textbooks:
Co-ordinator: Dr M Wilson.

EDUC819 Perspectives in Education B
Double session (A); 8 credit points (2hrs per wk).
Assessment: varies between electives.
Secondary students enrol in this subject.
Co-ordinator: Dr M Wilson.

EDUC820 Perspectives in Education C
Double session (A); 4 credit points (1hr per wk).
Assessment: varies between electives.
Primary students enrol in this subject.
Co-ordinator: Dr M Wilson.

Perspectives in Education B and C offer a number of electives which are designed to provide an element of students choice in pursuing an in-depth study in area(s) building on EDUC815. Secondary students will choose two elective topics and Primary students one. It is strongly recommended that students choose topics outside the core areas of their undergraduate degrees.

METHOD SUBJECTS

These subjects relate the student's subject discipline(s) from undergraduate studies to professional classroom practice. No student will be permitted to enrol in a Method subject for which they have an inadequate formal academic background. The student will apply the knowledge, strategies and skills established in other strands of the course, to the study of specific school curricula and the implementation of these curricula in the schools. The topics studied will include: school curricula and the educational perspectives relevant to teaching and learning; the investigation of appropriate learning environments; teaching and learning styles; strategies and skills as they apply to the presentation of the lessons, unit planning and programming; student assessment, evaluation of learning programs and teacher performance in relation to the presentation of the curriculum; classroom management; the range and evaluation of contemporary resources.

EDUC821 Social Science I Method
Double session (A); 4 credit points.
Co-ordinator: Dr M Wilson.

EDUC822 Social Science II Method
Double session (A); 4 credit points.
Students who wish to teach Social Science at the secondary school level will need to complete EDUC821 and EDUC822 successfully.
Co-ordinator: Dr M Wilson.

EDUC831 English Method
Double session (A); 4 credit points.
Co-ordinator: Dr M Wilson.

EDUC832 History Method
Double session (A); 4 credit points.
Co-ordinator: Dr M Wilson.

EDUC841 English as a Second Language Method
Double session (A); 4 credit points.
Co-ordinator: Dr M Wilson.

EDUC842 French Method
Double session (A); 4 credit points.
Co-ordinator: Dr M Wilson.

EDUC844 Italian Method
Double session (A); 4 credit points.
Co-ordinator: Dr M Wilson.

EDUC845 Japanese Method
Double session (A); 4 credit points.
Co-ordinator: Dr M Wilson.

EDUC851 Mathematics I Method
Double session (A); 4 credit points.
Co-ordinator: Dr M Wilson.

EDUC852 Mathematics II Method
Double session (A); 4 credit points.
Students who wish to teach mathematics at the secondary school level will need to complete EDUC851 and EDUC852 successfully.
Co-ordinator: Dr M Wilson.

EDUC861 Primary Method
Double session (A); 6 credit points.
Co-ordinator: Dr M Wilson.

EDUC862 Primary Method
Double session (A); 6 credit points.
Students who wish to teach at the primary school level will need to complete EDUC861 and EDUC862 successfully.
Co-ordinator: Dr M Wilson.

EDUC871 Science Method
Double session (A); 4 credit points.
Co-ordinator: Dr M Wilson.

EDUC872 Science Method
Double session (A); 4 credit points.
Students who wish to teach science at the secondary school level will need to complete EDUC871 and EDUC872 successfully.
Co-ordinator: Dr M Wilson.

EDUC881 Art I Method
Double session (A); 4 credit points.
Co-ordinator: Dr M Wilson.

EDUC882 Art II Method
Double session (A); 4 credit points.
Students who wish to teach art at the secondary school level will need to complete EDUC881 and EDUC882 successfully.
Co-ordinator: Dr M Wilson.

EDUC891 and EDUC892 successfully.

EDUC861 Primary Method
Double session (A); 6 credit points.
Co-ordinator: Dr M Wilson.

EDUC882 Primary Method
Double session (A); 6 credit points.
Students who wish to teach at the primary school level will need to complete EDUC881 and EDUC882 successfully.
Co-ordinator: Dr M Wilson.

EDUC881 and EDUC882 successfully.

EDUC882 Primary Method
Double session (A); 6 credit points.
Students who wish to teach at the primary school level will need to complete EDUC881 and EDUC882 successfully.
Co-ordinator: Dr M Wilson.

ENVI920 The Scientific Basis of Environmental Management
Spring session; 8 credit points (28 hrs lectures, 28 hrs seminar, up to four days fieldwork).
Assessment: final examination, 2 essays, 1 research report.
This course covers topics designed to give students a comprehensive overview of the scientific basis of environmental management. The course will adopt a multi-disciplinary approach to the scientific understanding of how major ecosystems work and show how an appreciation of such knowledge leads to the development of appropriate management strategies for these systems. While there will be some emphasis on the Australian situation, much of the material is applicable in any country. The systems to be covered include estuaries, reefs, coastal wetlands, forests (tropical and
temperate), large and small catchment areas, semi-arid areas. In addition the science of the management of hazardous wastes (including radioactive materials) will be discussed. Case studies from Australia, South East Asia and the Pacific Islands will be included. As part of the course, students will complete a project carried out in teams to facilitate the development of interdisciplinary skills and an appreciation of the benefits of teamwork in addressing environmental management issues.

**Co-ordinator:** Professor J Morrison.

**HIST934 The Re-making of Australian History**

*Autumn session: 12 credit points (3 contact hrs).*

*Pre-requisite: bachelor degree, with a sub-major or more in History.*

*Assessment: essay 60%, tutorial papers 30%, tutorial participation 10%.*

The subject will examine the re-writing of the following themes in Australian history: Nationalism and Racism; Aboriginal pre-history and white relations; the role of women in society; the influence of literature, art and mass communications; and local and family history. It will also discuss the social and technical sources of these changes.

*Textbooks:*


*Co-ordinator:* Professor J S Hagan.
FACULTY OF ENGINEERING
FACULTY OF ENGINEERING

FACULTY OFFICE

Interim Dean: Professor L C Schmidt
Sub Dean: Dr G John Montagner
Faculty Officer: Ms Julie Romanowski
Administrative Assistant: Ms Leonie McIntyre

FACULTY OFFICE

MEMBERSHIP

The Faculty of Engineering is made up of the following Units:

- Civil and Mining Engineering
- Materials Engineering
- Mechanical Engineering

For Electrical and Computer Engineering – Refer to Faculty of Informatics

RESEARCH COURSES AVAILABLE

The Faculty offers Honours Master of Engineering and Doctor of Philosophy degrees by research.

POSTGRADUATE PROGRAMS

Postgraduate programs are available in the Faculty in the following areas:

- Advanced Engineering Materials
- Advanced Manufacturing
- Applied Mechanics
- Bulk Solids and Particulate Technologies
- Environmental Engineering
- Maintenance Management
- Materials Engineering
- Materials Handling Systems
- Materials Processing
- Metallurgy
- Mining Engineering
- Mining Management
- Steel Processing and Products
- Structural and Transportation Engineering
- Systems Engineering
- Water and Geotechnical Engineering

For Electrical, Computer and Telecommunications Engineering, refer to Faculty of Informatics.
Honorary Professor
Keith Ennever, BSc(Eng) PhD Lond, FIEAust, CEng, MIEAust, MICE

Administrative Assistant
Lorelle Pollard

DEPARTMENT OF CIVIL AND MINING ENGINEERING

Departmental Head
Robin N Chowdhury, BSc(Eng) Ban, PC Dipl Roorker, PhD Lit, CEng, CEng, FIEAust, FASCE, FGS, MEERI, MICE, MASTM

Professor of Civil Engineering
Lewis J Schmidt, BSc BEngSc PhD Melb, MA Camb, MASCE, CEng, FIEAust

Assistant Professor of Mining Engineering
Raghav N Singh, BSc Banaras, MEng Sheff, PhD Cardiff, DSc Not, CEng CEng, FIMinE, FIIM, FIEAust, FAIM, FIE India.

Associate Professors
Naidal I Aziz, BSc PhD Wales, MAusIMM
Michael J Boyd, BSc (Tech) MEngSc PhD UNSW, CEng, MIEAust
Maxwell J Lowrey, BE ME UNSW, PhD, ASTC, CEng, FIEAust, MACS

Senior Lecturers
Denis C Montgomery, BSc (Eng) PhD Belfast, CEng, FIEAust

Muttukumarau Sivakumar, BSc (Eng) Ceylon, MEng AIF, PhD N’cle, CEng, MIEAust, MAWWA, MIAWQ

Senior Lecturers
Richard M Arenic, PhD ME Cracow, CEng, MIEAust, MSEEAS, MIMSAFE

Ernest Y Baafi, MS Penn State, PhD Arizona, ACSM, MAIME, MCIMM, MAusIMM

Buddhima Indraratna, BSc MSc Lond, DIC PhD Alberta, MIEAust, MIMM, CEng, CEng, MIEAust, MIAWQ

Richard Kohoutek, ME Prague, PhD Melb, CEng, CEng, MIEAust, MAMS, MASME, MIMM, MASTM, MACS

Ian Porter, BSc PhD Strath, AMIME, MAusIMM

Lecturers
Bruce Atthers, BE Syd, MEngSc UNSW, PhD Men UK

Hagare Bhimappa Dharmappa, BE Mysore, MTech IIT, DEng AIT, MIEAust,
Peter W Wypych, BE PhD, CPEng (Reg)
NPcR-3, MIEAust

Lecturers
Friso De Boer, Dr Ir Delft, PEng, Grad IEAust
Oliver C Kennedy, BE UNSW
Devi P Saini, BE Jodhp, ME Pilani, PhD WA,
CPEng, MIEAust, MESA

Fellows
Zhihong Gu, BE, ME NEU, PhD, CPEng,
MIEAust, MCMecheES
Renhu Pan, BE, ME USTB, PhD, PEng,
GradIEAust, MCMecheES

Computer Systems Officer
Des Jamieson, BA DipEd

Professional Officer
Ian J Kirby, BSc(Eng) UNSW, CPEng,
MIEAust, MASE

Administrative Assistants
Mrs Roma Hamlet
Mrs Barbara Butler

FACULTY VISITING COMMITTEE

Councillor Kerrie Christian, Materials
Engineer, BHP Slab & Plate Products
Division and Councillor Wollongong
City Council
Mr Peter Fitch, Chief Executive, ANI
Manufacturing Group
Mr Greg Klamus, Group General Manager,
Sydney Water
Mr Michael Muston, General Manager,
Wingecarribee Council
Mr Warwick Powis, Manager Maintenance
Services, BHP Steel SPPD
Professor Alek Samarin, Chairman
Mr E J Whitehead, Director Education and
Training, Institution of Engineers
Australia
Mr Peter Wolfe, Retired, RTA
CIVIL ENGINEERING

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Engineering by Coursework or Research
3. Graduate Diploma in Engineering

POSTGRADUATE PROGRAMS

Structural and Transportation Engineering
Water & Geotechnical Engineering

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of Engineering degree by research and the Doctor of Philosophy degree:

- Geotechnical engineering
- Slope stability
- Reinforced earth
- Steel and concrete structures
- Cementitious materials for construction
- Finite element and finite strip methods
- Bridge engineering
- Structural dynamics
- Flood studies
- Hydraulics and hydrology
- Water quality engineering
- Waste management
- Road construction materials
- Roads engineering
- Traffic engineering
- Microcomputer applications in analysis and design
- Computer-aided design and drafting

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN STRUCTURAL & TRANSPORTATION ENGINEERING
leading to the Honours Master of Engineering.

<table>
<thead>
<tr>
<th>Number</th>
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<th>Credit Points</th>
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<tr>
<td>Core</td>
<td>CIVL951 Dissertation</td>
<td>24</td>
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<tr>
<td>Electives</td>
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<tr>
<td>CIVL904</td>
<td>Highway Materials</td>
<td>6</td>
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<tr>
<td>CIVL905</td>
<td>Transportation Engineering</td>
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</tr>
<tr>
<td>CIVL914</td>
<td>Analysis and Design of Bridge Structures</td>
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<td>CIVL918</td>
<td>Steel Structures</td>
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<td>CIVL923</td>
<td>Advanced Reinforced Concrete</td>
<td>6</td>
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<tr>
<td>CIVL924</td>
<td>Advanced Studies in Computer Aided Design and Draughting</td>
<td>6</td>
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<tr>
<td>CIVL975</td>
<td>Environmental Planning</td>
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For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN WATER & GEOTECHNICAL ENGINEERING
leading to the Honours Master of Engineering.

<table>
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<tr>
<td>CIVL902</td>
<td>Reliability in Geotechnical Engineering</td>
<td>6</td>
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<tr>
<td>CIVL908</td>
<td>Advanced Soil Mechanics</td>
<td>6</td>
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<tr>
<td>CIVL909</td>
<td>Advanced Foundation Engineering</td>
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<tr>
<td>CIVL912</td>
<td>Engineering Hydrology</td>
<td>6</td>
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<td>CIVL917</td>
<td>Environmental Engineering</td>
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<td>CIVL919</td>
<td>Earth Structures</td>
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<tr>
<td>CIVL920</td>
<td>Civil Engineering Hydraulics</td>
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For further details, see Course Requirements below.
OTHER POSTGRADUATE SUBJECTS

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<td>CIVL899</td>
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<td>CIVL901</td>
<td>Project</td>
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<td>CIVL903</td>
<td>Concrete Technology</td>
<td>6</td>
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<tr>
<td>CIVL906</td>
<td>Traffic Engineering</td>
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<td>Civil Engineering Computations</td>
<td>6</td>
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<td>CIVL910</td>
<td>Vibration of Structures</td>
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<tr>
<td>CIVL911</td>
<td>Finite Element Methods</td>
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<tr>
<td>CIVL913</td>
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<tr>
<td>CIVL915</td>
<td>Numerical Methods in Civil Engineering</td>
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<td>CIVL916</td>
<td>Research Topics in Civil Engineering</td>
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<td>CIVL921</td>
<td>Wastewater Engineering</td>
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<td>CIVL922</td>
<td>Water Supply Engineering</td>
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<tr>
<td>CIVL925</td>
<td>Conservation of Structures</td>
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<td>CIVL950</td>
<td>Dissertation</td>
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<td>CIVL955</td>
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<tr>
<td>CIVL957</td>
<td>PhD Major Thesis</td>
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</tbody>
</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for the degree enrol in the subject CIVL957.

2. HONOURS MASTER OF ENGINEERING

The Department of Civil and Mining Engineering offers the following opportunities for graduates to conduct research or pursue an advanced course of study:

(a) The Honours Master of Engineering Degree by Research Thesis

The Honours Master of Engineering Degree by research thesis is intended for those engineers qualified and interested in specific problems.

(b) The Honours Master of Engineering Degree by Combinations of Coursework and Research Thesis

This is the normal course for the younger Civil Engineer, which provides him or her with training in research and also allows greater depth of understanding in specialist postgraduate areas.

Aims

The programs of study allow the student to combine specialist postgraduate subjects according to his or her undergraduate background, with project work. It is intended to strengthen professional training in a context of problems and policies which reach beyond the conventionally recognised boundaries of single disciplines. Elective postgraduate subjects and introductions to disciplines in which the student has no experience, are available.

The program for the Honours Master of Engineering Degree offered by the Department of Civil and Mining Engineering has two explicit aims:

(i) Specialist Training. Postgraduate training is provided for students with appropriate backgrounds, to enable professional development in their particular discipline. This is achieved by providing access to existing postgraduate courses already offered by Civil Engineering.

(ii) Interdisciplinary Training. An interdisciplinary framework is provided, within which postgraduate training in Civil Engineering may be integrated with other disciplines. This is achieved by the provision of limited access to concentrated study in other disciplines.

A candidate who has a Bachelor of Engineering with Honours at Class III or higher from this University, or an approved equivalent qualification, will enrol in subjects listed in the Postgraduate Schedule and with a value of not less than 48 credit points. Programs approved by the Department of Civil and Mining Engineering comprise:

(i) the subject CIVL955 ME Major Thesis; or
(ii) the subject CIVL951 Dissertation plus four subjects from the list CIVL901 through CIVL925; or
(iii) the subject CIVL950 Dissertation plus six subjects from the list CIVL901 through CIVL925.

* It should be noted that among the listed subjects from CIVL901 through 925, only some are offered in any one year.

3. GRADUATE DIPLOMA IN ENGINEERING

A candidate who has completed a degree of Bachelor of Engineering and:

(a) who has not qualified for any class of Honours; or
(b) who wishes to qualify for the Graduate Diploma in Engineering,

will enrol in the 48 credit point subject CIVL899.

Upon satisfactory completion of the subject CIVL899, the candidate is eligible for award of the Graduate Diploma in Engineering. A person who is awarded the Graduate Diploma in Engineering and who subsequently satisfies the requirements for award of the degree of Honours Master of Engineering is required by Course Rule 504(2) to surrender the testamur and associated rights for the Graduate Diploma prior to receiving the Honours Master degree.

SUBJECT DESCRIPTIONS

CIVL899 Advanced Topics in Engineering

Double session (A); 48 credit points.

Students will normally take a selection of topics at advanced level from the following: computer aided analysis and design; computer methods; concrete design; civil engineering materials; finite element techniques; hydrology; hydraulics; numerical techniques; reliability; rock mechanics; soil mechanics; simulation; structural analysis and design; structural topology; town planning; traffic planning; traffic engineering; transportation; highway engineering; urban investigations; structural dynamics; continuum mechanics.

Co-ordinator: Professor LC Schmidt.

CIVL901 Project

Autumn or Spring session; 6 credit points.

First stage of a comprehensive study concerning a specific topic; formulation of problem and literature study, critical examination of current work; planning of solution methods; discussion of results of initial work. With the approval of the Head of Department this subject may be taken by students who intend to enrol in a 12 credit point thesis. It will not be available to those students who enrol in a 24 credit point thesis.

Co-ordinator: to be advised.

CIVL902 Reliability in Geotechnical Engineering

Autumn or Spring session; 6 credit points.

Conventional safety factor and its limitations in representing safety or reliability; geotechnical predictions and associated degree of confidence; variability of soil and rock deposits; uncertainties in material parameters, geotechnical models and failure mechanisms; statistical data and probabilistic approaches; failure probabilistic approaches compared; reliability of geotechnical systems; recent developments in probability of failure propagation and initiation, most probable extent of embankment or slope failure.

Co-ordinator: Associate Professor RN Chowdhury.
CIVL903 Concrete Technology  
**Autumn or Spring session; 6 credit points.**  
Mix design theories; design of high strength and lightweight concrete, elastic behaviour; strength design, and checking of reinforcement; significance of tests and properties of constituent materials; analysis of results; non-destructive tests; special concrete applications.  
Co-ordinator: Associate Professor DG Montgomery.

CIVL904 Highway Materials  
**Autumn or Spring session; 6 credit points.**  
Co-ordinator: to be advised.

CIVL905 Transportation Engineering  
**Autumn or Spring session; 6 credit points.**  
Transport problems; urban travel demands; the transport planning process; travel-demand forecasting; trip generation analysis; model split analysis; trip distribution analysis; design assignment; route assignment analysis; economic analysis; employment and population forecasts; evaluation of transport plans; airport engineering; classification, design standards, layout and development, terminal facilities, city-airport transport systems; urban transportation; railroad engineering; light rail rapid transit; pipeline transportation; belt conveyors - freight and passengers.  
Co-ordinator: to be advised.

CIVL906 Traffic Engineering  
**Autumn or Spring session; 6 credit points.**  
Characteristics of vehicles, drivers and pedestrians; vehicle speeds, volumes, journey times; accident studies; traffic management; parking; traffic prediction; economic analysis.  
Co-ordinator: to be advised.

CIVL907 Civil Engineering Computations  
**Autumn or Spring session; 6 credit points.**  
This subject will concentrate on software packages which are designed for application to a wide range of structural types, both two and three dimensional, including trusses, frames, plates and shells. Any combination of the software packages may be used with a variety of analysis and design procedures including linear elastic analysis, nonlinear geometric analysis, dynamic analysis, frame optimization, steel frame member design, and design and checking of reinforced concrete building frames including beams, columns, slabs, steel quantity and location, material take-off etc.  
Co-ordinator: Professor LC Schmidt.

CIVL908 Advanced Soil Mechanics  
**Autumn or Spring session; 6 credit points.**  
The principle of effective stress and its implications; stress paths in soil mechanics; problems of foundation strength and failure; peak, residual and softened shear strengths for soil; pore pressure parameters A and B; the use of pore pressure parameters in practice; selected problems of stability and settlement; the analysis and performance of slopes; the factor of safety concept; stress analysis approaches; introduction to soil dynamics.  
Co-ordinator: Associate Professor RN Chowdhury.

CIVL909 Advanced Foundation Engineering  
**Autumn or Spring session; 6 credit points.**  
General principles concerning selection of foundation type on different types of soil; difficult ground conditions including collapsing and swelling soils; performance observations in geotechnical engineering; preventative and remedial measures against ground movement and slope failure; buoyancy rafts and basements; selected problems of foundation analysis and design; dam foundations; stress distribution and stress analysis; soil sampling and exploration; soil stabilisation including drainage.  
Co-ordinator: Dr B Indraratna.

CIVL910 Vibrations of Structures  
**Autumn or Spring session; 6 credit points.**  
Co-ordinator: Dr R Kohoutek.

CIVL911 Finite Elements Methods  
**Autumn or Spring session; 6 credit points.**  
Variational principles; element shape functions, "displacement" and "stress" formulations, curved and isoparametric elements; computer programming techniques; the finite strip procedure; analysis of plates, shells and axisymmetric structures; analysis of slab- and box-type bridge superstructures.  
Co-ordinator: Professor LC Schmidt.

CIVL912 Engineering Hydrology  
**Autumn or Spring session; 6 credit points.**  
Storm models, storm maximisation, extreme precipitation estimates, intensity-frequency duration analysis; design storms; rainfall losses, infiltration models, design losses; advanced unit - hydrograph theory, synthetic unit hydrographics; hydrograph synthesis by runoff - routing; design floods for rural and urban catchments.  
Co-ordinator: Associate Professor MJ Boyd.

CIVL913 Estuary and Coastal Engineering  
**Autumn or Spring session; 6 credit points.**  
Theory of deep and shallow water waves, wave generation and decay, wave breaking, wave forces on structures; harbour resonance and seiche action, wave refraction and diffraction; breakwater design; shoreline processes, beach protection; tidal theory, propagation of tides into estuaries; sediment transport; fixed and loose bed hydraulic models; inspection of hydraulic model.  
Co-ordinator: Associate Professor RN Chowdhury.

CIVL914 Analysis and Design of Bridge Structures  
**Autumn or Spring session; 6 credit points.**  
Types of bridges; similarities between bridges and some plate- and shell-type building structures; loads; analytical methods: load distribution technique, orthotropic plate theory, grillage and space frame methods, finite strip procedure, finite element method and finite difference approach; computer program suites; design codes; design of super-structures; design of foundations.  
Co-ordinator: Associate Professor YC Loo.

CIVL915 Numerical Methods in Civil Engineering  
**Autumn or Spring session; 6 credit points.**  
Co-ordinator: Associate Professor MJ Lowrey.

CIVL916 Research Topics in Civil Engineering  
**Autumn or Spring session; 6 credit points.**  
Topics will be selected from those areas of Civil Engineering in which staff members or visiting staff members to the department, are engaged in active research.  
Co-ordinator: to be advised.

CIVL917 Environmental Engineering  
**Autumn or Spring session; 6 credit points.**  
Collection and treatment of waste water; physical, chemical and biological treatment processes; measurement of pollutants; industrial and solid waste disposal; air pollution; noise pollution; environmental impact statements.  
Co-ordinator: Dr M Sivakumar.

CIVL918 Steel Structures  
**Autumn or Spring session; 6 credit points.**  
Co-ordinator: Professor LC Schmidt.

CIVL919 Earth Structures  
**Autumn or Spring session; 6 credit points.**  
Location of earth structures such as embankments and earthen dams; basic design considerations; analytical procedures including limit equilibrium methods and stress analysis; soft ground tunnelling; problems associated with earth structures including settlement cracking and subsidence; prevention and control of subsurface erosion and piping; risk studies; maintenance and improvement of earth structures.  
Co-ordinator: Associate Professor RN Chowdhury.
CIVL920 Civil Engineering
Hydraulics
Autumn or Spring session; 6 credit points.
Uniform flow in rivers and flood plains; open channel roughness and flow resistance; non-uniform open channel flow; backwater curve computation; unsteady open channel flow. Flood wave routing; hydraulics of spillways; hydraulics of bridges and culverts; retarding basin hydraulics; urban stormwater drainage design; sediment transport in open channel flow.
Co-ordinator: Associate Professor MJ Boyd.

CIVL921 Wastewater Engineering
Autumn or Spring session; 6 credit points.
Wastewater collection; sewer and storm drainage design; chemistry and microbiology of wastewater; effect on environment; physical, chemical and biological treatment processes and design facilities; sludge treatment and disposal; wastewater reuse; advanced wastewater treatment; treatment plant design.
Co-ordinator: Dr M Sivakumar.

CIVL922 Water Supply Engineering
Autumn or Spring session; 6 credit points.
Water quality; water supply sources and demand; chemistry and microbiology of water; aeration and oxygen transfer; theory of coagulation, flocculation, sedimentation and filtration; disinfection; water softening, desalination; design of mains and service pipes; distribution of water.
Co-ordinator: Dr M Sivakumar.

CIVL923 Advanced Reinforced Concrete
Autumn or Spring session; 6 credit points.
Strength and behaviour of reinforced concrete members in flexure, shear, torsion and compression; bond and anchorage; non-rectangular sections; numerical and semi-graphical methods. Short and long-term deflections of beams; effect of repeated loading and impact. Analysis and design of deep beams. Yield line method for slabs. Design code provisions.
Co-ordinator: Associate Professor YC Loo.

CIVL924 Advanced Studies in Computer Aided Design and Draughting
Autumn or Spring session; 6 credit points.
Fundamentals of CADD; the workstation; hardware and software for CADD configurations; operation and facilities of CADD systems; AutoCAD, MeggaCAD, Prodesign II and other Micro-CAD systems; LISP language; programming with AutoLISP; customising AutoCAD, creating new commands, screen menus and tablet menus; CADD data-base, bill of materials; structural detailing; CADD management.
Co-ordinator: Dr YW Wong.

CIVL925 Conservation of Structures
Autumn or Spring session; 6 credit points.
Introduction to Principles of Conservation: the Burra Charter, the NSW Heritage Act. Understanding traditional construction methods. Structural forms of historical buildings and bridges. Conservation of foundations; conservation of masonry walls; conservation of roof structures; conservation of bridges and industrial structures; local case studies; international case studies.
Co-ordinator: Dr YW Wong.

CIVL950 Dissertation
Double session (A); 12 credit points.

CIVL951 Dissertation
Double session (A); 24 credit points.

CIVL955 ME Major Thesis
Double session (A); 48 credit points.

CIVL957 PhD Major Thesis
Double session (A); 48 credit points.
COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy by Research
2. Honours Master of Engineering by Coursework* or Research
3. Graduate Diploma in Engineering*
   * available in 1996 subject to approval by Vice-Chancellor

POSTGRADUATE PROGRAMS

Environmental Engineering

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of Engineering degree by research and the Doctor of Philosophy degree:

- Water quality engineering
- Sludge management
- Computational hydraulics
- Environmental hydraulics and unit processes
- Pollution control engineering
- Water quality and quantity modelling of catchments, rivers and lakes
- Reuse of industrial solid wastes
- Soil erosion and sediment transport
- Environmental pollution modelling
- Recycling and waste management
- Environmental geotechnology
- Solid-liquid separation processes
- Transport and the environment

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN ENVIRONMENTAL ENGINEERING

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>EENG901</td>
<td>Project</td>
<td>6</td>
</tr>
<tr>
<td>EENG916</td>
<td>Research Topics in Environmental Engineering</td>
<td>6</td>
</tr>
<tr>
<td>EENG950</td>
<td>Dissertation</td>
<td>12</td>
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<tr>
<td>EENG951</td>
<td>Dissertation</td>
<td>24</td>
</tr>
<tr>
<td>EENG955</td>
<td>ME Major Thesis</td>
<td>48</td>
</tr>
<tr>
<td>ENVI920</td>
<td>The Scientific Basis of Environmental Management</td>
<td>6</td>
</tr>
<tr>
<td>ENVI921</td>
<td>Environmental Planning</td>
<td>6</td>
</tr>
<tr>
<td>CIVL906</td>
<td>Transportation Engineering</td>
<td>6</td>
</tr>
<tr>
<td>CIVL908</td>
<td>Advanced Soil Mechanics</td>
<td>6</td>
</tr>
<tr>
<td>CIVL912</td>
<td>Engineering Hydrology</td>
<td>6</td>
</tr>
<tr>
<td>CIVL917</td>
<td>Environmental Engineering</td>
<td>6</td>
</tr>
<tr>
<td>CIVL921</td>
<td>Wastewater Engineering</td>
<td>6</td>
</tr>
<tr>
<td>CIVL922</td>
<td>Water Supply Engineering</td>
<td>6</td>
</tr>
<tr>
<td>CIVL925</td>
<td>Conservation of Structures</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: not all subjects will be offered in any one year.

For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>EENG899</td>
<td>Advanced Topics in Environmental Engineering</td>
<td>48</td>
</tr>
</tbody>
</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for the degree enrol in the subject EENG957.

2. HONOURS MASTER OF ENGINEERING

The Department of Civil and Mining Engineering offers the following opportunity for graduates to conduct research or pursue an advanced course of study:

(a) The Honours Master of Engineering Degree by Research Thesis

Candidates enrol in the subject EENG955 ME Major Thesis.

(b) The Honours Master of Engineering Degree by combination of Coursework and Research Thesis.

A candidate who has a Bachelor of Engineering with Honours at Class III or higher from this University, or an approved equivalent qualification, will enrol in subjects listed in the Postgraduate Schedule and with a value of not less than 48 credit points.

Candidates enrol in either:

(i) the subject EENG951 (24cp) plus four subjects from the Honours Master of Engineering program; or
(ii) the subject EENG950 (12cp) plus six subjects from the Honours Master of Engineering program.

A candidate who has completed a degree of Bachelor of Engineering and who has not qualified for any class of Honours, or a candidate who has completed other than a Bachelor of Engineering degree, will enrol in a 96 credit point program, consisting of the subjects EENG899, plus either program (a) or program (b).

3. GRADUATE DIPLOMA IN ENGINEERING

A candidate who has completed a degree of Bachelor of Engineering and:
(a) who has not qualified for any class of Honours
or
(b) who wishes to qualify for the Graduate Diploma in Engineering:

will enrol in the 48 credit point subject EENG899.

Upon satisfactory completion of the subject EENG899, the candidate is eligible for the award of the Graduate Diploma in Engineering. A person who is awarded the Graduate Diploma in Engineering and who subsequently satisfies the requirements for award of the degree of Honours Master of Engineering is required by Course Rule 504(2) to surrender the testamur and associated rights for the graduate Diploma prior to receiving the Honours Master degree.

SUBJECT DESCRIPTIONS

EENG899 Advanced Topics in Environmental Engineering
Double session; 48 credit points.
One or more advanced topics taken from the following: computer aided analysis and design; computer methods; environmental hydraulics; pollution control; erosion and land rehabilitation; waste management; environmental impact assessment; legislation; environmental modelling processes; environmental geotechnology; transport and the environmental ground and mine-water.
Co-ordinator: Associate Professor D Montgomery.

EENG901 Project
Autumn or Spring; 6 credit points.
First stage of a study on a selected topic, including formulation of the problem, literature study, development of study plan, and discussion of results. With the approval of the Head of Department, this subject may be taken by students who intend to enrol in a 12 credit point dissertation. It is not available to students who enrol in a 24 credit point dissertation.

EENG916 Research Topics in Environmental Engineering
Double session; 12 credit points.
Topics will be selected from the areas of environmental engineering in which staff members are engaged in research.

EENG950 Dissertation
Double session; 12 credit points.

EENG951 Dissertation
Double session; 24 credit points.
Co-ordinator: Associate Professor M Boyd.

EENG955 ME Major Thesis
Double session (A); 48 credit points.
Candidate carries out research under the general direction of supervisor(s) on an approved specialised topic within the area of Environmental Engineering.

EENG957 PhD Major Thesis
Double session (A); 48 credit points.
Candidate carries out research under the general direction of the appointed supervisor(s) in an approved specialised topic within the area of environmental engineering.
MATERIALS ENGINEERING

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Engineering by Coursework or Research
3. Master of Engineering Practice in Materials Engineering
4. Master of Engineering Practice in Materials Welding and Joining
5. Master of Engineering Practice in Steel Processing and Products
6. Graduate Diploma in Engineering
7. Graduate Diploma in Materials Welding and Joining
8. Graduate Certificate in Steel Processing and Products

POSTGRADUATE PROGRAMS

Advanced Engineering Materials
Materials Processing
Metallurgy
Materials Engineering
Materials Welding and Joining
Steel Processing and Products

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of Engineering degree by research and the Doctor of Philosophy degree:

- Deformation and fracture of multiphase materials at elevated temperatures
- Hot deformation of high strength low alloy steels
- High temperature behaviour of engineering materials
- Development of structural steels
- Electron metallography of precipitates in ferrous alloys
- Development of structures in metals by recrystallization
- Crystallographic and metallographic properties of shape memory alloys
- Development of metallographic methods for shape memory alloys
- Development of galvanising alloys
- Structures and properties of welded metals
- Adhesive Bonding
- Brazing and diffusion bonding
- Spot welding of coated steels
- Microwave joining of metals and ceramics
- Surface engineering of materials
- Wear and surface property testing
- Ceramic coatings
- Physical vapour deposition processing of metals
- Ion implantation
- Microwave processing of materials
- Solidification
- Magnetic properties of rapidly solidified materials
- Structure and properties of metallic glasses
- Structure and properties of ceramic materials
- Structure and properties of composite materials
- High temperature superconductors
- Battery and fuel cell materials
- Molecular structure and properties of polymeric materials and polymer-metal interphases
- Bath smelting technology
- Slag cleaning
- Treatment of steelworks dust
- Treatment of arsenic fumes
- Erosion/corrosion of smelter refractories
- Characterisation of welding fumes

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN ADVANCED ENGINEERING MATERIALS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>MATL992</td>
<td>Dissertation</td>
<td>24</td>
</tr>
<tr>
<td>MATL901</td>
<td>Special Topic in Materials A</td>
<td>6</td>
</tr>
<tr>
<td>MATL903</td>
<td>Recent Developments in Materials</td>
<td>6</td>
</tr>
<tr>
<td>MATL905</td>
<td>Metallic Materials</td>
<td>6</td>
</tr>
<tr>
<td>MATL906</td>
<td>Ceramic Materials</td>
<td>6</td>
</tr>
<tr>
<td>MATL907</td>
<td>Polymeric Materials</td>
<td>6</td>
</tr>
<tr>
<td>MATL972</td>
<td>Materials Design</td>
<td>6</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.
### POSTGRADUATE PROGRAM IN MATERIALS PROCESSING
leading to the Honours Master of Engineering.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATL992</td>
<td>Dissertation</td>
<td>24</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
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<tr>
<td>MATL901</td>
<td>Special Topic in Materials A</td>
<td>6</td>
</tr>
<tr>
<td>MATL902</td>
<td>Special Topic in Materials B</td>
<td>6</td>
</tr>
<tr>
<td>MATL903</td>
<td>Recent Developments in Materials</td>
<td>6</td>
</tr>
<tr>
<td>MATL921</td>
<td>Formability of Sheet Material</td>
<td>6</td>
</tr>
<tr>
<td>MATL932</td>
<td>Surface Engineering of Materials</td>
<td>6</td>
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<tr>
<td>MATL937</td>
<td>Process Metallurgy</td>
<td>6</td>
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</tbody>
</table>

For further details, see Course Requirements below.

### POSTGRADUATE PROGRAM IN METALLURGY
leading to the Honours Master of Engineering.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATL992</td>
<td>Dissertation</td>
<td>24</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATL901</td>
<td>Special Topic in Materials A</td>
<td>6</td>
</tr>
<tr>
<td>MATL903</td>
<td>Recent Developments in Materials</td>
<td>6</td>
</tr>
<tr>
<td>MATL905</td>
<td>Metallic Materials</td>
<td>6</td>
</tr>
<tr>
<td>MATL911</td>
<td>Mechanical Behaviour of Materials</td>
<td>6</td>
</tr>
<tr>
<td>MATL951</td>
<td>Performance of Materials A</td>
<td>6</td>
</tr>
<tr>
<td>MATL952</td>
<td>Performance of Materials B</td>
<td>6</td>
</tr>
<tr>
<td>MATL971</td>
<td>Prescription and Selection of Materials</td>
<td>6</td>
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</tbody>
</table>

For further details, see Course Requirements below.

### POSTGRADUATE PROGRAM IN MATERIALS ENGINEERING
leading to the Master of Engineering Practice.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td>MATL987</td>
<td>Metallurgical Processing 1</td>
<td>6</td>
</tr>
<tr>
<td>MATL988</td>
<td>Metallurgical Processing 2</td>
<td>6</td>
</tr>
<tr>
<td>MATL989</td>
<td>Metallurgical Processing 3</td>
<td>6</td>
</tr>
<tr>
<td>MATL974</td>
<td>Engineering Materials 1</td>
<td>6</td>
</tr>
<tr>
<td>MATL975</td>
<td>Engineering Materials 2</td>
<td>6</td>
</tr>
<tr>
<td>MATL976</td>
<td>Refractories</td>
<td>6</td>
</tr>
<tr>
<td>MATL977</td>
<td>Corrosion and Degradation</td>
<td>6</td>
</tr>
<tr>
<td>MATL978</td>
<td>Mechanical Behaviour</td>
<td>6</td>
</tr>
<tr>
<td>MATL981</td>
<td>Special Topic A</td>
<td>6</td>
</tr>
<tr>
<td>MATL982</td>
<td>Special Topic B</td>
<td>6</td>
</tr>
<tr>
<td>MATL983</td>
<td>Special Topic C</td>
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<tr>
<td>MATL985</td>
<td>Dissertation A</td>
<td>6</td>
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<tr>
<td>MATL986</td>
<td>Dissertation B</td>
<td>6</td>
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</tbody>
</table>

For further details, see Course Requirements below.

### POSTGRADUATE PROGRAM IN MATERIALS ENGINEERING
leading to the Master of Engineering Practice in Materials Welding and Joining.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGG899</td>
<td>Advanced Topics in Materials Welding and Joining</td>
<td>48</td>
</tr>
<tr>
<td>ENGC901</td>
<td>Introduction to Welding and Joining Processes</td>
<td>2</td>
</tr>
<tr>
<td>ENGC902</td>
<td>Arc Welding Processes</td>
<td>2</td>
</tr>
<tr>
<td>ENGC903</td>
<td>Non-arc Joining Processes</td>
<td>2</td>
</tr>
<tr>
<td>ENGC904</td>
<td>Welding, Cutting and Surfacing</td>
<td>2</td>
</tr>
<tr>
<td>ENGC905</td>
<td>Behaviour of Metals during Welding - Part 1</td>
<td>2</td>
</tr>
<tr>
<td>ENGC906</td>
<td>Behaviour of Metals during Welding - Part 2</td>
<td>2</td>
</tr>
<tr>
<td>ENGC907</td>
<td>Joining of Non-metallic and Dissimilar Materials</td>
<td>2</td>
</tr>
<tr>
<td>ENGC908</td>
<td>Construction and Design - Part 1</td>
<td>2</td>
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<tr>
<td>ENGC909</td>
<td>Construction and Design - Part 2</td>
<td>2</td>
</tr>
<tr>
<td>ENGC910</td>
<td>Fabrication/Applications Engineering - Part 1</td>
<td>2</td>
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<tr>
<td>ENGC911</td>
<td>Fabrication/Applications Engineering - Part 2</td>
<td>2</td>
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<tr>
<td>ENGC912</td>
<td>Welding Practical - Part 1</td>
<td>2</td>
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<tr>
<td>ENGC913</td>
<td>Welding Practical - Part 2</td>
<td>2</td>
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<tr>
<td>ENGC914</td>
<td>NDT/Metallographic Analysis</td>
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</table>
POSTGRADUATE PROGRAM IN MATERIALS ENGINEERING (cont’d)
leading to the Master of Engineering Practice in Materials Welding and Joining.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>ENGG915</td>
<td>Mechanical Testing</td>
<td>2</td>
</tr>
<tr>
<td>ENGG916</td>
<td>Case Studies</td>
<td>2</td>
</tr>
<tr>
<td>ENGG917</td>
<td>Special Topics in Joining - A</td>
<td>2</td>
</tr>
<tr>
<td>ENGG918</td>
<td>Special Topics in Joining - B</td>
<td>2</td>
</tr>
<tr>
<td>ENGG919</td>
<td>Dissertation</td>
<td>12</td>
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</tbody>
</table>

For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN STEEL PROCESSING AND PRODUCTS
leading to Graduate Certificate in Steel Processing and Products and Master of Engineering Practice in Steel Processing and Products.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>ENGG930</td>
<td>Preliminary Topics in Steel Processing and Products</td>
<td>6</td>
</tr>
<tr>
<td>TQM911</td>
<td>Introduction to Quality Concepts</td>
<td>6</td>
</tr>
<tr>
<td>ENGG931</td>
<td>Steel Products and their Production</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>plus one elective</td>
<td>6</td>
</tr>
</tbody>
</table>

Master of Engineering Practice in Steel Processing and Products

<table>
<thead>
<tr>
<th>Graduate Certificate subjects, plus</th>
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</thead>
<tbody>
<tr>
<td>MGMT933 Management of Process Innovation 1</td>
</tr>
<tr>
<td>MECH970 Maintenance Management</td>
</tr>
<tr>
<td>plus two electives</td>
</tr>
</tbody>
</table>

Electives:

| ENGG932 Rolling Technology          | 6 |
| ENGG933 Coating Technology          | 6 |
| ENGG934 Steelmaking                 | 6 |
| ENGG935 Casting                     | 6 |
| MATL976 Refractories                | 6 |
| ENGG936 Control of Steel Processing | 6 |
| MGMT915 Management of Change        | 6 |
| MGMT934 Management of Process Innovation 2 | 6 |

For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>MATL899</td>
<td>Advanced Topics in Materials</td>
<td>48</td>
</tr>
<tr>
<td>MATL955</td>
<td>ME Major Thesis</td>
<td>48</td>
</tr>
<tr>
<td>MATL957</td>
<td>PhD Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enroll in MATH957.

2. HONOURS MASTERS OF ENGINEERING

A candidate who has a degree of Bachelor of Engineering with Honours at Class III or higher from this University, or an approved equivalent qualification, will enrol in subjects listed in the Postgraduate Schedule and with a value of not less than 48 credit points. Programs approved by the Department of Materials Engineering comprise:

(i) the subject MATL955 Major Thesis; or
(ii) a dissertation MATL992 plus four subjects, each with a value of 6 credit points.

For any particular year the availability of subjects offered will be determined by student numbers and demand.

3. MASTER OF ENGINEERING PRACTICE

A candidate who has completed a relevant major study, or approved equivalent work, either as part of, or in addition to, a bachelor degree will enrol in subjects having a value of not less than 48 credit points, and listed in the Postgraduate Schedule. A candidate who has not completed such a major study, or the equivalent, will enrol in subjects having a value of not less than 72 credit points.

Two Master of Engineering Studies Programs are currently offered: one in Materials Engineering and the other in Materials Welding and Joining.

Each subject in the Program in Materials Engineering:

(a) will normally be offered over one session,
(b) has a value of 6 credit points, and
(c) will be assessed by a combination of quizzes, assignments, practical work and examination.

The Master of Engineering Studies Program in Materials Welding and Joining is outlined in Section 4 and in the Faculty of Engineering Entry.

4. MASTER OF ENGINEERING PRACTICE IN MATERIALS WELDING AND JOINING

This course is offered on a one year full-time basis, with the normal entry requirement being a Bachelor of Engineering or Bachelor of Science degree.

The subjects taken in the course are listed in the Table above. The course consists of a set of 18 modules (ENGG 901-918) with a total of 36 credit points, together with a specialisation (ENGG 919) of 12 credit points. The 2 credit point modules are presented as intensive one week (30 hour) subjects which:

(a) are offered over two sessions;
(b) are assessed by quizzes, assignments, reports on practical work and examination, as relevant to the
Approval of the Dean of the Faculty will be required for the subject matter of ENGG 919 - Dissertation.

5. MASTER OF ENGINEERING PRACTICE IN STEEL PROCESSING AND PRODUCTS

Candidates would normally be expected to have a Bachelor Degree in Materials or Mechanical Engineering, but a bachelor degree in another appropriate field of engineering or science together with appropriate professional experience would also be accepted.

The course will be offered on a module basis, consisting of 4 modules from the Graduate Certificate in Steel Processing and Products, plus an additional 4 modules from the above schedule.

6. GRADUATE DIPLOMA IN ENGINEERING

A candidate who has completed a degree of Bachelor of Engineering and (a) who has not qualified for any class of Honours, or (b) who wishes to qualify for the Graduate Diploma in Engineering, will enrol in the 48 credit point subject MATL899.

Upon satisfactory completion of the subject MATL899 the candidate is eligible for award of the Graduate Diploma in Engineering in Materials Engineering. A person who is awarded the Graduate Diploma in Engineering and subsequently satisfies requirements for award of the degree of Honours Master of Engineering is required by Course Rule 504(2) to surrender the testamur and associated rights for the Graduate Diploma prior to receiving the Honours Master of Engineering degree.

7. GRADUATE DIPLOMA IN MATERIALS WELDING AND JOINING

This course is one year full-time in duration, or may be taken part-time on a module by module basis. The normal entry requirement is a Bachelor of Engineering degree or a Bachelor of Science or an Associate Diploma plus appropriate industrial experience.

There are 16 modules each of 30 hours duration (480 hours total). These modules are delivered within the global subject ENGG 899. Advanced Topics in Materials Welding and Joining (48 credit points), and comprise 11 taught modules and 5 practical modules.

8. GRADUATE CERTIFICATE IN STEEL PROCESSING AND PRODUCTS

A Candidate will be awarded a Graduate Certificate in Steel Processing and Products on the successful completion of 24 credit points outlined in the above schedule. The course will be offered on a module basis

Entry Requirements:
See Master of Engineering Practice in Steel Processing and Products

SUBJECT DESCRIPTIONS

900-level subjects offered by other departments may be included in a coursework program subject to the approval by the Head of Department. While the subject co-ordinator has been given for each subject, it should be noted that the co-ordinator may change and any such changes will be notified to students enrolled in the subject.

ENGG899 Advanced Topics in Materials Welding and Joining

Autumn or Spring session; 48 credit points. Components of ENGG 899 will be delivered as 16 modules.

4 modules: Welding and joining processes (arc physics, TIG, MIG, SAW, FCA, ESW, robotic welding, brazing and soldering, adhesive bonding, diffusion bonding, EB, laser, friction, flash butt, ERW)
2 modules: Behaviour of metals during welding
1 module: Materials behaviour during joining of non-metallic and dissimilar materials
2 modules: Construction and Design
2 modules: Fabrication/Applications
Engineering
2 modules: Welding practical
1 module: NDT/metallographic analysis
1 module: Mechanical testing
1 module: Case studies
Co-ordinator: Professor D Dunne.

ENGG901 Introduction to Welding and Joining Processes

Autumn or Spring session; 2 credit points. Introduction to welding technology; definitions and terminology; classification of welding processes. Oxy-gas welding; processes and principles; applications; typical problems; health and safety issues. Review of electrotechnics; basics of electricity and electronics; Ohm’s Law; direct and alternating current; magnetism; electrical and electronic devices; arc physics; arc characteristics and control; temperature distribution in the arc; effect of magnetic fields; limits of application. Arc power sources; power source characteristics; AC sources, DC sources; control of current and voltage.
Co-ordinator: Professor J Norrish.

ENGG902 Arc Welding Processes

Autumn or Spring session; 2 credit points. Introduction to gas shielded welding; process principles of TIG, MIG and MAG welding; shielding gases; effect of gases on arc characteristics; filler metals; standards; typical problems; health and safety issues. Tungsten inert gas (TIG) welding; power sources; process factors; joint design; specifications; applications and typical problems; health and safety factors.
Metal inert gas (MIG) welding; metal active gas (MAG) welding; power sources; process factors; special techniques; joint design; specifications; applications and typical problems; health and safety factors.
Submerged arc welding (SAW); power sources; process factors; joint design; specifications; applications and typical problems; health and safety factors.
Co-ordinator: Professor J Norrish.

ENGG903 Non-Arc Welding Processes

Autumn or Spring session; 2 credit points. Principles and processes associated with: resistance welding; laser and electron beam welding; brazing and soldering; weld-bonding; adhesive bonding; friction welding; diffusion bonding; transient liquid brazing.
Co-ordinator: Professor J Norrish.

ENGG904 Welding, Cutting and Surfacing

Autumn or Spring session; 2 credit points. Fully mechanised welding processes and robotics; on-line and off-line programming of robots; flexible manufacturing systems, CAD/CAM systems; seam tracking; arc sensing; vision systems; health and safety. Electroslag welding; process factors; applications and limitations. Cutting and other edge preparation processes; arc cutting; plasma cutting; flame cutting; electron beam and laser cutting; water-jet cutting. Cladding; thermal spraying; plasma-MIG surfacing; equipment, applications and special problems.
Co-ordinator: Professor J Norrish.

ENGG905 Behaviour of Metals During Welding - Part 1

Autumn or Spring session; 2 credit points. Structures and properties of metals; alloys and phase diagrams; iron-carbon alloys; heat-treatment of steels; microstructures of welded joints; embrittlement and cracking in steels. Commercial structural steels; fine grained steels; thermomechanically processed steels; low temperature steels; high temperature creep resistant steels; high alloy stainless steels; cast irons.
Co-ordinator: Professor D Dunne.

ENGG906 Behaviour of Metals During Welding - Part 2

Autumn or Spring session; 2 credit points. Introduction to corrosion and wear; surface engineering of steels: cladding, thermal spraying; carburising, nitriding, electroplating, galvanizing, tin coating; other treatments; problems in welding and joining of coated steels. Copper and copper alloys; aluminium and its alloys; nickel alloys; other metals and alloys; welding and joining of non-ferrous alloys.
Co-ordinator: Professor D Dunne.

ENGG907 Joining of Non-Metallic and Dissimilar Materials

Autumn or Spring session; 2 credit points. Structures and properties of non-metallic materials and composites; joining of polymers; joining of polymers to metals; joining of ceramics and ceramic-metals; methods used for joining of composites and composites to other materials.
Co-ordinator: Professor D Dunne.

ENGG908 Construction and Design - Part 1

Autumn or Spring session; 2 credit points. Fundamentals of the strength of materials; basics of weld design; design principles of welded structures; joint design; fracture mechanics.
Co-ordinator: Professor J Norrish.
ENGG909 Construction and Design - Part 2

Autumn or Spring session; 2 credit points.

Behaviour of welded structures under different forms of loading; design of welded structures for static loading; effects of dynamic loading; thermodynamically loaded welded structures; design of welded aluminium alloy structures; reinforced steel welded joints.

Co-ordinator: Professor J Norrish.

ENGG910 Fabrication/Applications Engineering - Part 1

Autumn or Spring session; 2 credit points.

Quality assurance in welded structures; quality control during manufacture; total quality management. Welding stresses and distortion; control of welding restraint, stress relieving of weldments. Plant facilities, welding jigs and fixtures; measurement, control and recording in welding. Fume and radiation hazards from welding, health and safety issues.

Co-ordinator: Professor J Norrish.

ENGG911 Fabrication/Applications Engineering - Part 2

Autumn or Spring session; 2 credit points.

Non-destructive testing methods: ultrasonics and radiography; repair welding; fitness for purpose considerations; economic aspects of weld fabrication; economic considerations of high productivty welding, automatic and robotic welding.

Co-ordinator: Professor J Norrish.

ENGG912 Welding Practical Part 1

Autumn or Spring session; 2 credit points.

Training in oxy-acetylene welding, MMA, TIG and MIG welding techniques; training in oxy-gas cutting of steel.

Co-ordinator: Professor J Norrish.

ENGG913 Welding Practical Part 2

Autumn or Spring session; 2 credit points.

Demonstrations of brazing, soldering and adhesive bonding techniques. Demonstrations of plasma welding and cutting, submerged arc welding, resistance spot and seam welding, robotic and laser welding.

Co-ordinator: Professor J Norrish.

ENGG914 NDT/Metallographic Analysis

Autumn or Spring session; 2 credit points.

Practical exercises in weld defect testing using ultrasonics and radiography. Metallographic examination of commercially important metals and alloys, and the microstructures of steel and aluminium weldments.

Co-ordinator: Professor D Dunne.

ENGG915 Mechanical Testing

Autumn or Spring session; 2 credit points.

Practical exercises in mechanical testing of metallic and non-metallic materials: hardness testing, Charpy testing, determination of yield and tensile strengths, tensile elongation. Demonstration of fracture toughness (COD) testing. Application of mechanical testing to weldments.

Co-ordinator: Professor D Dunne.

ENGG916 Case Studies

Autumn or Spring session; 2 credit points.

Case studies of welding procedures applied to the fabrication of boilers and pressure vessels, pipelines, ships and naval vessels, offshore structures, transportation equipment, cranes, bridges, steel framed buildings, etc.

Co-ordinator: Professor D Dunne.

ENGG917 Special Topics in Joining - A

Autumn or Spring session; 2 credit points.

Lectures on special topics in materials welding and joining, especially current research directions and leading edge technology.

Co-ordinator: Professor D Dunne.

ENGG918 Special Topics in Joining - B

Autumn or Spring session; 2 credit points.

Lectures on special topics in materials welding and joining, especially current research directions and leading edge technology.

Co-ordinator: Professor D Dunne.

ENGG919 Dissertation

Annual; 12 credit points.

A thesis is required based on project work and/or an interpretative literature review on a topic in materials welding and joining. The thesis can be oriented towards a mechanical, materials, civil or mining engineering.

Co-ordinator: Professor T Rozgonyi.

ENGG930 Preliminary Topics in Steel Processing and Products

Autumn or Spring Session; 6 credit points.

A program, approved by the Dean of Engineering, of project work and studies of advanced topics necessary for the understanding of steel processing and the production of steel plate and strip. Topics will be selected from the fields of physical and mechanical behaviour of materials; microstructure; fluid mechanics, heat transfer; manufacturing as a process and observational methods.

Co-ordinator: to be advised.

ENGG931 Steel Products and Their Production

Autumn or Spring Session; 6 credit points.

An overview of steel products and the processes used to produce them in a modern steelworks. This will include electric arc furnace steelmaking; casting; rolling; annealing; metallic coating and polymer coating.

Co-ordinator: to be advised.

ENGG932 Rolling Technology

Autumn or Spring Session; 6 credit points.

A detailed study of hot and cold rolling and thermal treatment; methods of modelling these processes and the properties and uses of steels produced by these processes. A study of batch and continuous annealing of rolled products and the resulting modifications to properties.

Co-ordinator: to be advised.

ENGG933 Coating Technology

Autumn or Spring Session; 6 credit points.

A detailed study of the processes of applying metallic and polymer coatings to steel strip; mathematical modelling of the processes; the chemistry of the coatings applied and the properties and uses of the coated products produced by these processes.

Co-ordinator: to be advised.

ENGG934 Steelmaking

Autumn or Spring Session; 6 credit points.

An introduction to methods used to produce iron for steelmaking. A survey of methods of steelmaking and a discussion of the factors which might lead to the use of electric arc furnaces. A detailed study of electric arc furnace steelmaking. Types of steel and their uses.

Co-ordinator: to be advised.

ENGG935 Casting

Autumn or Spring Session; 6 credit points.

A detailed study of the continuous casting of steel including fluid flow; heat transfer; chemical interactions and solidification; modelling of the casting process; mould design and factors influencing the quality of the cast product.

Co-ordinator: to be advised.

ENGG936 Control of Steel Processing

Autumn or Spring Session; 6 credit points.

Review of measurement and control methods; treating the manufacturing process as a system, specific applications of measurement and control methods to steel processing from steelmaking through to casting.

Co-ordinator: to be advised.

MATL999 Advanced Topics in Materials

48 credit points.

A program, approved by the Head of Department, of project work and studies of advanced topics in materials selected from the fields of processing, physical and mechanical behaviour, microstructure and observational methods.

Co-ordinator: Professor D Dunne.

MATL901/MATL902 Special Topic in Materials A/B

There are no set syllabi for these subjects. It is intended that they will be offered on a specialised materials engineering topic by members of the Department, or visitors to the Department.

Co-ordinator: Dr G Brooks.

MATL903 Recent Developments in Materials

Considerations of the structures, properties, technology and applications of advanced materials with emphasis on materials important to the Australian economy.

Co-ordinator: Mrs S Nightingale.

MATL905 Metallic Materials


Co-ordinator: Professor D Dunne.

MATL906 Ceramic Materials

Ceramics - traditional and advanced. Microstructure-property relationships.
Processing, solid state and liquid phase sintering; Applications. Ceramic matrix composites.

Co-ordinator: Mrs S Nightingale.

MATL907 Polymeric Materials
Polymerisation, formation and classification. Effects of structure and additives on properties. Composite materials with polymeric matrices.

Co-ordinator: Dr G Spinks.

MATL908 Phase Transformations
Analysis and theories of solid state phase transformations, nucleation phenomena, diffusionless and diffusionless growth; application to precipitation, eutectoid, proeutectoid, martensitic and other processes.

Co-ordinator: to be advised.

MATL911 Mechanical Behaviour of Materials
Behaviour of ceramics, metals and polymers under stress, strain relationships, time and temperature dependent phenomena.

Co-ordinator: Associate Professor T Chandra.

MATL921 Formability of Sheet Material
Flow behaviour of sheet materials under uniaxial and biaxial stress, analyses of industrial forming processes.

Co-ordinator: Dr M Samandi.

MATL932 Surface Engineering of Materials
Surface coating processes, coating of metals and polymers; quality and performance of the product; surface heat treatment processes.

Co-ordinator: Dr M Samandi.

MATL937 Process Metallurgy
Ironmaking. Sintering and pelletising; time-temperature effects; phase composition; strength-reducibility relationships; mix selection; cokemaking; fundamental relations; coke strength and reactivity; blast furnace process; Rist and Reichert diagrams; burden design and distribution; stack, bosh and hearth processes; DRI. Steelmaking. Hot metal pretreatment - thermodynamic and kinetic aspects; BOF steelmaking; top and bottom blowing; thermodynamics and kinetics of refraining; vacuum methods; alloy recovery; deoxidation; continuous casting; solidification.

Co-ordinator: Dr G Brooks.

MATL951 Performance of Materials A

Co-ordinator: Associate Professor T Chandra.

MATL952 Performance of Materials B

Co-ordinator: to be advised.

MATL955 ME Major Thesis
48 credit points.

Co-ordinator: to be advised.

MATL957 PhD Major Thesis
48 credit points.

Co-ordinator: to be advised.

MATL961 Materials Analysis A

Co-ordinator: Professor D Dunne.

MATL971 Prescription and Selection of Materials

Co-ordinator: Professor D Dunne.

MATL972 Design of Materials
Relationship between composition, structure, properties and behaviour of materials for engineering applications.

Co-ordinator: Professor D Dunne.

MATL974 Engineering Materials 1

Co-ordinator: Professor D Dunne.

MATL975 Engineering Materials 2

Co-ordinator: Dr M Samandi.

MATL976 Refractories
Chemical composition and properties of oxides and non-oxide ceramics commonly used in refractory applications, bonding of refractories, monolithic refractories and installation techniques, refractory cements, degradation examples of applications in the iron and steel industry, methods for testing refractory properties.

Co-ordinator: Mrs S Nightingale.

MATL977 Corrosion and Degradation

Co-ordinator: Dr G Spinks.

MATL978 Mechanical Behaviour
Mechanical properties of materials: strength, hardness, strain hardening, creep, rupture, impact, dislocation and grain boundary effects. Mechanical forming operations: rolling, extrusion, forging and wire drawing, flow stress determination. Thermomechanical processing: time and temperature dependent behaviour, die design, high temperature materials problems, defects in mechanical processing. Industrial applications.

Co-ordinator: Associate Professor T Chandra.

MATL981 Special Topic A
Specialist topic in materials engineering offered by members of staff, industrial experts or visitors to the Department.

Co-ordinator: Associate Professor T Chandra.

MATL982 Special Topic B
Specialist topic in materials engineering offered by members of staff, industrial experts or visitors to the Department.

Co-ordinator: Associate Professor T Chandra.

MATL983 Special Topic C
Specialist topic in materials engineering offered by members of staff, industrial experts or visitors to the Department.

Co-ordinator: Associate Professor T Chandra.

MATL985 Dissertation A
Extensive literature survey and analysis of some topic relevant to materials engineering and approved by the Head of the Department.

Co-ordinator: Associate Professor T Chandra.

MATL986 Dissertation B
Extensive literature survey and analysis of some topic relevant to materials engineering and approved by the Head of the Department.

Co-ordinator: Associate Professor T Chandra.

MATL987 Metallurgical Processing 1

Co-ordinator: Dr G Brooks.
MATL988 Metallurgical Processing 2
Thermodynamics and kinetics of metallurgical systems: Gibbs free energy, Ellingham diagrams, slag-metal equilibria, reaction order, rate constants, temperature and pressure effects. Transport phenomena: momentum, heat and mass transfer. Metallurgical reaction engineering: batch and flow reactors, design principles.
Co-ordinator: Dr G Brooks.

MATL989 Metallurgical Processing 3
Co-ordinator: Dr G Brooks.

MATL992 Dissertation
24 credit points.
This subject may comprise a minor research project, an extensive literature survey and analysis, or the development of improved modelling methods of materials processes.
Co-ordinator: to be advised.
MECHANICAL ENGINEERING

COURSES OFFERED

The following courses are available:

1. Doctor of Philosophy
2. Honours Master of Engineering (Mechanical Engineering)
3. Honours Master of Engineering (Maintenance Management)
4. Honours Master of Engineering (Systems Engineering)
5. Master of Engineering Practice (Bulk Solids and Particulate Technologies)
6. Graduate Diploma in Engineering (Mechanical Engineering)
7. Graduate Diploma in Engineering (Maintenance Management)
8. Graduate Diploma in Engineering (Systems Engineering)

POSTGRADUATE PROGRAMS

Advanced Manufacturing
Applied Mechanics
Bulk Solids and Particulate Technologies
Maintenance Management
Materials Handling
Systems Engineering
(Total Quality Management is available as a cross Faculty program)

CURRENT RESEARCH AREAS

The following research areas are available to candidates undertaking the Honours Master of Engineering degree by research and the Doctor of Philosophy degree.

*Applied Mechanics and Heat Transfer:*
  - Bio-mechanics
  - Cavitation
  - Computational fluid mechanics
  - Finite element analysis
  - Heat transfer in two phase flow
  - Mechanical engineering design
  - Monitoring/diagnosis of manufacturing processes and machinery conditions
  - New algorithms in robotics
  - Non-destructive testing
  - Microwave applications
  - Mine water flows in longwall operation
  - Ozone transfer into water for disinfection
  - Recreation engineering
  - Rolling mill technology
  - Solar thermal system analysis and design
  - Solid mechanics of elastic and magneto-elastic bodies
  - System identification and control
  - Tribology - bearings, friction and wear

*Manufacturing Technology and Management:*
  - Automated QC and reliability engineering
  - Automated statistical process control
  - Automated warehousing systems
  - Automated welding and joining
  - Chip control in automated manufacture
  - Cost-effective quality management
  - Cybernetic quality system
  - Expert/knowledge system in automated machining
  - Fuzzy set and fuzzy logic control
  - Intelligent manufacturing systems
  - Japanese quality and manufacturing techniques
  - Knowledge-based computer simulation of machining process
  - Maintenance management
  - Total quality management

*Materials Handling:*
  - Bulk solids handling and prediction of bin wall loads and flowrates
  - Energy technology
  - Pneumatic and hydraulic conveying
### POSTGRADUATE PROGRAM IN ADVANCED MANUFACTURING

leading to the Honours Master of Engineering.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>MECH951</td>
<td>Dissertation</td>
<td>24</td>
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<tr>
<td>Electives</td>
<td></td>
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<tr>
<td>MECH908</td>
<td>Computer Aided Design</td>
<td>6</td>
</tr>
<tr>
<td>MECH919</td>
<td>Advanced Topics in Mechanical Engineering 1</td>
<td>6</td>
</tr>
<tr>
<td>MECH929</td>
<td>Advanced Topics in Mechanical Engineering 2</td>
<td>6</td>
</tr>
<tr>
<td>MECH932</td>
<td>Reliability Systems Management</td>
<td>6</td>
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<tr>
<td>MECH934</td>
<td>Advanced Manufacturing Processes</td>
<td>6</td>
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<tr>
<td>MECH935</td>
<td>Integrated Manufacturing Systems</td>
<td>6</td>
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<tr>
<td>MECH939</td>
<td>Advanced Topics in Mechanical Engineering 3</td>
<td>6</td>
</tr>
<tr>
<td>MECH942</td>
<td>Expert Systems in Manufacturing</td>
<td>6</td>
</tr>
<tr>
<td>MECH949</td>
<td>Advanced Computer Control of Machines and Processes</td>
<td>6</td>
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<tr>
<td>MECH950</td>
<td>Advanced Robotics</td>
<td>6</td>
</tr>
<tr>
<td>MECH960</td>
<td>Industrial Quality Management</td>
<td>6</td>
</tr>
<tr>
<td>MECH961</td>
<td>Quality Improvement Systems and Implementation</td>
<td>6</td>
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<tr>
<td>MECH963</td>
<td>Industrial Quality Technology</td>
<td>6</td>
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<tr>
<td>MECH965</td>
<td>Quality in Engineering Design</td>
<td>6</td>
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<tr>
<td>MECH967</td>
<td>International Quality Techniques</td>
<td>6</td>
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For further details, see Course Requirements below.

### POSTGRADUATE PROGRAM IN APPLIED MECHANICS

leading to the Honours Master of Engineering.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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</thead>
<tbody>
<tr>
<td>MECH951</td>
<td>Dissertation</td>
<td>24</td>
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<tr>
<td>Plus at least three (3) from:</td>
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<tr>
<td>MECH903</td>
<td>Biomechanical Engineering</td>
<td>6</td>
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<tr>
<td>MECH906</td>
<td>Experimental and Analytical Modelling</td>
<td>6</td>
</tr>
<tr>
<td>MECH908</td>
<td>Computer Aided Design</td>
<td>6</td>
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<tr>
<td>MECH917</td>
<td>Air Conditioning and Refrigeration</td>
<td>6</td>
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<tr>
<td>MECH919</td>
<td>Advanced Topics in Mechanical Engineering 1</td>
<td>6</td>
</tr>
<tr>
<td>MECH920</td>
<td>Numerical Methods in Mechanical Engineering</td>
<td>6</td>
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<tr>
<td>MECH921</td>
<td>Hydrodynamics</td>
<td>6</td>
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<tr>
<td>MECH924</td>
<td>Continuum Mechanics</td>
<td>6</td>
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<tr>
<td>MECH925</td>
<td>Advanced Fluid Power</td>
<td>6</td>
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<tr>
<td>MECH926</td>
<td>Applied Fluid Mechanics</td>
<td>6</td>
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<tr>
<td>MECH928</td>
<td>Finite Element Techniques in Mechanical Engineering</td>
<td>6</td>
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<tr>
<td>MECH929</td>
<td>Advanced Topics in Mechanical Engineering 2</td>
<td>6</td>
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<tr>
<td>MECH930</td>
<td>Mechanical Vibration and Condition Monitoring</td>
<td>6</td>
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<tr>
<td>MECH931</td>
<td>Friction Lubrication and Wear</td>
<td>6</td>
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<tr>
<td>MECH933</td>
<td>Solar Energy</td>
<td>6</td>
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<tr>
<td>MECH939</td>
<td>Advanced Topics in Mechanical Engineering 3</td>
<td>6</td>
</tr>
<tr>
<td>MECH944</td>
<td>Heat Transfer 2</td>
<td>6</td>
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For further details, see Course Requirements below.

### POSTGRADUATE PROGRAM BULK SOLIDS AND PARTICULATE TECHNOLOGIES

leading to Master of Engineering Practice.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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</thead>
<tbody>
<tr>
<td>MECH913</td>
<td>Pneumatic Transport of Bulk Solids</td>
<td>6</td>
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<tr>
<td>MECH914</td>
<td>Hydraulic Transport of Bulk Solids</td>
<td>6</td>
</tr>
<tr>
<td>MECH927</td>
<td>Physical Processing of Bulk Solids</td>
<td>6</td>
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<tr>
<td>MECH982</td>
<td>Bulk Solids Characterisation &amp; Particulate Mechanics</td>
<td>6</td>
</tr>
<tr>
<td>MECH983</td>
<td>Storage and Flow of Bulk Solids</td>
<td>6</td>
</tr>
<tr>
<td>MECH984</td>
<td>Belt Conveying</td>
<td>6</td>
</tr>
<tr>
<td>MECH985</td>
<td>Dust and Fume Systems</td>
<td>6</td>
</tr>
<tr>
<td>MECH986</td>
<td>Instrumentation and Control Systems for Bulk Solids</td>
<td>6</td>
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<tr>
<td>MECH987</td>
<td>Advanced Topics in Bulk Solids &amp; Particulate Technologies 1</td>
<td>6</td>
</tr>
<tr>
<td>MECH988</td>
<td>Advanced Topics in Bulk Solids &amp; Particulate Technologies 2</td>
<td>6</td>
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<tr>
<td>MECH989</td>
<td>Advanced Topics in Bulk Solids &amp; Particulate Technologies 3</td>
<td>6</td>
</tr>
<tr>
<td>Plus</td>
<td>Project in Bulk Solids and Particulate Technologies</td>
<td>12</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.
## POSTGRADUATE PROGRAM IN MAINTENANCE MANAGEMENT
leading to the Graduate Diploma in Engineering (Mtce Mgt) and the Honours Master of Engineering (Mtce Mgt).

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</table>
| **Graduate Diploma in Engineering (Mtce Mgt)**
| **Core** | MATH949 | Statistical Thinking | 6 |
| or | ENGG921 | Engineering Data Reduction and Error Analysis | 6 |
| | MECH970 | Maintenance Management | 6 |
| | MECH973 | Systems Engineering and Life Cycle Management | 6 |
| | MGMT911 | Organisational Behaviour | 6 |
| plus 4 electives to be selected from the list below. |
| **Honours Master of Engineering (Mtce Mgt)**
| **Core** | MECH951 | Dissertation | 24 |
| | MECH972 | Condition Based Maintenance | 6 |
| | MECH974 | Information Systems in Maintenance Management | 6 |
| plus 2 electives to be selected from the list below. |

### Electives

- ACCY901 Accounting for Managers | 6
- LAW960 Legal Studies for Professionals | 6
- MECH940 Rotational Drives and Transmissions | 6
- MECH971 Systems Analysis for Maintenance | 6
- MECH975 Maintenance in Manufacturing Industry | 6
- MECH976 Industrial Engineering Techniques in Maintenance Management | 6
- MECH977 Advanced Topics in Maintenance 1 | 6
- MECH978 Advanced Topics in Maintenance 2 | 6
- MGMT912 Organisation Structure and Control | 6
- MGMT953 Human Resource Management | 6
- MGMT976 Competitive Strategy and Analysis | 6

For further details, see Course Requirements below.

## POSTGRADUATE PROGRAM IN MATERIALS HANDLING SYSTEMS
leading to the Honours Master of Engineering.

<table>
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<th>Number</th>
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<tr>
<td><strong>Core</strong></td>
<td>MECH951</td>
<td>Dissertation</td>
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<td></td>
<td>MECH911</td>
<td>Bulk Solids Handling Systems 1</td>
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<tr>
<td></td>
<td>MECH912</td>
<td>Bulk Solids Handling Systems 2</td>
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<td>MECH913</td>
<td>Pneumatic Transport of Bulk Solids</td>
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<tr>
<td><strong>Electives</strong></td>
<td>MECH906</td>
<td>Experimental and Analytical Modelling</td>
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<td>MECH914</td>
<td>Hydraulic Transport of Bulk Solids</td>
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<td>MECH919</td>
<td>Advanced Topics in Mechanical Engineering 1</td>
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<td>MECH922</td>
<td>Energy Technology</td>
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<td>MECH927</td>
<td>Physical Processing of Bulk Solids</td>
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<td>MECH929</td>
<td>Advanced Topics in Mechanical Engineering 2</td>
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<td>MECH931</td>
<td>Friction, Lubrication and Wear</td>
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<td>MECH940</td>
<td>Rotational Drives and Transmissions</td>
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<td>MECH939</td>
<td>Advanced Topics in Mechanical Engineering 3</td>
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<td>MECH945</td>
<td>Bulk Solids Handling Systems 3</td>
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<td></td>
<td>MECH960</td>
<td>Industrial Quality Management</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.

## POSTGRADUATE PROGRAM IN SYSTEMS ENGINEERING
leading to the Graduate Diploma in Engineering (Systems Engineering) and the Honours Master of Engineering (Systems Engineering).

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
</table>
| **Graduate Diploma in Engineering (Systems Engineering)**
| **Core** | MECH973 | Systems Eng. and Life Cycle Management | 6 |
| | MECH980 | Functional Analysis and Risk Management | 6 |
| | MECH981 | Concurrent Design Management | 6 |
| | ENGG921 | Eng. Data Reduction & Error Analysis | 6 |
| | MGMT911 | Organisational Behaviour | 6 |
| | MGMT979 | Financial Decision Making | 6 |
| plus 2 electives to be selected from the list below. |

* This is considered to be the normal progression. Candidates entering the Masters course directly may be required to take one or more of the core subjects listed under Graduate Diploma.
POSTGRADUATE PROGRAM IN SYSTEMS ENGINEERING (cont’d).

leading to the Graduate Diploma in Engineering (Systems Engineering) and the Honours Master of Engineering (Systems Engineering).

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>MECH971</td>
<td>Maintenance Engineering</td>
<td>6</td>
</tr>
<tr>
<td>MECH974</td>
<td>Information Systems in Maintenance Management</td>
<td>6</td>
</tr>
<tr>
<td>MECH951</td>
<td>Dissertation</td>
<td>24</td>
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<tr>
<td>plus 2 electives to be selected from the list below.</td>
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**Electives**

- MGMT971: Managerial Finance
- MGMT934: Rotational Drives and Transmissions
- MGMT974: Industrial Quality Management
- MGMT974: Information Systems in Maintenance Management
- MGMT971: Maintenance Engineering
- MGMT976: Industrial Engineering Techniques in Maintenance Management
- LAW960: Law for Managers
- MGMT953: Human Resource Management
- ACCY901: Accounting for Managers
- MGMT912: Organisation Structure and Control
- MGMT976: Competitive Strategy and Analysis
- MGMT965: Quality in Engineering Design
- ENGG922: Statistical Process Control in Manufacturing and Service Industries

For further details, see Course Requirements below.

**OTHER POSTGRADUATE SUBJECTS**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>MECH899</td>
<td>Advanced Topics in Engineering</td>
<td>48</td>
</tr>
<tr>
<td>MECH935</td>
<td>ME Major Thesis</td>
<td>48</td>
</tr>
<tr>
<td>MECH957</td>
<td>PhD Major Thesis</td>
<td>48</td>
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</table>

**COURSE REQUIREMENTS**

1. **DOCTOR OF PHILOSOPHY**

Candidates for this degree enrol in MECH957 PhD Major Thesis (48 credit points).

2. **HONOURS MASTER OF ENGINEERING (Mechanical)**

A candidate who has a Bachelor of Engineering with Honours Class III or higher from this University, or an approved equivalent qualification, will enrol in subjects listed in the Postgraduate Schedule and with a minimum value of 48 credit points. Approved programs comprise:

(i) the subject MECH955 ME Major Thesis, for full-time and part-time candidates, or
(ii) the subject MECH951 Dissertation plus 24 credit points of coursework according to one of the 3 approved programs: Advanced Manufacturing; Applied Mechanics; Materials Handling Systems.

3. **HONOURS MASTER OF ENGINEERING (Maintenance Management)**

Direct entry to the Honours Master of Engineering (Mtc Mgt) course will require a tertiary degree of approved standard from a recognised institute, eg. a BE (Hons) degree or equivalent. Maintenance engineers having completed their Graduate Diploma degree (Maintenance Management/Engineering) will be given appropriate credits for the course they already have completed. Credits may also be approved for other qualifications or experience for suitable applicants.

In order to then obtain an Honours Masters of Engineering (Mtc Mgt), the candidate must have a Graduate Diploma in Engineering (Mtc Mgt) or equivalent and have completed successfully a further 48 credit points. These must consist of four subjects selected from 2 core and 2 elective subjects and a 24 credit point research project leading to a dissertation. Note that prior to the conferring of the master degree, the candidate is required according to Course Rule 504(2) to surrender the testamur and associated rights for the diploma.

The research project required for the Honours Master degree will run in parallel with the formal coursework throughout the anticipated last year of candidate's study.

4. **HONOURS MASTER OF ENGINEERING (Systems Engineering)**

Direct entry to the Honours Master of Engineering (Systems Engineering) course will require a tertiary degree of approved standard from a recognised institute, eg. a BE (Hons) degree or equivalent. Engineers having completed their Graduate Diploma degree (Maintenance Management/Engineering) will be given appropriate credits for the course they already have completed. Credits may also be approved for other qualifications or experience for suitable applicants.

To obtain an Honours Master of Engineering (Systems Engineering), the candidate must have a Graduate Diploma in Engineering (Systems Engineering) or equivalent, and have completed successfully a further 48 credit points. These must consist of 4 subjects selected from 2 core and 2 elective subjects and a 24 credit point research project leading to a dissertation.

The research project required for the Honours Master degree will run in parallel with the formal coursework throughout the anticipated last year of candidate's study.

5. **MASTER OF ENGINEERING PRACTICE (Bulk Solids and Particulate Technologies)**

The normal entry requirement is a Bachelor of Engineering degree, or a Bachelor of Science degree, or an Associate Diploma in a relevant field, plus appropriate industrial experience.

A candidate will be awarded a Master of Engineering Practice (Bulk Solids and Particulate Technologies) on successful completion of 48 credit points. The 12 credit point project course (MECH990) is compulsory, the remaining 36 credit points will be made up of 6 subjects from the electives listed in the schedule. This program is offered on a modular basis.

6. **GRADUATE DIPLOMA IN ENGINEERING (Mechanical Engineering)**

A candidate who has completed a degree of Bachelor of Engineering, and:

(a) who has not qualified for any class of Honours; or
(b) who wishes to qualify for the Graduate Diploma in Engineering, will enrol in the 48 credit point subject MECH899.

Upon satisfactory completion of the subject MECH899, the candidate is eligible for award of the Graduate Diploma in Engineering (Mechanical).

A person who is awarded the Graduate Diploma in Engineering and subsequently satisfies requirements for award of the degree of Honours Master of Engineering is required by Course Rule 504(2) to surrender the testamur and associated rights for the graduate diploma prior to receiving the honours masters degree.

7. GRADUATE DIPLOMA IN ENGINEERING (Maintenance Management)

Entry to this Diploma normally will require an approved Bachelor degree from this University or an approved equivalent qualification. However, maintenance managers/engineers without tertiary qualifications in engineering but with significant industrial experience, will also be considered for admission to a limited number of places.

A candidate will be awarded a Graduate Diploma in Engineering (Mtte Mgt) on successful completion of 48 credit points. 24 credit points of the core is compulsory, made up of four 6 credit point course work subjects - one subject from each of the Departments of Management and Mathematics, and two from Mechanical Engineering. The other 24 credit points will come from four 6 credit point electives.

Students completing the Graduate Diploma in Engineering (Mtte Mgt) at the University of Wollongong will have the option to enter into the Honours Master of Engineering (Mtte Mgt).

8. GRADUATE DIPLOMA OF ENGINEERING (Systems Engineering)

Direct entry to the Graduate Diploma of Engineering (Systems Engineering) course will require a tertiary degree of approved standard from a recognised institute, eg. a BE degree or equivalent. Credits may be granted for other qualifications or experience of suitable applicants.

Senior managers/engineers without tertiary qualifications in engineering but with significant industrial experience, will also be considered for admission to a limited number of places.

A candidate will be awarded a Graduate Diploma in Engineering (Systems Engineering) on successful completion of 48 credit points. Thirty-six credit points of the core is compulsory, made up of six 6 credit point course work subjects. The other 12 credit points will come from six 6 credit point electives, selected from the list above.

SUBJECT DESCRIPTIONS

Each of the subjects described below, with the exception of MECH899, MECH951, MECH955 and MECH957, has 3 contact hours per week for one session. Subjects offered by other Departments will be acceptable for the Masters degree course in Mechanical Engineering subject to the approval by the Head of the Department.

ENG9921 Engineering Data Reduction and Error Analysis

Autumn or Spring session; 6 credit points (3 hrs per wk).
Assessment: final examination and compulsory assignments during session.
Basic probability theory; statistical distributions; normal, binomial, Poisson distributions. Testing of hypotheses. Error analysis, sampling techniques. Experimental design, correlation and auto-correlation. Introduction to maintenance analysis data and control charts.
Co-ordinator: Professor TG Rozgonyi.

ENG9922 Statistical Process Control in Manufacturing and Service Industries

Autumn or Spring session; 6 credit points (3 hrs per wk).
Assessment: final examination and compulsory assignments.
Co-ordinator: Professor TG Rozgonyi.

MECH899 Advanced Topics in Engineering

Double session; 48 credit points. Students will normally take a selection of topics at advanced level. The selection of the topics will be subject to the approval of the Head of the Department in which the student wishes to enrol and subsequently specialise.
Co-ordinator: Dr WK Soh.

MECH903 Biomechanical Engineering

Autumn or Spring session; 6 credit points (2 hrs lecture/2 hrs laboratory/tutorial per wk).
Assessment: mid-session examination 20%, final examination 50%, project/lab report/tutorial 30%.
This subject introduces a selection of advanced quantitative methods used in biomechanical assessment of human movements. Topics include three-dimensional dynamics, modelling techniques (including finite element, simulation and optimisation).
Objects: On successfully completing this subject, students will be able to assess the mechanics of musculoskeletal system, including design equipment. Clinical application of these methods will include gait analysis, mechanics of rehabilitation and occupational tasks.
Co-ordinator: Dr A Basu.

MECH906 Experimental and Analytical Modelling

Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination, and compulsory assignments during session.

Stochastic processes; Random signal analysis; Correlation function; Probability functions and spectral density functions; System identification; Correlation analysis; Spectral analysis. Modelling of continuous systems using analytical methods; Lumped parameter systems; Linearisation. Solution of equations. Parameter estimation. Review of classical control techniques; Multi-input multi-output systems; Transfer functions; State space analysis; Stability analysis; Interaction and inverse Nyquist array; Optimal control.
Co-ordinator: Dr GJ Montagner.

MECH908 Computer Aided Design

Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
Application of boundary element method; computer simulation of engineering systems; optimization techniques; computer graphics, visualisations and animations.
Co-ordinator: to be advised.

MECH911 Bulk Solids Handling Systems 1

Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
Further consideration concerning bin design; failure criteria for bulk solids; flow promotion; two-phase flow; effects of interstitial gas on flow of fine powders; mixing and segregation of bulk solids; design of trough belt conveyors and bucket elevators.
Co-ordinator: Professor PC Arnold.

MECH912 Bulk Solids Handling Systems 2

Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
Further consideration concerning bin design; failure criteria for bulk solids; flow promotion; two-phase flow; effects of interstitial gas on flow of fine powders; mixing and segregation of bulk solids; design of trough belt conveyors and bucket elevators.
Co-ordinator: Professor PC Arnold.

MECH913 Pneumatic Transport of Bulk Solids

Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination, mid-session examination and compulsory assignments during session.
Classification and selection of transport systems; flow patterns; pressure drop, minimum transport velocities; design parameters and examples; feeding and disengaging methods.
Co-ordinator: Dr PW Wypych.

MECH914 Hydraulic Transport of Bulk Solids

Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials/lab).
Assessment: 2 in final examination. Other short examinations, tutorials/assignments may be incorporated in the final assessment.
Properties of slurries, slurry classification; flow behaviour, flow predictions, friction losses; system equipment, system design & operation; economics; wear of equipment & material degradation.
Co-ordinator: Dr AG McLean.
MECH917 Air Conditioning and Refrigeration
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
Air conditioning of buildings; design heat load calculation; plant sizing and design; refrigeration plant components; thermodynamic analysis and design.
Co-ordinator: Dr P Cooper.

MECH919 Advanced Topics in Mechanical Engineering 1
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
There is no set syllabus for this subject. It is intended that it normally be offered on a specialised mechanical engineering topic given by members of the Department, visiting academic staff or engineering consultants.
Co-ordinator: Dr WK Soh.

MECH920 Numerical Methods in Mechanical Engineering
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
Studies using finite difference and boundary element techniques. Topics are selected from the following areas of Mechanical Engineering: Aerodynamics, boundary layer flow, elasticity, gas dynamics, heat transfer, hydraulics and hydrodynamics.
Co-ordinator: Professor MP West.

MECH921 Hydrodynamics
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
Applications of complex potential; unsteady fluid flows; foil theory and applications; cavitations and discontinuous flows; body hydrodynamics.
Co-ordinator: Dr WK Soh.

MECH922 Energy Technology
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
Evaluation of alternate fuels and energy sources, energy management and audits, conventional and advanced energy systems, alternate and renewable energy source evaluation, remote area power supplies, energy generation and utilisation environmental considerations.
Co-ordinator: Dr AG McLean.

MECH924 Continuum Mechanics
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
An introduction to tensor analysis, classical theory of elasticity, fluid mechanics, thermodynamics of solids, thermoelasticity, viscoelasticity, plasticity, finite deformation theory.
Co-ordinator: Associate Professor A Basu.

MECH925 Advanced Fluid Power
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
Fluid power components; circuit design; analysis of transmission, valve-controlled and feedback systems; electronic controls; vibration and transient response.
Co-ordinators: Associate Professor AK Tieu.

MECH926 Applied Fluid Mechanics
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
A study of applied fluid mechanics which will include the analysis, design and control of a selection of fluid flow systems in industry.
Co-ordinator: Dr WK Soh.

MECH927 Physical Processing of Bulk Solids
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials/lab).
Assessment: 2 hr final examination. Other short examinations, tutorials/assignments may be incorporated in the final assessment.
Bulk solids description and characterisation; crushing, grinding, thickening, separation, precipitation, filtration, blending, tabletting, briquetting and agglomeration, sizing and classification; introduction to beneficiation; drying; intermediate processing and handling; control and instrumentation; dust generation and abatement.
Co-ordinator: Dr AG McLean.

MECH928 Finite Element Techniques in Mechanical Engineering
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
Co-ordinator: Professor MP West.

MECH929 Advanced Topics in Mechanical Engineering 2
As for MECH919.

MECH930 Mechanical Vibration and Condition Monitoring
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
Co-ordinator: Associate Professor AK Tieu.

MECH931 Friction, Lubrication and Wear
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
Co-ordinator: Associate Professor AK Tieu.

MECH932 Reliability Systems Management
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination. Other examinations, tutorials and assignments may be incorporated in the final assessment.
Failure modes and rates, reliability testing, redundancy, maintenance systems, design for reliability, failure interactions, systems safety analysis, reliability management.
Co-ordinator: to be advised.

MECH933 Solar Energy
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
Principles and techniques applicable to the analysis and design of solar thermal energy systems. Solar radiation; transmission and absorption by collectors; analysis and design of collectors; energy storage; system thermal calculations; solar process economics.
Co-ordinator: Dr GJ Montagner.

MECH934 Advanced Manufacturing Processes
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
Modelling of advanced manufacturing processes; manufacturing cost analysis; productivity and quality methods and measurements in manufacture; group technology; computer-assisted process planning; manufacturing optimisation; trends in advanced manufacturing processes.
Co-ordinator: Professor G Arndt.

MECH935 Integrated Manufacturing Systems
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination and compulsory assignments during session.
CIM concepts and applications; FMS; computer-process interfacing; monitoring and control; computer-aided quality control; component handling systems; human interface in the manufacturing system; future trends.
Co-ordinator: Professor G Arndt.

MECH936 Systems Modelling and Simulation in Manufacturing
Autumn or Spring session; 6 credit points (3 hrs lecture/lab per wk).
Assessment: final examination and compulsory assignments during session.
Modelling concepts; simulation concepts; basic simulation modelling; complex
simulation modelling; random number generator; probabilistic input distribution; output data analysis; model validation; shop floor operation simulation; production planning simulation.
Co-ordinator: Dr G J Montagner.

MECH938 Economic Optimisation in Engineering* Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Cost analysis and control, time value of money operations, measuring the work of investments, comparison of alternatives, depreciation and income tax, economic analysis of projects, forecasting, productivity, appraisal, break-even, sensitivity and risk analysis, inventory and queuing problems, project management and operations research, contractual bidding and legal considerations.
Co-ordinator: Professor M West.

MECH940 Rotational Drives and Transmissions Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials)
Assessment: 2hr final examination. Other short examinations and assignments will be incorporated in the final assessment.
Mechanical drive system load matching; prime mover and load characteristics, drive and transmission component characteristics, constant and variable speed drives; harmonics and resonance; control and instrumentation; prime mover and load audits; system life cycle costs; system design; load sharing; system noise and heat generation.
Co-ordinator: Dr A McLean.

MECH939 Advanced Topics in Mechanical Engineering 3 As for MECH919.

MECH942 Expert Systems in Manufacturing Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Design knowledge-based systems; knowledge representations; shell development; expert system support systems; dealing with uncertainty; mechanical reasoning; consulting systems; intelligent process automation and management; future trends.
Co-ordinator: to be advised.

MECH944 Heat Transfer 2 Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Conduction: review of one-dimensional heat conduction and fin theory; analysis of two-dimensional and transient heat conduction using analytical and numerical methods; multidimensional conduction; review of fundamentals of laminar and turbulent heat transfer; free convection; flow over tube banks; design and selection of heat exchangers. Two-phase heat transfer: nucleate and film boiling; pool boiling and boiling in tubes; film and dropwise condensation.
Note: not on offer in 1996.
Co-ordinator: Dr P Cooper.

MECH945 Bulk Solids Handling Systems 3 Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Two phase solids flow; control and instrumentation of solids flow; feeding of fine bulk solids; mechanical conveyors and feeders, materials handling plant project management; materials handling plant design; maintenance and operation; flow of very cohesive, wet and fibrous bulk solids; container wall loads.
Note: not on offer in 1996.
Co-ordinator: Dr D J McLean.

MECH949 Advanced Computer Control of Machines and Processes Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Applications of advanced computer control techniques, such as intelligent control, optimal control, fuzzy logic control, expert system-based control.
Co-ordinator: to be advised.

MECH950 Advanced Robotics Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Design of advanced robot structures and control systems, modelling of sensor-based robot systems, application of artificial intelligence in robot control.
Co-ordinator: to be advised.

MECH951 Dissertation 24 credit points.
Co-ordinator: to be advised.

MECH955 ME Major Thesis Double session; 48 credit points.
Co-ordinator: to be advised.

MECH957 PhD Major Thesis Double session; 68 credit points.
Co-ordinator: to be advised.

MECH960 Industrial Quality Management Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials)
Assessment: final examination, other examinations, projects, tutorials and assignments may be incorporated in the final assessment.
Topics to be covered include: process capability; statistical process control and capability case-studies; JIT (Just In Time) & Quality; team working and worker involvement (SGIA); improvement management; education and training for quality; introduction to quality of design, reliability, safety and product liability; Total Productive Maintenance v. TQC; activity based costing and TQM; quality information systems and key performance indicators.
Co-ordinator: Associate Professor V Stewart.

MECH961 Quality Improvement Systems and Implementation Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials)
Assessment: final examination, other examinations, projects, tutorials and assignments may be incorporated in the final assessment.
Basic quality philosophy as per Feigenbaum, Juran, Deming and Crosby - emphasis on system, cost and people improvement; the economics of quality; ISO9000 Quality Systems - their role in TQM; introduction to Practical Industrial Quality Systems (PIQs) (Kaizen, Ishikawa, Improvement Methodology and tools); quality function deployment; measurement of conformance and prevention of non-conformance; team approaches to problem solving - the roles of management; suppliers and customers; implementation examples through case-studies of prominent organizations; audit procedures for TQM.
Co-ordinator: Associate Professor V Stewart.

MECH963 Industrial Quality Technology Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials)
Assessment: final examination. Other examinations, projects, tutorials and assignments may be incorporated in the final assessment.
Appraisal systems: Vision, CNC measuring machines, in-process, in-cycle, and post process gauging. Integrated quality in automated manufacturing processes, quality information systems; Measurement of geometry, size and surface texture; Calibration systems; The use of integrated SPC and expert systems.
Co-ordinator: Associate Professor V Stewart.

MECH965 Quality in Engineering Design Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials)
Assessment: final examination, other examinations, projects, tutorials and assignments may be incorporated in the final assessment.
Design as the source of quality; The Concurrent Engineering Approach; Value engineering; failure mode and effect analysis; organisation for design quality; design case studies in Taguchi methods and quality function deployment; design standards, testing, reliability, safety maintainability, product liability, product certification; configuration management; contract and design reviews.
Co-ordinator: Associate Professor V Stewart.

MECH967 International Quality Techniques Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials)
Assessment: final examination, projects and assignments may be incorporated in the final assessment.
An international perspective on quality, comparison of the quality techniques employed in the major regions of the world. The historical evolution, development, application methodology and integration of these techniques within the cultural, political and industrial environment of various regions/countries are addressed, in the context of achieving World's Best Practice. Areas of commonality and
importance in both the manufacturing and service fields, such as self-diagnosis, benchmarking, business process reengineering, concurrent engineering, quality function deployment, and software quality management. The quality award system in each region will be studied.

Overall perspective for maintenance in business context; Maintenance philosophies; Evolution of the need for maintenance management; Cost & profit drivers in maintenance; Maintenance organisation department structure (Resource and administration); Maintenance documentation & computer control; Quality assurance in maintenance; Implementation of maintenance planning; Human factors & motivation skills in maintenance environment; TQM Aspects: improvement methodology (Plan-Do-Check-Act).

MECH970 Maintenance Management
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination. Other short examinations, assignments and laboratory reports may be incorporated in the final assessment.

MECH971 Systems Analysis for Maintenance
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination. Other short examinations, assignments and laboratory reports may be incorporated in the final assessment.

MECH972 Condition Based Maintenance
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination. Other short examinations, assignments and laboratory reports may be incorporated in the final assessment.

MECH973 Systems Engineering and Life Cycle Management
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination. Other short examinations, assignments and laboratory reports may be incorporated in the final assessment.

MECH974 Information Systems in Maintenance Management
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination. Other short examinations, assignments and laboratory reports may be incorporated in the final assessment.

MECH975 Maintenance in Manufacturing Industry
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination. Other short examinations, assignments and laboratory reports may be incorporated in the final assessment.

MECH976 Industrial Engineering Techniques in Maintenance Management
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination. Other short examinations, assignments and laboratory reports may be incorporated in the final assessment.

MECH977 Advanced Topics in Maintenance 1
Autumn or Spring session; 6 credit points.
Assessment: to be advised.

MECH978 Advanced Topics in Maintenance 2
Autumn or Spring session; 6 credit points.
Assessment: to be advised.

MECH980 Functional Analysis and Risk Management
Autumn or Spring session; 6 credit points (3 hrs per wk).
Assessment: final examination and compulsory assignments during session.

MECH981 Concurrent Design
Autumn or Spring session; 6 credit points (3 hrs per wk).
Assessment: final examination and compulsory assignments during session.

Note: not on offer in 1996.
MECH982 Bulk Solids Characterisation & Particulate Mechanics  
Autumn or Spring session; 6 credit points.  
Assessment: Assessable task will be required at the completion of the module.  
Concepts of particle mechanics (failure criteria, models to represent such criteria as particle size and distributions, particle shape, compressibility, permeability, internal friction, cohesion, adhesion, wall friction); concepts of flow properties of bulk solids for equipment design; flow property measurement techniques; use of computer software to analyse and present experimental data for use in design.  
Coord: Professor P Arnold.

MECH983 Storage and Flow of Bulk Solids  
Autumn or Spring session; 6 credit points.  
Assessment: Assessable task will be required at the completion of the module.  
Basic concepts of storage; flow and feeding of bulk solids; use of flow properties to determine hopper geometries; bin wall loads; feeding and discharge systems, feeder loads; chute design; flowrate prediction; segregation and blending; dust suppression systems; stockpile systems; case studies.  
Coord: Professor P Arnold.

MECH984 Belt Conveying  
Autumn or Spring session; 6 credit points  
(modular basis over 5 days).  
Assessment: Assessable task will be required at the completion of the module.  
Belt conveying systems; properties of conveyor belting; tension analyses (static and dynamic); drive systems; loading and unloading belts; trajectory prediction; transfer chute design novel belt systems; economic analyses.  
Coord: Professor P Arnold.

MECH985 Dust and Fume Systems  
Autumn or Spring session; 6 credit points.  
Assessment: Assessable task will be required at the completion of the module.  
Basic concepts; terminology and problems; dust characterisation; fan performance characteristics; capture velocities and minimum transport velocities; hood and enclosure design; duct design; dust generation and minimisation; filtration systems; design of dust handling and disposal systems; occupational health and safety; environmental legislation; case studies.  
Coord: Professor P Arnold.

MECH986 Instrumentation and Control Systems for Bulk Solids  
Autumn or Spring session; 6 credit points.  
Assessment: Assessable task will be required at the completion of the module.  
Transducer types and their specification and applications; dynamic response of systems; speed measurement and control; mass flow rate measurement; belt weighing; weigh belt feeders; continuous and batch weighing systems; bin weighing systems and structural implications; system accuracies; interfacing with PLC’s and computers; case studies.  
Coord: Professor P Arnold.

MECH987 Advanced Topics in Bulk Solids & Particulate Technologies 1  
Autumn or Spring session; 6 credit points.  
Assessment: Assessable task will be required at the completion of the module.  
There is no set syllabus for this subject. It is intended that it normally be offered on a specialised topic relating to some aspect of modern technologies relating to bulk solids and/or particulate technologies by staff members/visiting specialists and/or engineering practitioners.  
Coord: Professor P Arnold.

MECH988 Advanced Topics in Bulk Solids & Particulate Technologies 2  
Autumn or Spring session; 6 credit points.  
Assessment: Assessable task will be required at the completion of the module.  
There is no set syllabus for this subject. It is intended that it normally be offered on a specialised topic relating to some aspect of modern technologies relating to bulk solids and/or particulate technologies by staff members/visiting specialists and/or engineering practitioners.  
Coord: Professor P Arnold.

MECH989 Advanced Topics in Bulk Solids & Particulate Technologies 3  
Autumn or Spring session; 6 credit points.  
Assessment: Assessable task will be required at the completion of the module.  
There is no set syllabus for this subject. It is intended that it normally be offered on a specialised topic relating to some aspect of modern technologies relating to bulk solids and/or particulate technologies by staff members/visiting specialists and/or engineering practitioners.  
Coord: Professor P Arnold.

MECH990 Project in Bulk Solids and Particulate Technologies  
Autumn or Spring Session; 12 credit points.  
Prepare a thesis on an approved topic related to bulk solids and/or particulate technologies. Normally the thesis will cover work performed in the workplace.  
Coord: Professor P Arnold.
MINING ENGINEERING

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Engineering by Coursework or Research
3. Master of Mining Management
4. Graduate Diploma in Mining Management
5. Graduate Diploma in Engineering

POSTGRADUATE PROGRAMS

Mining Engineering
Mining Management

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of Engineering degree by research and the Doctor of Philosophy degree:

- Roof bolting studies
- Longwall mining
- Rock mechanics
- Surface mining
- Mine simulation, planning and design
- Mine safety
- Geostatistics
- Computer applications in mining engineering

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAMS IN MINING MANAGEMENT

leading to the Graduate Diploma of Mining Management or the Master of Mining Management.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>MINE941</td>
<td>Environmental Management for the Mining Industry</td>
<td>6</td>
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<tr>
<td>MINE945</td>
<td>Mine Management Project</td>
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<td>MINE956</td>
<td>Mineral Law</td>
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<td>MINE962</td>
<td>Management Perspectives</td>
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<td>MINE963</td>
<td>Economic Decision Making</td>
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<td>MINE964</td>
<td>Management of Innovation</td>
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<td>MINE965</td>
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<td>MINE971</td>
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<td>MINE972</td>
<td>Export Marketing for the Mining Industry</td>
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<td>MINE973</td>
<td>Mine Evaluation and Project Assessment</td>
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<td>MINE974</td>
<td>Mine Management</td>
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<td>MINE975</td>
<td>Evaluation in the Coal Mining Industry</td>
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<tr>
<th>Subject</th>
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<td>Safety in the Mining Industry</td>
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<td>Drilling and Blasting</td>
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<td>Application of Computers in the Mineral Industry</td>
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<tr>
<td>placer Technology</td>
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<tr>
<td>Introductory Computing and Statistics for Geologists and Mining Engineers</td>
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<tr>
<td>Mine Ventilation and Environment</td>
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<tr>
<td>Geostatistics and Mine Planning</td>
<td>6</td>
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<tr>
<td>Mine Water - Origin, Inflow Predictions and Control</td>
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<tr>
<td>Strata Control - from First Principles to Practice</td>
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<tr>
<td>Environmental Impact of Mining and Mineral Operations</td>
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<td>Environmental Assessments (Audits)</td>
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<td>Mineral Exploration Management</td>
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<td>Coal Preparation</td>
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<td>Soil and Rock Construction Materials</td>
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<td>Slope Stability for Surface Mining</td>
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<td>Environmental Geology</td>
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For further details, see Course Requirements below.
POSTGRADUATE PROGRAMS IN MINING ENGINEERING
leading to the Honours Master of Engineering.

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<tr>
<th>Number</th>
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<td>Elective</td>
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<td>MINE903 Simulation of Underground Mining Operations and Problems</td>
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<td>MINE904 Rock Mechanics</td>
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<td>MINE905 Environmental Control in Mines</td>
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<td>MINE906 Mining Engineering Techniques</td>
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<td>MINE911 Mine Service Engineering</td>
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<td>MINE953 Mine Water - Origin, Inflow Predictions and Control</td>
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For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

<table>
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<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<td>MINE901</td>
<td>Transportation of Minerals and Personnel</td>
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<td>MINE907</td>
<td>Gases in Mines</td>
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<td>MINE908</td>
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<td>MINE909</td>
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<td>MINE950</td>
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<td>MINE955</td>
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<tr>
<td>MINE957</td>
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COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in MINE957.

2. HONOURS MASTER OF ENGINEERING

The Department of Civil and Mining Engineering offers graduates the following opportunities to conduct research or pursue an advanced course of study in Mining Engineering:

(a) The Honours Master of Engineering Degree by Research Thesis

The Honours Master of Engineering Degree by research thesis is intended for those engineers qualified and interested in specific problems.

(b) The Honours Master of Engineering Degree by Combination of Coursework and Research Thesis

This is the normal course for the younger mining engineer, which provides him or her training in research and also allows greater depth of understanding in specialist postgraduate areas.

Aims

The programs of study allow the student to combine specialist postgraduate subjects according to his or her undergraduate background, with project work. It is intended to strengthen professional training in a context of problems and policies which reach beyond the conventionally recognised boundaries of single disciplines. Elective postgraduate subjects and introduction to disciplines in which the student has no experience, are available.

The program for the Honours Master of Engineering Degree has two explicit aims:

(i) Specialist Training. Postgraduate training is provided for students with appropriate backgrounds, to enable professional development in their particular discipline. This is achieved by providing access to existing postgraduate courses already offered;

(ii) Interdisciplinary Training. An interdisciplinary framework is provided, within which postgraduate training in Mining Engineering may be integrated with other disciplines. This is achieved by the provisions of limited access to concentrated study in other disciplines.

Entry Requirements

A candidate who has a Bachelor of Engineering with Honours at Class III or higher from this University, or an approved equivalent qualification, will enrol in subjects listed in the Postgraduate Schedule and with a value of not less than 48 credit points. Programs approved by the Department of Civil and Mining Engineering comprise:

(i) the subject MINE955 Major Thesis;
(ii) the subject MINE951 Dissertation plus four subjects from the list MINE901 through MINE911; or
(iii) the subject MINE950 Dissertation plus six subjects from the list MINE901 through MINE911.

3. & 4. MINING MANAGEMENT PROGRAM

The Graduate Diploma in Mining Management and the Master in Mining Management are intended for mining industry personnel who wish to improve their employment opportunities. It is anticipated that the majority will have backgrounds in either engineering or science, and will take the opportunity to develop their knowledge of management through a course of study orientated towards a career in the mining industry.

Particular emphasis is to be placed on making the courses available to candidates in remote locations, and it is intended that the courses be offered in a modular form comprising one week of intensive formal coursework supplemented by pre-coursework and post-coursework assignments.

As many potential candidates are located in remote regions they will welcome the unique opportunity offered by an external postgraduate course. The courses will be offered in conjunction with the Key Centre for Mines, a joint initiative of the Departments of Civil and Mining Engineering and Geology at the University of Wollongong and the School of Mines at the University of New South Wales.

Aims

The courses aim to satisfy the continuing education needs of those minerals sector personnel wishing to upgrade and expand their credentials by presenting them with the opportunity to further their technical understanding of practices within the minerals industry whilst gaining valuable skills in Mining Management, Industrial Relations, Marketing and Financial Control.

The management skills acquired from the
courses will be a sound foundation for future executive positions.

**Graduate Diploma in Mining Management**

Candidates will be required to complete a total of 54 credit points: of which 24 credit points will be selected from 300/400 level subjects and 30 credit points from 900 level subjects. Advanced standing of up to 24 credit points of 300/400 level work may be granted on the basis of previous qualifications. A maximum of 18 credit points will be in Business Management or Science and Engineering with each candidate’s course content being approved by an academic advisor.

**Entry Requirements**

Entry into the Graduate Diploma in Mining Management requires a three year degree or diploma in the fields of science and technology or commerce and economics with the qualifications of candidates applying for entrance to be assessed by the Head of the Department of Civil and Mining Engineering and the Head of the Department of Geology.

**Master in Mining Management**

This course will be offered on a part-time basis and will require a minimum study period of two years with full advanced standing. Candidates will be required to complete 96 credit points of work, a maximum of 24 credit points from 300/400 level subjects and a minimum of 24 credit points by research. Advanced standing of up to 24 credit points of 300/400 level subjects may be granted on the basis of up to 24 credit points of 300/400 level subjects may be granted on the basis of previous qualifications.

Candidates with a technical background will be advised to undertake at least 50% of the formal coursework from Business Management whilst those with a business management background will be encouraged to undertake at least 50% of the postgraduate level coursework from Science and Engineering. The research project will be industry-based and tailored to the candidate’s work-place requirements.

**Entry Requirements**

Entry into the Master of Mining Management requires a four year degree of appropriate standard from a recognized tertiary institution. Following the successful completion of the Graduate Diploma in Mining Management, a candidate will have the option of entering into the Master of Mining Management; where prior to the conferring of the degree of Master in Mining Management upon a candidate, that candidate shall surrender the testamur for the Diploma in Mining Management, and in so doing, shall be deemed to have surrendered all rights pertaining to the diploma. Other qualifications or professional experience may also be approved.

5. **GRADUATE DIPLOMA IN ENGINEERING**

A candidate who has completed a degree of Bachelor of Engineering and

(i) who has not qualified for any class of Honours,

or

(ii) who wishes to qualify for the Graduate Diploma in Engineering (Mining)

will enrol in the 48 credit point subject MINE899.

Upon satisfactory completion of the subject MINE899 the candidate is eligible for award of the Graduate Diploma in Engineering (Mining). A person who is awarded the Graduate Diploma in Engineering and who subsequently satisfies the requirements for the award of the degree of Honours Master of Engineering is required by Course Rule 504(2) to surrender the testamur and associated rights for the Graduate Diploma prior to receiving the Honours Masters degree.

**SUBJECT DESCRIPTIONS**

**MINE899 Advanced Topics in Mining Engineering**

**Double session (A); 48 credit points.**

Computer aided analysis and design; computer methods; ore reserve estimation finite element techniques; hydrology; hydraulic; numerical techniques; reliability; rock mechanics; simulation; structural analysis and design; structural topology; mine planning.

**Co-ordinator:** Dr I. Porter.

**MINE901 Transportation of Minerals and Personnel**

**Autumn or Spring session; 6 credit points.**

Transport of minerals from initial winning to stockpile and to distribution points; safety problems, hygiene, the environment; transport of personnel, equipment, safety, regulations, cost involved; current research.

**Co-ordinator:** Associate Professor N.I. Aziz.

**MINE902 Advanced Studies in Mining Engineering**

**Autumn or Spring session; 6 credit points.**

Topics will be selected from those areas of Mining Engineering in which staff members or visiting staff members to the Department are engaged in active research.

**Co-ordinator:** Dr E.Y. Baafi.

**MINE903 Simulation of Underground Mining Operations and Problems**

**Autumn or Spring session; 6 credit points.**

**Assessment:** assignments and examinations.

Including coal reserves, mining dimensions, surface effects, cost benefit effects of operation and management and economic evaluation and feasibility of a mining enterprise.

**Co-ordinator:** Dr E.Y. Baafi.

**MINE904 Rock Mechanics**

**Autumn or Spring session; 6 credit points**

**Assessment:** assignments and examinations.

Fundamentals of strata mechanics together with advanced topics including engineering technology and rock mechanics aspects of coal mining strata control. Design aspects of mine structures, such as mine pillars, gate roads and longwall mining. Instrumentation in providing for the safe design of the mine opening. Rock and cable bolting techniques and powered support design.

**Co-ordinator:** Dr B. Indraratna.

**MINE906 Mining Engineering Techniques**

**Autumn or Spring session; 6 credit points.**

**Assessment:** assignments and examinations.

A selection of advanced laboratory and field exercises in mine support, temporary and long term; in situ testing, laboratory testing, rock properties and parameters; mine design and plant related to extraction areas.

**Co-ordinator:** Professor R.N. Singh.

**MINE907 Gases in Mines**

**Autumn or Spring session; 6 credit points.**

**Assessment:** assignments and examinations.

Natural occurrence and prediction of rockbursts; collection of mine gases; mine atmospheres, gases, dusts, fires, rescue and recover; computer analysis.

**Co-ordinator:** Associate Professor N.I. Aziz.

**MINE908 Mine Fires and Explosions**

**Autumn or Spring session; 6 credit points.**

**Assessment:** assignments and examinations.

Formation of coal dust; explosibility of coal dust; initiation of explosions; methane accumulation; development and propagation of explosion wave front; pressure pulse and flame front; prevention and control of coal dust formation; barriers, active and passive; experimental galleries; rescue and recovery of both mine and personnel; resultant fires; computer modelling of resulting crisis situations in ventilation; current research; relevant legislation.

**Co-ordinator:** Associate Professor N.I. Aziz.

**MINE909 Mine Subsidence**

**Autumn or Spring session; 6 credit points.**

**Assessment:** assignments and examinations.

Causes of mine subsidence; continuum mechanics theories; determination of trough subsidence; subsidence calculations and prediction; measurement techniques; design of structures in mine subsidence active area; methods of reducing subsidence damage; application of computers for subsidence modelling; relevant legislation.

**Co-ordinator:** Dr I. Porter.

**MINE911 Mine Service Engineering**

**Autumn or Spring session; 6 credit points**

**Assessment:** assignments and examinations.

Advanced studies in power reticulation in mines; economics of power reticulation, maintenance engineering; equipment monitoring and preventive maintenance; quality control and equipment specifications; current research.

**Co-ordinator:** Professor R.N. Singh.

**MINE941 Environmental Management for the Mining Industry**

**Annual; 6 credit points (42 contact hrs).**
MINE945 Mining Management Project
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
A study of either an administrative or technical nature with relevance to the management of a mining or mineral processing operation. This may be based on simulated or actual situations but projects of relevance to the candidate's employment will be encouraged. As far as is possible, projects will be designed in consultation with the mining industry.
Co-ordinator: Associate Professor N I Aziz.

MINE946 Place Technology
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
Sources of placer minerals; natural processes producing concentration of placer minerals; nature of placer deposits; trends in placer exploration; placer sampling; reserves calculations; mining methods; processing methods; project evaluation; environmental implications and pollution control technology.
Co-ordinator: Associate Professor N I Aziz.

MINE947 Introductory Computing and Statistics for Geologists and Mining Engineers
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
Computer hardware for geological data processing; peripheral devices; operating systems; VAX/VMS, IBM, VM/XA, MS DOS, UNIX; programming in Fortran and C; statistics for geologists and mining engineers; data base packages and macros.
Co-ordinator: Dr E Y Baafi.

MINE948 Mine Ventilation and Environment
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
Ventilation network analysis and simulation; fan selection, role of booster fans; ventilation of long headings; recirculation; gases from diesel engines and their control; methane and its control in underground coal mines; dust in mine air and its control; mine climate and its control; ventilation planning.
Co-ordinator: Associate Professor N I Aziz.

MINE952 Geostatistics and Mine Planning
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
When to apply Geostatistics, a brief review of univariate statistics; bivariate statistics and correlation; exploratory data analysis; measures of spatial correlation - The variogram, the covariance, variogram calculation and how to obtain a good variogram; random function models and stationarity, desirable properties of estimators; estimation of variance, dispersion variance and uses; optimal weighted average estimator - ordinary kriging; recoverable reserve estimation - problems and solutions; indicator and probability kriging. Application examples - coal, copper, gold, blast-hole Kriging for Ore-waste selection, Geotechnics and the environment.
Co-ordinator: Dr E Y Baafi.

MINE953 Water - Origin, Inflow Predictions and Control
Annual; 6 credit points (42 contact hrs).
Assessment: assignments and examinations.
Water problems in surface and underground mining; hydrogeological factors affecting mine water inflow; hydrogeological considerations in origin of mine water; hydrogeological characterisation of rock mass and pumping tests; pumping test calculations; effects of ground water on surface mining stability; ground water control in surface mining; calculation of mine water inflow to surface mining; water problems in underground mining; underground mine dewatering techniques; pumps and pumping systems; underground pumping stations and pump design; mine inundation; working under the body of water; inflow prediction by chemical analysis method; mine water pollution control; treatment of mine water pollution; biotechnical approach; constructed wetlands and lagoons.
Co-ordinator: Professor R Singh.

MINE954 Strata Control from First Principles to Practice
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
Fundamentals of strata mechanics together with advanced topics including engineering and rock mechanics aspects of coal mining strata control; design aspects of mine structures, such as mine pillars, gate roads and longwall mining; instrumentation in providing for the safe design of the mine opening; rock and cable bolting techniques and powered support design.
Co-ordinator: Associate Professor N I Aziz.

MINE956 Mineral Law
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
Co-ordinator: Associate Professor N I Aziz.

MINE958 Environmental Impact of Mining and Mineral Operations
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
Aspects of environmental impact of surface and underground operations; visual impact assessment, air pollution, including dust, noise and vibration; solid waste management, water pollution and acid mine drainage; restoration, land use, subsidence and the socio-economic effects of mining will also be discussed.
Co-ordinator: Professor R N Singh.

MINE962 Management Perspectives
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
What is Management?, Managing individuals, managing groups, managing organisations, managing information, managing operations, managing decision making.
Co-ordinator: Associate Professor N I Aziz.
MINE963 Economic Decision Making
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
Introduction to Economic Concepts; demand; supply and the market; consumers; firms and market structures; welfare economics; cost and revenue; profit maximisation; international economics; macroeconomics and national income analysis; national economic policy, cost-benefit analysis and expenditure decisions; business finance.
Co-ordinator: Associate Professor N I Aziz.

MINE964 Management of Innovation
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
Innovation and innovators, technology and innovation; opportunity analysis; marketing and innovation; the business plan, management of innovation; innovations in corporations, maintaining innovations.
Co-ordinator: Associate Professor N I Aziz.

MINE965 Strategic Planning
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
The nature and scope of strategic management; the practice of strategic management; the mission of the organisation; analysing organisational resources; formulating strategic objectives; generating strategic alternatives; evaluating strategic implementation; assessing strategic performance.
Co-ordinator: Associate Professor N I Aziz.

MINE971 Financial Management
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
Financial management - an overview; accounting concepts and the accounting process, financial statements; public sector accounting; corporate accounting; the interpretation of financial statements; the recording of costs; management cost information (1); management cost information (2); the budgeting process.
Co-ordinator: Associate Professor N I Aziz.

MINE972 Export Marketing for the Mining Industry
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
Marketing as applied to the mineral industry. Sources and types of market-related information. Particular international market characteristics, political, social and economic. Trade barriers, cartels, regional and sub-regional economic groupings. Marketing to Asia, Buyer behaviour, private and government sectors. Design, conduct and analysis of surveys of overseas markets for mineral products. Factors related to particular market conditions. Export Assessment. The recognition of export opportunities. Stages in the development of a market strategy. Market decision making under conditions of uncertainty. The relationship between corporate and marketing strategy for mineral products. Value added mineral products and export marketing. Sources of assistance for export marketing.
Co-ordinator: Associate Professor N I Aziz.

MINE973 Mine Evaluation and Project Assessment
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
Valuation tools and techniques; valuation reports; preliminary Investigation; Asset Determination; Impact of Financing Operations; Strategic Plans; Feasibility Studies; Valuation of Exploration Tenements; residual values of property and plant; variations to value.
Co-ordinator: Associate Professor N I Aziz.

MINE974 Mine Management
Annual; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
The general management functions; planning; organisation; control; communication; command; coordination; production functions; marketing; financial aspects; personnel; purchasing; public relations; environmental matters; contracts and stock market requirements and implications.
Co-ordinator: Associate Professor N I Aziz.

MINE975 Evaluation in the Coal Mining Industry
Autumn or Spring session; 6 credit points.
An introduction to the theory and practice of financial modelling of mining projects; financial evaluation and economic decision making; long life and large sustaining capital needs of coal projects and the techniques of evaluating operational alternatives are reviewed and illustrated by industry case histories; evaluation of new mine projects are studied by means of case histories.
Co-ordinator: Associate Professor N I Aziz.

MINE976 Environmental Assessments (Audits)
Annual; 6 credit points (42 modular hours).
Assessment: continuous assessment and examination.
This course is an introduction to methods for assessing existing and potential contamination of industrial sites and mining operations. The course includes elements such as the policy and legal framework of environmental assessments, sources of information on a range of chemical contaminants and recommended exposure limits; the role of the assessor (or auditor); selected environmental assessment case studies will be considered.
Co-ordinator: Professor R N Singh.

MINE977 Environmental Geology
Spring or Autumn Session; 6 credit points (42 contact hrs).
Assessment: continuous assessment and examination.
This comprehensive course will deal with the major topics of: engineering geology and ground water controls, in the form of discontinuities, variable materials and pore pressure; effect of excavation method and scheduling in pit stability; the fundamental basis of stability analysis, advantages and disadvantages of a range of mathematical models, remedial measures that can be taken to stabilise slopes; pit slope design in the context of overall mine planning. The subject may also involve workshops and field inspections so that students gain hands-on experience of practical cases.
Co-ordinator: Professor R N Singh.

MINE980 Slope Stability for Surface Mining
Annual; 6 credit points (42 modular hours).
Assessment: continuous assessment and examination.
This course provides an introduction to the location, assessment, mining and processing of soil and rock construction materials and to the environmental problems associated with their extraction. The main themes explored include the maximum use of existing quarries, the use of upgraded marginal materials and the reclamation of quarried lands. The materials covered include aggregates, ballast, armourstone and prepared road base, sand, gravel and natural pavement materials, artificial aggregates and stabilised road base, brick clay, limestone and cementsitious materials.
Co-ordinator: Associate Professor NAziz.

MINE981 Environmental Geology
Spring or Autumn Session; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
Refer to Faculty of Science, Geology subjects course description.

MINE985 Cargo Preparation
Annual; 6 credit points (42 modular hours).
Assessment: continuous assessment and examination.

MINE990 Slope Stability for Surface Mining
Annual; 6 credit points (42 contact hrs).
Assessment: continuous assessment and examination.
This comprehensive course will deal with the major topics of: engineering geology and ground water controls, in the form of discontinuities, variable materials and pore pressure; effect of excavation method and scheduling in pit stability; the fundamental basis of stability analysis, advantages and disadvantages of a range of mathematical models, remedial measures that can be taken to stabilise slopes; pit slope design in the context of overall mine planning. The subject may also involve workshops and field inspections so that students gain hands-on experience of practical cases.
Co-ordinator: Professor R N Singh.

GEOL921 Environmental Geology
Spring or Autumn Session; 6 credit points (42 contact hrs).
Assessment: 4 major assignments.
Refer to Faculty of Science, Geology subjects course description.

MINE990 Cargo Preparation
Annual; 6 credit points (42 modular hours).
Assessment: continuous assessment and examination.

MINE995 ME Major Thesis
Double session (A); 48 credit points.
Co-ordinator: Associate Professor N Aziz.
MINE957 PhD Major Thesis
Double Session (A); 48 credit points.
Co-ordinator: Professor R N Singh.
FACULTY OF HEALTH AND BEHAVIOURAL SCIENCES
FACULTY OF HEALTH AND BEHAVIOURAL SCIENCES

FACULTY OFFICE

Dean: Professor Charles Watson
Sub Dean: Dr Graham Ward
Executive Officer: Carole Peacock (042) 21 3363
Professional Officer: Paddy Fitzgerald-Asher (042) 21 4060
Administrative Assistant: Bev Moate (042) 21 3492

MEMBER UNITS

The Faculty of Health and Behavioural Sciences is made up of the following Units:

- Biomedical Science
- Nursing
- Psychology
- Public Health and Nutrition
- Medical Research Unit

RESEARCH COURSES AVAILABLE

The Faculty offers Honours Master of Science and Doctor of Philosophy degrees by research. In addition, the Honours Master of Arts is offered in the Departments of Biomedical Science and Psychology.

POSTGRADUATE PROGRAMS

Postgraduate programs are available in the Faculty in the following areas:

- Clinical Psychology 164
- Health Policy and Management 171
- Mental Health 171
- Nursing 158
- Nutrition and Dietetics 172
- Occupational Health and Rehabilitation 172
- Primary Health Care 172
- Public Health 172
FULL TIME STAFF

Dean
Professor Charles Watson, BScMed(Hons)
Syd, MB BS Syd, MD UNSW, FAPPHM

Sub-Dean
Dr Graham R Ward, TTC
TTC
Sub-Dean
Executive Officer
Paddy Fitzgerald-Asher, BCom, GradEXpBus
Professional Officer
Bev Moate
Administrative Assistant
Len Storlien, BSc (cum laude)
Departmental Head and Professor of
DEPARTMENT OF
Thomas F Penrose, DipPhysEd
Arthur Jenkins, BSc(Hons)
Nigel Taylor, DipT BHMS(Hons) QW, MSc
BEd(PE) MEd
LAND, PhD MACE, MSc (Hons)
PhD
PhD
PhD
PhD
Zhou Medical College

Lecturers
Lee Astheimer, BSc(Hons) Canada MScalif, PhD Calif
Owen Curtis, DipPhysEd TSTC Melb, BEd(PED) Med. WA
Xu Peng Huang, MSc Shanghai, MBBS Xu Zhou Medical College

Teaching Fellows
Guy Bashford, MB BS FACRM
Ian Davidson, MB BS FACRM
Robert Moses, MB BS FRACP
Geoff Speldwinde, MB BS FACRM

Administrative Assistants
Marion Harvey
Nola Hurt

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Mark Andrews, BPE UWA, MStud(Ed)
James Johnson, CertMedTech, SAIT

Technical Officers
Arno Reiners, BEng
Mario Solitro, Cert.Elec. Syd TAFE

Laboratory Technician
Shane Watkins, BTC, Assoc.Dip(Biotech)
Syd TAFE

DEPARTMENT OF NURSING

Dean
Professor Charles Watson, BScMed(Hons)
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TTC
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Bev Moate
Administrative Assistant
Len Storlien, BSc (cum laude)

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Syd, MB BS Syd, MD UNSW, FAPPHM

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TTC
Sub-Dean
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Professional Officer
Bev Moate
Administrative Assistant
Len Storlien, BSc (cum laude)

Senior Lecturers
Marlee Lynch, RN, BA Macq, DipNEd Cumb, PCN (NSW)
Tracey McDonald, RN, CM, DipNEd Cumb, PCN (NSW)
Margaret Gery, RN, BA Syd
Brit Gery, RN, BA(Hons), MSc Syd, MAPsS
Marilyn Hales, RN, CM, BA LINE, MA (Cult 9), MNC (NSW)
William Janes, RN, BA Macq, BHA UNSW, DipNEd Cumb, MSc, PCN (NSW)

Administrative Assistants
Isla Bowen, RN, BA, MAPsS
Jennifer Fares, RN, DipNEd Armidale CAE, BA, FCN (NSW)
Margaret Gery, RN, BA Syd
Brit Gery, RN, BA(Hons), MSc Syd, MAPsS
Marilyn Hales, RN, CM, BA LINE, MA (Cult 9), MNC (NSW)
William Janes, RN, BA Macq, BHA UNSW, DipNEd Cumb, MSc, PCN (NSW)
Suzanne Punton Butler, RN, BA NE, DipEd(TechEd), DipNEd Coll of Nursing
Allison Shorten, RN, CM, BN, MBSc
Georgina Stamp, RN, GDipSc, MSc Flin
Peter Thomas, RN, BSc Syd, GradDipEd(Sec) SCAE, MA
Margaret Wallace, RN, BA Macq, GDipD(ED)(Org) SCAE, GDipD(ED)(Mid)
Curtin, Med, MDC, MCN (NSW)

Technical Officer
Annette Hoskins, RN, BoN.

DEPARTMENT OF PSYCHOLOGY

Departmental Head and Professor of Psychology
Robert Barry, BSc DSc UNSW, DipEd BA
PhD Syd, MSc Macq, FIOF, MAPsS

Professor
William J Lovegrove, BA PhD Q’d, MAPsS

Associate Professors
Mark H Anshel, BS Ill State, MA McGill, PhD Flor State, MAPsS
Linda L Viney, BA Tas, MA ANU, PhD Cinc, FAHP
Beverly M Walker, BA PhD Syd, MAPsS

Senior Lecturers
Patrick Heaven, BA Stel, MSc UOFS, D Litt et Phil Sth Africa, MAPsS
Rachael M Henry, BA MA AppPsych PhD Syd MAPsS, MBPsS, MACP
Nigel MacKay, BSc, MSc Couns, DPhil Oxf
Jeff Wragg, BA MA PhD, MAPsS

Lecturers
Darren Burke, BSc PhD Syd
Peter Caputi, BA DipMath
Doug G Corrond, BSc M Sc ’ncl (NSW)
John M de Wet, BA MA PhD CapeT, MAPsS
Allison M Fox, BSc (Hons) PhD Macq
John M Freestones, BA UNSW, DipPsych Syd, DipEurstud, MAPsS

DEPARTMENT OF NURSING

Departmental Head and Associate Professor of Nursing
Rhonda Griffiths, RN, CM, DipTeach (Nsg)

DEPARTMENT OF BIOMEDICAL SCIENCE

Departmental Head and Professor of Biomedical Science
Len Storlien, BSc (cum laude) Lethbridge, MA Br Col, PhD ANU

Senior Lecturers
Stephen H Boucher, MSc Dal, PhD Arizona J Mark Brown, BSc PhD Q’d
Paul Else, BSc(Hons) PhD UNSW
Arthur Jenkins, BSc(Hons) Q’d PhD UNSW
Thomas F Penrose, DipPhysEd STC, MSc Oregon
Julie Steele, DipT Kuring-gai, BPE(Hons) WA
Nigel Taylor, DipT BHMS(Hons) Qld, MSc Lond, PhD Simon Fraser

Dr Graham R Ward, TTC, BSc BSc(Meds) UNSW

Administrative Assistants
Heather Todd
Magdalene Heaslip
Tania Harrison

TEACHING FELLOWS
Guy Bashford, MB BS FACRM
Ian Davidson, MB BS FACRM
Robert Moses, MB BS FRAACP
Geoff Speldwinde, MB BS FACRM

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Marion Harvey
Nola Hurt

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James Johnson, CertMedTech, SAIT

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Arno Reiners, BEng
Mario Solitro, Cert.Elec. Syd TAFE

Laboratory Technician
Shane Watkins, BTC, Assoc.Dip(Biotech)
Syd TAFE

DEPARTMENT OF HEALTH AND NUTRITION

Departmental Head and Associate Professor of Public Health
Rose Harris, BA Adel, STB American, MA PhD Maryland, FAPHS,

Professor of Public Health
Christine E Ewan, MB BS PhD MA Syd, FAPPHM

Associate Professor
Paolo Ricci, BS LaSalle, MS PhD Drex, MA Temple, MPA Haro, LLM Leices

Professional Fellow
Bernie Amos, AO, MB BS, FRACP, FRACMA, FAPHS

Assistant Director
Katarina Drazumeric, BA

DEPARTMENT OF PUBLIC HEALTH AND NUTRITION

Departmental Head and Associate Professor of Public Health
Rose Harris, BA Adel, STB American, MA PhD Maryland, FAPHS,

Professor of Public Health
Christine E Ewan, MB BS PhD MA Syd, FAPPHM

Associate Professor
Paolo Ricci, BS LaSalle, MS PhD Drex, MA Temple, MPA Haro, LLM Leices

Professional Fellow
Bernie Amos, AO, MB BS, FRACP, FRACMA, FAPHS

Senior Lecturers
Mary Harris, GradDipHealthAdmin SAIT, MPH Berkeley, PCNA, FAPHS
Lindsey Harrison, MA PhD ANU, MSc Lond
Rohan Jayasuriya, MB BSc Ceyl, MPhil Johns H, MD (Comm Med)
Irene Krels, MD PhD Leiden, MSc (Epi) Harv
Paul O'Haloran, BA Mclin PsyC Maq, MAPsS
Linda Tapsell, BSc DipNutrDiet Syd, MHPed UNSW, ADP
FACULTY VISITING COMMITTEE

Mr Steve Martin, Speaker, House of Representatives
Mr Richard Gould, Chief Executive Officer, Illawarra Area Health Service
Dr Garry Egger, Health Promotion Consultant
Dr Calvin Frost, Deputy Chief Health Officer, NSW Health Department
Ms Paula Blanche, Director of Nursing, Illawarra Regional Hospital
Dr Aileen Plant, Course Director, Master of Applied Epidemiology Program, National Centre for Epidemiology and Population Health
Professor Barbara Gillam, School of Psychology, University of New South Wales
Professor John Sutton, Head, School of Biomedical Science, University of Sydney
Ms Iris McLoughlin, Senior Aboriginal Health Worker, Community Health Services

MEDICAL RESEARCH UNIT

Professor & Head of Unit
Dennis Calvert, BMedSc MB ChB MD Otago, MCB, FRACP, FRCPA, FRCPath, FACHSE, FAFPHM

Associate Professor
Robyn Holden, RPN, DipAppSc Phillips Inst, BA LAT, MA PhD Deakin

Lecturer
Barbara Meyer, BSc (Hons) PhD Monash

Administrative Assistant
Elaine Knight
The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Science by Coursework and Research
3. Graduate Diploma in Science (Exercise Science)

CURRENT RESEARCH AREAS

The Department's research activities are placed under the general areas of metabolic and cardiorespiratory physiology, pathology, human performance, and movement rehabilitation.

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY
   Candidates for this degree enrol in GHMA999 Major Thesis

2. HONOURS MASTER OF SCIENCE
   The primary aim of the Honours Masters program in Human Movement Science is to provide research opportunities and training at the postgraduate level.
   Students with a degree at least Honours Class II, Division 1 level will be required to complete subjects with a value of at least 96 credit points to graduate. The credit points will be divided into 48 credit points of coursework and 48 credit points of research.
   Those students with a degree at least Honours Class II, Division 1 level will be required to complete a program with a value of at least 48 credit points.

3. GRADUATE DIPLOMA IN SCIENCE (EXERCISE SCIENCE)
   This one-year Graduate Diploma is designed principally for graduate students to gain a professional orientation in Exercise Science to their undergraduate program.
   Students must consult with the postgraduate co-ordinator for approval of entry. The specific combination of subjects will be determined after discussion with the postgraduate co-ordinator and will take into account the previous background and needs of the student and whether the subjects selected are consistent with University's Course Rules for Graduate Diplomas.

SUBJECT DESCRIPTIONS

GHMA900 Applied Cardiovascular Physiology* Autumn or Spring session; 8 credit points (56 contact hrs).
   Pre-requisites BMS202 or approved subject.
   Assessment: project 60%, labs 15%, presentation 5%, mid-term examination 20%.
   This subject focuses on the cardiovascular system, describes and provides access to a range of noninvasive indices of cardiovascular function, and examines the relationships between exercise, physical and psychological stressors, chronic disease, and cardiac function. At the finish of the course students will have had in depth experience with noninvasive measures of cardiac function such as impedance cardiography, beat-by-beat blood pressure, spectral analysis of ECG, and ECG electrophysiology.
   Textbooks: Journal articles and selected book chapters will be used.
   Co-ordinator: Dr S Boucher.

GHMA904 Advanced Study in Exercise Physiology* Autumn or Spring session; 8 credit points (3 hr lecture plus laboratory work each wk).
   Assessment: semester paper 30%, seminar presentations 15%, seminar preparation and involvement 10%, and major research project 45%.
   The aim of the assessment is to evaluate the understanding of essential core components, which is consistent with both professional training and the quantification of the preparedness of the student to undertake research in exercise physiology.
   This subject shall involve seminar-based, detailed study in current topics in exercise physiology as they pertain to research in the broad areas of exercise, health and disease. While certain key topics will be maintained as core components, the subject material and supplementary topics will change regularly to reflect recent trends in research. Subject core topics include: gas exchange kinetics; fatigue mechanisms; acid base regulation; muscle plasticity.
   Textbooks: There is no prescribed text. However, a collection of essential readings (research and review papers), will be held in the reserve section of the library. All students are expected to copy these papers for class use.
   Co-ordinator: Dr NAS Taylor.

GHMA906 Research Projects Autumn or Spring session; 8 credit points (28 hrs workshop per session).
   Assessment: substantial report and seminar.
   This subject requires the student to research in detail a problem identified in an approved topic in Human Movement Science. Students will conduct their research project in a selected staff member's research laboratory.
   Textbooks: none.
   Co-ordinator: Dr S Boucher.

GHMA909 Practicum Autumn or Spring session; 8 credit points (field work plus 28 hrs of university-based laboratory/workshops).
   Pre-requisite: approved subjects in Human Movement Science.
   Assessment: Substantial report and seminar.
   Students will undertake a period of supervised research with selected staff members and will provide a substantial report on this experience.
   Textbooks: none.
   Co-ordinator: Dr M Brown.

GHMA911 Advanced Injury Prevention and Rehabilitation* Autumn or Spring session; 8 credit points (56 hrs of lectures, seminars and laboratory sessions).
   Pre-requisite: Approved subjects in Human Movement Science.
   Assessment: assignment work, mid session and final examination.
   An extension of BMS351 to provide opportunities to apply the skills of the human movement scientist to the evaluation of movement capability, the identification of movement disorders, and the design of appropriate procedures to restore and enhance individual movement capacities of a variety of movement settings.
   Textbooks: to be advised.
   Co-ordinator: Mr O Curtis.

GHMA913 Special Topics Autumn or Spring session; 8 credit points.
   Individual directed study with a selected member of staff.
   Co-ordinator: Dr G Ward.

GHMA914 Ergonomics Autumn or Spring session; 8 credit points (56 hrs of lectures, seminars and laboratory sessions).
   Assessment: assignment work, laboratory reports and final examination.
   This subject will analyse the relationship between the nature of work environment. Topics covered will include the design of workstations and jobs and the capacities and limitations of the human body.
   Textbooks: to be advised.
   Co-ordinator: to be advised.

GHMA999 Major Thesis Multi-session subject; 48 credit points.

* Not on offer in 1996.
NURSING

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Master of Nursing (Honours)
3. Master of Science (Honours, Midwifery)
4. Master of Science (Midwifery)
5. Master of Nursing
6. Master of Science (Development Disability)
7. Graduate Certificate, Graduate Diploma and Master of Indigenous Health Studies
8. Graduate Diploma in Science (Developmental Disability)
9. Graduate Diploma in Nursing
10. Graduate Certificate in Nursing

CURRENT RESEARCH AREAS

The major current areas of nursing research use educational, demographic, and ethnographic techniques. Studies using a variety of approaches associated with disciplines such as Psychology, History, Economics, Philosophy and Sociology will be considered.

The following areas of research are available to candidates undertaking the Honours Masters degrees by research and the Doctor of Philosophy degree:

Maternal and child care
Gerontology
Medical/surgical nursing
Special care nursing
Mental health
Developmental disability
Psychiatric nursing
Health promotion
Cardiovascular disease prevention
Health services evaluation
Migrant health
Geriatrics and rehabilitation
Palliative care
and other areas relevant to nursing

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAMS IN NURSING

leading to the Graduate Certificate in Nursing, Graduate Certificate in Indigenous Health Studies, Graduate Diploma in Nursing, Graduate Diploma in Indigenous Health Studies, Graduate Diploma in Science (Developmental Disability), Master of Science (Developmental Disability), Master of Nursing, Master of Indigenous Health Studies, Master of Science (Midwifery), Master of Science (Honours, Midwifery), Master of Nursing (Honours), Doctor of Philosophy.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
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</table>

SCHEDULE 1

Graduate Certificate in Nursing
24 credit points from the subjects listed below:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMB900</td>
<td>Nursing: The Professional Context 6</td>
</tr>
<tr>
<td>GHMB902</td>
<td>Nursing Management 6</td>
</tr>
<tr>
<td>GHMB903</td>
<td>Scientific and Quantitative Developments in Critical Care 6</td>
</tr>
<tr>
<td>GHMB906</td>
<td>Critical Care Nursing: Reflections on Practice 6</td>
</tr>
<tr>
<td>GHMB907</td>
<td>Fundamental Concepts in Developmental Disability 6</td>
</tr>
<tr>
<td>GHMB908</td>
<td>Applied Behavioural Science for Developmental Disability Practice 6</td>
</tr>
<tr>
<td>GHMB909</td>
<td>Multiple Disability 6</td>
</tr>
<tr>
<td>GHMB910</td>
<td>Contemporary Issues in Developmental Disability 6</td>
</tr>
<tr>
<td>GHMB923</td>
<td>Legal and Professional Issues 6</td>
</tr>
<tr>
<td>GHMB930</td>
<td>Clinical Education 6</td>
</tr>
<tr>
<td>GHMB931</td>
<td>Clinical Supervision 6</td>
</tr>
<tr>
<td>GHMD902</td>
<td>Communication and Education 6</td>
</tr>
<tr>
<td>GHMD906</td>
<td>Health Services Organisation and Management 6</td>
</tr>
<tr>
<td>NURS225</td>
<td>Pathophysiology for the Registered Nurse 6</td>
</tr>
</tbody>
</table>

Normally subjects will be selected to form a coherent course of study in a specialised area.

SCHEDULE 2

Graduate Certificate in Indigenous Health Studies (24 credit points) subjects

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>GHMB904</td>
<td>Modalities of Care: Mental Health 6</td>
</tr>
<tr>
<td>GHMD936</td>
<td>Public Health Nutrition 6</td>
</tr>
<tr>
<td>GHMB940</td>
<td>Indigenous Family Studies 6</td>
</tr>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research 6</td>
</tr>
</tbody>
</table>
POSTGRADUATE PROGRAMS IN NURSING (cont'd)
leading to the Graduate Certificate in Nursing, Graduate Certificate in Indigenous Health Studies, Graduate Diploma in Nursing, Graduate Diploma in Indigenous Health Studies, Graduate Diploma in Science (Developmental Disability), Master of Science (Developmental Disability), Master of Nursing, Master of Indigenous Health Studies, Master of Science (Midwifery), Master of Science (Honours, Midwifery), Master of Nursing (Honours), Doctor of Philosophy.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>SCHEDULE 3</td>
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</tr>
<tr>
<td>Graduate Diploma in Nursing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Subjects</td>
<td></td>
<td></td>
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<tr>
<td>plus 24 credit points from Schedule 1</td>
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<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>GHMD984</td>
<td>Health Research Methodology</td>
<td>6</td>
</tr>
<tr>
<td>GHMB905</td>
<td>Special Topic in Nursing</td>
<td>12</td>
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<tr>
<td>SCHEDULE 4</td>
<td></td>
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<tr>
<td>Graduate Diploma in Indigenous Health Studies (48 credit points) subjects</td>
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<tr>
<td>Schedule 2: The Graduate Certificate in Indigenous Health Studies (24 credit points) plus</td>
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<td></td>
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<tr>
<td>GHMD902</td>
<td>Communication and Education</td>
<td>6</td>
</tr>
<tr>
<td>GHMD904</td>
<td>Epidemiology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD913</td>
<td>Drug Problems and Issues</td>
<td>6</td>
</tr>
<tr>
<td>GHMB941</td>
<td>Indigenous Health Patterns</td>
<td>6</td>
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<tr>
<td>SCHEDULE 5a</td>
<td></td>
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<tr>
<td>Graduate Diploma in Science (Developmental Disability)</td>
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<td></td>
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<tr>
<td>Core and specialisation subjects - compulsory as listed below</td>
<td></td>
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<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>GHMD984</td>
<td>Health Research Methodology</td>
<td>6</td>
</tr>
<tr>
<td>GHMB907</td>
<td>Fundamental Concepts in Developmental Disability</td>
<td>6</td>
</tr>
<tr>
<td>GHMB908</td>
<td>Applied Behavioural Science for Developmental Disability Practice</td>
<td>6</td>
</tr>
<tr>
<td>GHMB909</td>
<td>Multiple Disability</td>
<td>6</td>
</tr>
<tr>
<td>GHMB910</td>
<td>Contemporary Issues in Developmental Disability</td>
<td>6</td>
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<tr>
<td></td>
<td>The remaining two (2) subjects (12 credit points) are electives, normally chosen from the following five (5) subjects:</td>
<td></td>
</tr>
<tr>
<td>SOC103</td>
<td>Sociology 1A</td>
<td>6</td>
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<tr>
<td>SOC205</td>
<td>Sociology of the Family</td>
<td>6</td>
</tr>
<tr>
<td>EDUF101</td>
<td>Child Growth and Development</td>
<td>6</td>
</tr>
<tr>
<td>PSYC233</td>
<td>Development</td>
<td>6</td>
</tr>
<tr>
<td>GHMB900</td>
<td>Nursing: The Professional Context</td>
<td>6</td>
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<tr>
<td>SCHEDULE 5b</td>
<td></td>
<td></td>
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<tr>
<td>Master of Science (Developmental Disability)</td>
<td></td>
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<tr>
<td>48 credit points from Schedule 5a plus:</td>
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<tr>
<td>GHMB998</td>
<td>Minor Thesis</td>
<td>24</td>
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<tr>
<td>SCHEDULE 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master of Nursing (48 credit points) subjects</td>
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<td></td>
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<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>GHMD984</td>
<td>Health Research Methodology</td>
<td>6</td>
</tr>
<tr>
<td>GHMB905</td>
<td>Special Topic in Nursing</td>
<td>12</td>
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<tr>
<td>GHMB998</td>
<td>Minor Thesis</td>
<td>24</td>
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<tr>
<td>SCHEDULE 7</td>
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<tr>
<td>Master of Indigenous Health (72 credit points) subjects</td>
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<tr>
<td>Option A - Schedule 4: The Graduate Diploma in Indigenous Health Studies (48 credit points) plus</td>
<td></td>
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<tr>
<td>GHMB998</td>
<td>Minor Thesis</td>
<td>24</td>
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<tr>
<td>Option B - Schedule 4: The Graduate Diploma in Indigenous Health Studies (48 credit points) plus</td>
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<td></td>
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<tr>
<td>GHMD908</td>
<td>Service Planning and Evaluation</td>
<td>6</td>
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<tr>
<td>GHMD912</td>
<td>Health Promotion - A Practical Approach</td>
<td>6</td>
</tr>
<tr>
<td>GHMB942</td>
<td>Special Topic</td>
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<tr>
<td>SCHEDULE 8</td>
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<tr>
<td>Master of Science (Midwifery)</td>
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<tr>
<td>Specialisation (compulsory)</td>
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<tr>
<td>GHMB920</td>
<td>Applied Midwifery Studies</td>
<td>12</td>
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<tr>
<td>GHMB921</td>
<td>Reproductive Bioscience</td>
<td>8</td>
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<tr>
<td>GHMB922</td>
<td>Psychosocial Development of the Family</td>
<td>8</td>
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<td>GHMB923</td>
<td>Legal and Professional Issues</td>
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<tr>
<td>GHMB924</td>
<td>Midwifery Studies</td>
<td>8</td>
</tr>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
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<tr>
<td>or NURS224</td>
<td>Research and Design Methods</td>
<td>6</td>
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</tbody>
</table>
leading to the Graduate Certificate in Nursing, Graduate Certificate in Indigenous Health Studies, Graduate Diploma in Nursing, Graduate Diploma in Indigenous Health Studies, Graduate Diploma in Science (Developmental Disability), Master of Nursing, Master of Indigenous Health Studies, Master of Science (Midwifery), Master of Science (Honours, Midwifery), Master of Nursing (Honours), Doctor of Philosophy.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td></td>
<td>SCHEDULE 9</td>
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<tr>
<td></td>
<td>Honours Master of Science (Midwifery)</td>
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<td>Master of Science (Midwifery) subjects plus:</td>
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<td>48 credit points consisting of</td>
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<td></td>
<td>GHMD984 Health Research Methodology</td>
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<td>GHMD904 Epidemiology</td>
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<tr>
<td></td>
<td>Two (2) optional electives to be selected from:</td>
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<td></td>
<td>GHMC962 Counselling Psychology</td>
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<td>GHMD912 Health Promotion a Practical Approach</td>
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<td>GHMD925 Aboriginal Health Issues</td>
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<td></td>
<td>GHMD939 Health Nutrition in Health and Disease</td>
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<td>GHMD967 Service Planning and Evaluation</td>
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<td>GHMD981 Maternal and Child Health in Developing Countries</td>
<td>6</td>
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<td></td>
<td>GHMB998 Major Project</td>
<td>24</td>
</tr>
</tbody>
</table>

|        | SCHEDULE 10                                 |               |
|        | Honours Master of Nursing and Doctor of Philosophy |         |
|        | (Repeat same enrolment each year of study)    |               |
|        | GHMB999 Major Thesis                         | 48            |

Subject descriptions for GHMB - Department of Nursing
Subject descriptions for GHMD - Department of Public Health and Nutrition

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

For the Doctor of Philosophy degree candidates enrol in the subject GHMB999 Thesis.

2. HONOURS MASTER OF NURSING (By Research)

HONOURS MASTER OF NURSING (By Coursework and Research) AND MASTER OF NURSING

The Honours Master of Nursing by Research is intended to provide candidates with the opportunity to pursue a research program in a specialised field of nursing. For Master of Nursing and Honours Master of Nursing by Research please refer to the Course Rules and note the following additions:

i. Applicants must hold a current authority to practise as a Registered Nurse with the NSW Nurses Registration Board or an equivalent authority to practise. Normal entry requirements are as stated in the Course Rules.

   - a candidate will undertake an approved course recommended by the Head of the Department of Nursing;
   - a candidate for the Master of Nursing;

   Please refer to the Pass Masters Degree Rules and note the following additions:

   - a candidate who has completed a degree of Bachelor of Nursing or equivalent shall be eligible for admission into Master of Nursing Program.

   iv. a person wishing to use previous postgraduate studies to qualify for admission to the Master of Nursing (Pass), or Master of Nursing (Honours) degree shall be expected to:

      - (a) Master of Nursing (Pass), Master of Science (Pass):
        - (i) carry 48 credit points advanced standing from the graduate diploma into the Master of Nursing, Master of Science or Master of Indigenous Health Studies;
        - (ii) complete 24 credit point minor thesis.
      - (b) Master of Nursing (Honours)
        - (i) carry 48 credit points advanced standing from the Pass Master of Nursing to the Master of Nursing (Honours) with the additional requirement of 48 credit points from thesis work; or
        - (ii) proceed straight into 96 credit points Master of Nursing (Honours) as per Course Rules.

   v. candidates wishing to use previous postgraduate studies obtained from institutions other than the University of Wollongong will be awarded credit consistent with the general regulations of the University of Wollongong;

   vi. a candidate for the Honours Master of Nursing will successfully complete subjects with a total value of not less than 96 credit points:

      - (a) 24 credit points will comprise the core subjects listed in Schedule 1;
      - (b) 24 credit points will be selected from Schedule 3;
      - (c) a thesis consisting of the results of an investigation to the value of 48 credit points; or
      - (d) a minor thesis consisting of the results of an investigation whose credit point value is 24 together with satisfactory completion of directed study subjects to the value of 24 credit points.

Candidates for this degree enrol in GHMB999.

3. MASTER OF SCIENCE (MIDWIFERY) (HONOURS)

The Master of Science (Honours, Midwifery) is a program that provides an opportunity for candidates to engage in advanced coursework studies in related subjects and to complete a research equity culminating in the submission of a minor thesis.

4. MASTER OF SCIENCE (MIDWIFERY)

The Master of Science (Midwifery) is to prepare graduates to function as autonomous practitioners in the professional practice of midwifery. On successful completion of the Master of Science (Midwifery), students who do not hold an authority to practice midwifery and have a current authority to practise as a Registered Nurse (List A) are eligible to apply to the NSW Nurses Registration Board for an authority to practise.
5. MASTER OF NURSING
The Pass Masters degree is designed to prepare nurses for leadership roles in nursing and the health care system.
Candidates select subjects from Schedule 6. Refer to Section 2 above for further details.

6. MASTER OF SCIENCE (DEVELOPMENTAL DISABILITY)
Students enrolled in Master of Science (Developmental Disability) will have already completed a Graduate Diploma in Science (Developmental Disability). They will undertake a minor thesis on an aspect of developmental disability that consolidates earlier studies in developmental disability and research methodology.

7. THE GRADUATE CERTIFICATE, DIPLOMA AND MASTER OF INDIGENOUS HEALTH STUDIES
The Graduate Certificate, Diploma and Master of Indigenous Health Studies prepares graduates to work as autonomous health providers in urban and rural Indigenous communities.

8. GRADUATE DIPLOMA IN SCIENCE (DEVELOPMENTAL DISABILITY)
The Graduate Diploma in Science (Developmental Disability) is a multi-disciplinary course designed for health and education professionals providing direct care to people with developmental disabilities. It aims to provide an appropriate theoretical and conceptual framework for practice and access to contemporary information relating to developmental disability. The course consists of specialist developmental disability subjects and electives. Emphasis is on applying theoretical, research-based knowledge to practice in the developmental disability field.

9. GRADUATE DIPLOMA IN NURSING
(a) (General Stream)
The Graduate Diploma in Nursing is a professional course in nursing which will provide preparation in research design and methodology for nurses wishing to progress into higher degree programs, and preparation for the nurse who seeks an expanded role in the health system, by an individualised program of core subjects selected from Schedule 1. Candidates complete 48 credit points of core subjects and selected elective subjects from Schedule 1 and 3.

(b) The Graduate Diploma in Nursing provides nurses with the opportunity to develop skills and knowledge in a major area of nursing. Major areas of study include clinical education, critical care nursing, nursing management and research. Applicants must hold a current authority to practise as a Registered Nurse with the NSW Nurses Registration Board or an equivalent authority to practise. Normal entry requirements are as stated in the Course Rules.

10. GRADUATE CERTIFICATE IN NURSING
The Graduate Certificate in Nursing is a short, focused, clinically based course having both academic and industry relevance. It is designed to give students the flexibility to choose subjects that allow professional development to occur in tandem with academic rigour. Candidates may exit following completion of the required subjects having acquired advanced knowledge in their chosen fields and having been prepared for advanced practice. On completion of the Graduate Certificate in Nursing candidates may elect to progress to the Graduate Diploma in Nursing.

SUBJECT DESCRIPTIONS

GHMB900 Nursing: The Professional Context
Autumn session; 6 credit points (3 hrs per wk).
Assessment: one seminar presentation 20%, written assignment 60%, a critical annotated bibliography 20%.
Students will be encouraged to explore nursing topics currently creating controversy and within the professional milieu of the nursing profession. Issues which impact on nursing education and management will be examined. Topics will include the career structure for the nursing profession and the role of the nurse within this context. Because of the degree of change currently affecting the nursing profession topics will be varied and opportunities will be available for discussion and critical analysis.
Textbook:
Journal articles and portions of books will be used in lieu of a set text.

Co-ordinator: to be advised.

GHMB902 Nursing Management
Spring session; 6 credit points (3 hrs per wk).
Assessment: tutorial presentation and participation 50%, project 50%.
This subject will introduce the basic concepts of nursing administration at all levels – at the ward, middle management and at senior levels. Differences in management styles will be addressed; ward design and planning on care delivery; nursing care delivery assignments will be examined in detail. Nursing involvement in the public and the private sector will be examined.
Textbook:

Co-ordinator: Mr B Janes.

GHMB903 Scientific and Qualitative Developments in Critical Care Nursing
Spring session; 6 credit points (3 hrs per wk).
Pre-requisite: GHMB906.
Assessment: seminar presentation 40%, written assignment 60%.
This subject investigates technological, biological, psychological and sociological developments that have created an impact in critical care nursing in recent times. Insights into specific technology and pharmacology used for diagnostic or therapeutic purposes by nurses and the Health team will be targeted, including their characteristics, uses and efficacies within an holistic nursing care framework. Pre and post surgical as well as operative nursing developments will also be discussed in terms of the efficacy of nursing care provision. A portion of each week will be devoted to ECG interpretation.
Textbook:
Journal articles and portions of books will be used in lieu of a set text.

Co-ordinator: Mr B Janes and Dr J Sibbald.

GHMB904 Modalities of Care: Mental Health*
Autumn session; 6 credit points (3 hrs per wk).
Assessment: seminar presentation 20%, written assignment 20%, 1 case report 60%.
This subject addresses the most frequently used of therapeutic modalities from mental health nursing perspectives. Selected theoretical approaches are discussed for each treatment modality. Specific characteristics of each type of therapy are presented. In addition the psychiatric nurse's role, and goals for therapy are described and analysed.
Textbook:

Co-ordinator: to be advised.

GHMB905 Special Topic in Nursing
Autumn or Spring session; 12 credit points (3 hrs per wk and seminars as required).
Pre-requisite: Demonstrated expertise in a special area of nursing as determined by the Head of the Department of Nursing.
Assessment: seminar presentation 20%, research report 40%.
The special topic in nursing will be selected from the list of current research areas provided by supervisors in the Nursing Department. The specific topic in nursing will be closely related to the research subjects and constitute of a research proposal which will be expected to provide the basis for the major investigation to be carried out by the candidate in the subsequent major thesis subject.
Textbook: to be advised.

Co-ordinator: Co-ordinator of Graduate Studies in the Department of Nursing.

GHMB906 Critical Care Nursing: Reflections on Practice
Autumn session; 6 credit points (3 hrs per wk).
Assessment: seminar presentation 40%, written assignment 60%.
This subject focuses on relevant theories, themes and issues that have a practical bearing upon critical care clinical practice, (Intensive Care, Accident and Emergency and Coronary Care), and models of critical care nursing that address the practical aspects of this knowledge. Practical aspects include pathophysiology of the Cardiovascular, Respiratory, Nervous and Alimentary systems and Acid Base balance, and Introduction to Electrocardiograph Interpretation.
Textbooks:

* Not on offer in 1996
Innovative care. Underlying problems of
Assessment: seminar presentation and
participation 20%, two 1500-2000 word written
assignments 40% each.

This subject will provide the basic scientific
knowledge on which development disability is based. Emphasis will be
placed upon the student's gaining sound
understanding of the nature of
developmental disability and its complex
interactions with society. The study of
developmental disability is not merely a
medical or educational issue, but rather
one of wide social significance that is
correctly placed in a broad social context.
The body of knowledge which defines and
identifies the nature of the clientele and the
philosophical and ethical foundations for
practice will be addressed in this course.

Textbooks: to be advised.

Co-ordinator: Ms M Gerry.

GHMB909 Multiple Disability
Autumn session: 6 credit points (3 hrs per wk).
Pre-requisite: GHMB909.
Assessment: seminar presentation 20%, seminar
paper 30% and an assignment 3000-4000 words 50%.

Many clients with developmental
disabilities, particularly those who are the
heaviest users of specialised services, have
more than one disability. The problems
associated with these clients are usually
more complex and long-term than those of
clients with a single disability. These clients
provide a particular challenge to staff and
demand highly individualised and
innovative care. Underlying problems of
developmental disability may also be
complicated by the stresses of transition
to the life-cycle, by the disabling
effects of institutionalisation or by the socio-
-economic problems that frequently
accompany developmental disability. This
subject will address these issues.

Textbooks: to be advised.

Co-ordinator: Ms I Bowen.

GHMB910 Contemporary Issues in
Developmental Disability
Spring session; 6 credit points (3 hrs per wk).
Pre-requisite: GHMB907.
Assessment: project proposal presentation 20%,
project update presentation 20% and a project
5000-8000 words 60%.

Developmental disability is a field that has
changed constantly through its history and a
field in which there is a continual
questioning of current policies and practices
and a searching for better alternatives. It is
vitally important therefore, that
practitioners in the field are willing to critically
assess what is currently being done and to
honestly and objectively consider other
options. There are also a number of controv-
ersial issues in relation to the rights and
responsibilities of people with develop-
mental disabilities that must be addressed.
This subject will require independent and
thoughtful analysis of such issues and
critical assessment of current practices.

Textbooks: to be advised.

Co-ordinator: Dr J Sibbald.

GHMB922 Psychosocial
Development of the Family
Double session (A); 8 credit points (2 hrs per wk).
Assessment: one class presentation (including
written report) 20%, two critical reviews of
published articles 10% each one discussion paper
60%.

This subject will provide the student with
an in-depth knowledge of theory and
research, applied largely in the Australian
context on psychological, sociological and
social influences on the family and
extended family networks.

Textbooks: Brazelton, TB and Cramer EC, The Earliest
Relationship: Parents, Infants and The
Drama of Early Attachment, Reading
Massachusetts, Addison-Wesley, 1990.

Co-ordinator: Mr B Grenyer.

GHMB923 Legal and Professional
Issues
Spring session; 6 credit points (3 contact hrs per wk).
Assessment: seminar presentation 20%, seminar
paper 30%, major written assignment 50%.

This subject is designed to provide students
with a knowledge of legal and professional
issues in relation to their area of clinical
practice. Relevant Australian legislation,
appropriate case law and examples of moral
reasoning will be used to provide a
framework for clinical decision-making.

Textbooks: CCH Health & Medical Law (eds), Law for
the Nursing Profession, North Ryde,

Johnstone, MJ, Bio-ethics: A Nursing

Co-ordinator: Ms M Wallace.

GHMB924 Midwifery Studies
Double session (A); 8 credit points (2 hrs per wk).
Assessment: 30 minute seminar presentation
25%, Debate 25%, Critical analysis of research
papers 20% and an independent learning task
2000 words 20%.

This subject provides the theoretical
framework for the student to function as a
safe beginning practitioner caring for
childbearing women and families through
pregnancy, labour, and the puerperium.
An evidence-based approach to clinical
practice and an ability to review literature
critically will be encouraged.

Textbooks: Enkin M, Keirse, MJNC & Renfrew M,
A Guide to Effective Care in Pregnancy &

Co-ordinator: Ms G Stamp.

GHMB930 Clinical Education*
Autumn session; 6 credit points (3 hrs per wk).
Assessment: one seminar presentation 30%,
written assignment 50%, observed clinical
teaching 20%.

The subject will introduce the concepts and
practice of clinical education, it will address
issues related to the role of the clinical
educator, factors influencing student
learning, teaching strategies and teaching
resources in clinical settings, the clinical
environment as an educational topic, and bridging the theory and practice gap. Clinical education research and the health professional responsibilities and leadership in clinical education will be discussed.

Textbook:
Co-ordinator: to be advised.

GHMB931 Clinical Supervision and Assessment*
Spring session: 6 credit points (3 hrs per wk).
Pre-requisite GHMB930.
Assessment: various assessment techniques will be employed including seminar presentations, supervision report and a mentor project.
This subject covers the theoretical and practical aspects of clinical supervision and assessment within the health service context. It introduces the concept of competency based assessment, its origins, limitations and practical applications to assessment of professional performance. Students will critically assess and utilise a range of assessment tools and develop skills in assessing students both formatively and summatively. The subject will include practical experience in supervising performance and giving feedback.
Textbooks: to be advised.
Co-ordinator: to be advised.

GHMB940 Indigenous Family Studies
Autumn session: 6 credit points (4 hrs per wk; 2 hrs lectures, 2 hours tutorials).
Pre-requisite: nil.
Assessment: 2 x seminar presentations 20% each, 1 x major assignment 30%, examination 30%.
This subject examines traditional Aboriginal family structures, kinship systems, child-rearing practices, the role of women within the Aboriginal family and the health related situations in town-camps.
Textbook:
Co-ordinator: Ms I Stein.

GHMB941 Indigenous Health Patterns
Spring session: 6 credit points (4 hrs per wk; 2 hrs lectures, 2 hours tutorials).
Pre-requisite: nil.
Assessment: 2 x seminar presentations 20% each, 1 x major assignment 30%, examination 30%.
This subject examines different approaches to the study of Aboriginal health, contemporary patterns of morbidity and mortality, various health services and the related needs and community empowerment.
Textbooks:
Co-ordinator: Ms I Stein.

GHMB942 Special Topic
Autumn or Spring: 12 credit points (2 hrs lecture/seminar).
Pre-requisite: nil.
Assessment: 2 x seminar presentations of "topic-in-progress" 20% each, Special Topic Submission 60%.
This subject examines the factors affecting illness patterns, health area analysis, epidemiological considerations and health program delivery patterns about the topic under consideration in an Indigenous context. In addition, health audit procedures, service efficiency, service appropriateness and inter-agency co-ordination will be scrutinised in an Indigenous context.
Textbook: to be advised.
Co-ordinator: Ms I Stein.

GHMB998 Minor Thesis
Autumn or Spring or Double session (A); 24 credit points (1 hr of research supervision per wk and 2 hr seminars as required to complete assessment paper).
Assessment: minor thesis.
This is a major component of a combined coursework/thesis program in the Masters of Nursing undertaken by candidates enrolled in the Department of Nursing. A thesis must be submitted and assessed according to the Course Rules for Masters' Candidates. Thesis work is only commenced with the approval from the co-ordinator of the subject and the Head of the Nursing Department. Students will be required to present a seminar on their chosen thesis topic prior to completion of the thesis.
Co-ordinator: selected supervisors.

GHMB999 Major Thesis
48 credit points.
COURSES OFFERED
The following postgraduate courses are available:

1. PhD by Research
2. Doctor of Clinical Psychology
3. PhD in Clinical Psychology
4. Master of Clinical Psychology
5. MA (Hons) by Research
6. Master of Science (Pass)
7. Graduate Certificate in Cognitive Neuroscience

CURRENT RESEARCH AREAS
The following areas of research are available to candidates undertaking the Honours Master of Arts degree by research and the Doctor of Philosophy degree:

Adolescent Drug Use and Deviance
Adolescent Development
Attachment Theory and Measurement
Attributional Research; Belief Systems
Autobiographical memory
Belief Systems, Attributional Research
Clinical Applications of Biofeedback
Clinical, Community and Health Psychology (especially constructivist approaches)
Cognition in Sport Performance
Cognitive and Perceptual Aspects of Mental Imagery
Cognitive-Behavioural Treatment of Anxiety and Panic Disorders
Consciousness, Will, Belief, Placebo and Suggestion Effects
Coping with Acute Stress
Creativity
Development of Neuropsychological Tests
Drug and Alcohol Treatment
Evaluation of Early Intervention Programs
Eye Movement Desensitisation and Reprocessing
General Social Psychology
Health and Medical Psychology
Health Psychophysiology
Human Pavlovian Autonomic Conditioning
Implicit Learning
Indices of Stress, Anxiety, and Arousal
Jungian and Transpersonal Psychology
Learned Helplessness
Life-span Development, particularly Adolescent Development
Long-Term Memory
Measurement Issues in Personal Construct Theory
Mood Disorder
Object Recognition
Orienting Reaction
Perception of Motion
Personal Construct Psychology
Pregnancy and Childbirth
Psychiatric Rehabilitation
Psychoanalytic Research in the areas of:
- Mother-Infant Interactions
- Group work with Children and Adolescents
- Brief Work with Parents and Children up to 5 years
- Child Sexual Abuse
Psychology and Women/Sex and Gender Roles
Psychology of User/Computer Interface
Psychophysiological Correlates of Individual Differences
Psychophysiology of Attentional Processes
Psychosocial Functioning in Adults and the Elderly
Psychosocial Indices in Pregnancy and Childbirth
Psychotherapy Research
Qualitative Psychology
Social Support
Spatio-temporal Processing in Human Vision
Specific Reading Disabilities
Subjectivity, Philosophy of Mind
The Acute and Long-term Effects of Drugs (Especially Alcohol) on Cognitive Functioning
The Causes of Drug and Alcohol Use in Adolescence
The Development and Evaluation of Programs for Intervention with Adolescent and Adult Drug Users
The Development of Reading
Theoretical/Metatheoretical Issues in Psychology and Clinical Theory
Working Memory
## SCHEDULE OF PROGRAMS

### POSTGRADUATE PROGRAMS IN CLINICAL PSYCHOLOGY

leading to the Master of Clinical Psychology or the Doctor of Clinical Psychology.

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<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<td>GHMC901</td>
<td>Interpersonal Skills for Clinical Psychologists</td>
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<tr>
<td></td>
<td>GHMC902</td>
<td>Assessment for Clinical Psychologists</td>
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<td>GHMC903</td>
<td>Research Skills for Clinical Psychologists</td>
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<td>GHMC904</td>
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<td>Child Clinical Psychology</td>
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<td>GHMC906</td>
<td>Clinical Neuropsychology</td>
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<td>GHMC907</td>
<td>Psychotherapy with Individuals and Groups</td>
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<td>GHMC915</td>
<td>Cognitive Behaviour Therapy</td>
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<td>GHMC916</td>
<td>Practicum A</td>
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<td>GHMC917</td>
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<td>GHMC912</td>
<td>Research Project</td>
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<tr>
<td>(ii) Doctor of Clinical Psychology</td>
<td>GHMC901</td>
<td>Interpersonal Skills for Clinical Psychologists</td>
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<td>GHMC902</td>
<td>Assessment for Clinical Psychologists</td>
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<td>GHMC903</td>
<td>Research Skills for Clinical Psychologists</td>
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<td>GHMC904</td>
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<td>GHMC914</td>
<td>Thesis (Clinical Psychology)</td>
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<td>(iii) PhD in Clinical Psychology</td>
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<tr>
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<td>Thesis (Clinical Psychology)</td>
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</table>

* The thesis carries a weighting of 48 credit points per year over 1.5 years

* The thesis carries a weighting of 48 credit points per year over 2.5 years

For further details, see Course Requirements below.

### OTHER POSTGRADUATE SUBJECTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>(i) Master of Science (Pass) in Psychology</td>
<td>GHMC950</td>
<td>Theory Seminar*</td>
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<td></td>
<td>GHMC951</td>
<td>Health Psychology</td>
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<td>GHMC953</td>
<td>Psychology of Information Processing</td>
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<td></td>
<td>GHMC958</td>
<td>Topics in Data Analysis*</td>
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<td></td>
<td>GHMC959</td>
<td>Research Project</td>
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<td></td>
<td>GHMC960</td>
<td>Psychology of Reading and Reading Disabilities</td>
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<tr>
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<td>GHMC961</td>
<td>Assessment in Applied Psychology</td>
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<td>GHMC962</td>
<td>Counselling Psychology</td>
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<td>GHMC963</td>
<td>Child and Adolescent Psychology</td>
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<tr>
<td></td>
<td>GHMC964</td>
<td>Cognitive and Affective Neuroscience</td>
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<td>GHMC965</td>
<td>Advanced Sport and Exercise Psychology</td>
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* These require special permission from the Head of Department
1. DOCTOR OF PHILOSOPHY

To qualify for entry to the Doctor of Philosophy candidates must have a good Honours degree of at least 2(ii) standard. However, only a limited number of places are available, so the required standard may well be higher than this. This degree is a three year full-time degree, the usual minimum period of study. For part-time study the duration will be approximately twice as long. Candidates for this research degree enrol in GHMC999.

2. PhD in CLINICAL PSYCHOLOGY

To qualify for entry candidates must have an Honours Bachelor Degree of at least Class II, Division 1 standard. The program will normally involve eight academic sessions of full-time study. Full-time students are required to present for examination not later than 10 academic sessions from the date of registration. The program for PhD in Clinical Psychology candidates will require successful completion of:

(i) a supervised research programme on a topic which is in the field of Clinical Psychology. The research programme, to be written up as a thesis, constitutes two-thirds of the program.

(ii) at least 64 credit points from the Schedule of Graduate subjects in Psychology as follows:

A. 52 credit points in course work subjects:
- GHMC901 Interpersonal Skills for Clinical Psychologists
- GHMC902 Assessment for Clinical Psychologists
- GHMC903 Research Skills for Clinical Psychologists
- GHMC904 Clinical Psychology
- GHMC905 Child Clinical Psychology
- GHMC906 Clinical Neuropsychology
- GHMC907 Psychotherapy with Individuals and Groups
- GHMC915 Cognitive Behaviour Therapy

B. at least 12 credit points in supervised practical clinical experience:
- GHMC916 Practicum A
- GHMC917 Practicum B

3. DOCTOR OF CLINICAL PSYCHOLOGY

To qualify for entry candidates must have an Honours Bachelor Degree of at least Class II, Division 1 standard. The program will normally involve six academic sessions of full-time study. Full-time students are required to present for examination not later than 8 academic sessions from the date of registration. The program for Doctor of Clinical Psychology candidates will require successful completion of:

(i) a supervised research programme on a topic which is in the field of Clinical Psychology. The research programme will be written up as a thesis and constitutes half of the program.

(ii) at least 72 credit points from the Schedule of Graduate subjects in Psychology as follows:

A. GHMC901 Interpersonal Skills for Clinical Psychologists
- GHMC902 Assessment for Clinical Psychologists
- GHMC903 Research Skills for Clinical Psychologists
- GHMC904 Clinical Psychology
- GHMC905 Child Clinical Psychology
- GHMC906 Clinical Neuropsychology
- GHMC907 Psychotherapy with Individuals and Groups
- GHMC915 Cognitive Behaviour Therapy

B. at least 12 credit points in supervised practical clinical experience:
- GHMC916 Practicum A
- GHMC917 Practicum B

4. MASTER OF CLINICAL PSYCHOLOGY

The degree of Master of Clinical Psychology will be subject to the Honours Masters Degree Rules together with the following conditions. Entry to the Master of Clinical Psychology program will be from an Honours degree in Psychology at a standard of Class II, Division 2 or its equivalent. The program will involve four sessions of full-time study or their equivalent part-time. The program requires the successful completion of at least 96 credit points from the Schedule of Graduate Subjects in Psychology as follows:

A. 60 credit points in course work subjects:
- GHMC901 Interpersonal Skills for Clinical Psychologists
- GHMC902 Assessment for Clinical Psychologists
- GHMC903 Research Skills for Clinical Psychologists
- GHMC904 Clinical Psychology
- GHMC905 Child Clinical Psychology
- GHMC906 Clinical Neuropsychology
- GHMC907 Psychotherapy with Individuals and Groups
- GHMC915 Cognitive Behaviour Therapy

B. at least 24 credit points in supervised practicums:
- GHMC916 Practicum A
- GHMC917 Practicum B

5. HONOURS MASTER OF ARTS BY RESEARCH

To qualify for entry to the Master of Arts (Honours) Research candidates must have a good Honours degree of at least 2(ii) standard. However, only a limited number of places are available, so the required standard may well be higher than this. The usual minimum period of study is two years full-time. The part-time study will be approximately twice as long. Candidates for this research degree enrol in GHMC998.

6. MASTER OF SCIENCE (PASS) IN PSYCHOLOGY

The Master of Science (Pass) in Psychology is available to graduates with the degree of Bachelor with at least 24 credit points in 300-level Psychology subjects, or their equivalent. The Master of Science enables pass students to update or extend their psychological studies into an APS accredited fourth year.

It normally occupies two sessions of full-time study or four sessions of part-time study. Admission to the program must be through recommendation by the Head of the Department of Psychology. It is subject to the University Rules governing the award of Master of Science.

The Master of Science requires successful completion of 48 credit points made up as follows:

A. 24 credit points in the core subjects:
- GHMC959 Research Project
- GHMC961 Assessment in Applied Psychology
- GHMC962 Counselling Psychology

B. 8 credit points selected from one of four specialisations:
- GHMC953 Psychology of Information Processing
- GHMC963 Child and Adolescent Psychology
- GHMC965 Advanced Sport and Exercise
- GHMC974 Principles of Personal Construct Psychology

C. 16 credit points selected from the following three electives:
- GHMC951 Health Psychology
- GHMC960 Psychology of Reading and Reading Disabilities
- GHMC964 Cognitive and Affective Neuroscience

There is no guarantee that students will get their first preference within the specialisation and elective subject groupings.

7. GRADUATE CERTIFICATE IN COGNITIVE NEUROSCIENCE

The Graduate Certificate in Cognitive Neuroscience is available to graduates with undergraduate degrees deemed appropriate by the Head of Department.

The course provides an opportunity for graduates to begin formal studies in Cognitive Neuroscience. It will be of particular interest to those with undergraduate training in Psychology, Medicine, Biomedical Science or Human Movement Science, but also of interest to those with a background in Electrical Engineering or Computer Science.

It normally occupies three sessions of part-time study, involving subjects presented via the PAGE consortium with some residential requirements. It may be available in an on-campus mode over 1 or 2 sessions.

The Graduate Certificate requires successful completion of 24 credit points made up as follows:

A. GHMC901 Interpersonal Skills for Clinical Psychologists
- GHMC902 Assessment for Clinical Psychologists
- GHMC903 Research Skills for Clinical Psychologists
- GHMC904 Clinical Psychology
- GHMC905 Child Clinical Psychology
- GHMC906 Clinical Neuropsychology
- GHMC907 Psychotherapy with Individuals and Groups
- GHMC915 Cognitive Behaviour Therapy

B. at least 24 credit points in supervised practicums:
- GHMC916 Practicum A
- GHMC917 Practicum B

C. 24 credit points of independent but supervised research in the subject:
- GHMC912 Research Project
8 credit points each:
GHMC964 Cognitive and Affective Neuroscience
GHMC966 Psychophysiology: Insights in Human and Animal Behaviour
GHMC967 Models of the Human Brain and their Applications

Students with appropriate backgrounds may be permitted, by the Head of Department, to replace GHMC966 by an individual project (GHMC959 Research Project).

SUBJECT DESCRIPTIONS

CLINICAL PSYCHOLOGY

GHMC901 Interpersonal Skills for Clinical Psychologists

Double session (A); 6 credit points (52 hrs).
Assessment: assignments and examination.

This subject has two components. The first component requires the personal involvement of students meeting regularly in a group with the aim of facilitating their work as clinical psychologists through exploration of their personal capacities. The group will serve as a "laboratory" for personal and interpersonal "experiments" using psychoanalytic group work, existential group work, and psychodrama. Students will be invited to experience changes in themselves (as we expect our clients to do), achieve personal learning and integration, come to "use" themselves as effectively as possible and develop insight, as well as creativity and innovativeness.

The second component also focuses on developing better interpersonal skills, but doing so in the wider context of family, work place, community and culture. Systems theory is employed for this purpose. Students are also encouraged to become more aware of cultural influences in their lives and their work practices. Workshops are one of the tools applied in this course for this purpose.

Textbooks: to be advised.
Co-ordinator: Associate Professor L Viney.

GHMC902 Assessment for Clinical Psychologists

Double session (A); 8 credit points (52 hrs).
Assessment: assignments and examination.

This subject assumes that students have a knowledge of the theory of psychological testing and measurement. Competence in the areas included in PSYC547 Assessment and Intervention in Psychology (or its equivalent) is a course pre-requisite. The aim of the course is to develop skill in the choice, administration, interpretation and reporting of psychological assessment techniques. There will be an emphasis on workshops simulating peer and video feedback regarding assessment skills. The specific objectives of the subject are that:

1. an understanding of the ethical issues associated with clinical psychological assessment;
2. an understanding of the principles of test construction and of criteria for evaluating assessment techniques;
3. competence in conducting assessment interviews;
4. competence in writing assessment reports;
5. mastery of the procedures for administering, scoring and interpreting the following tests: (a) WAIS-R, WISC-R (b) MMPI, (c) Projective tests;
6. knowledge of the purposes, administration procedures and criteria for interpretation of a number of additional cognitive, personality and behavioural assessment techniques;
7. the ability to choose assessment procedures appropriate to particular cases; and
8. the ability to assess specific problem areas.

References:
Lists will be distributed during the course. There will be considerable use of test manuals and accompanying texts.
Co-ordinator: Mr J Freestone.

GHMC903 Research Skills for Clinical Psychologists

Double session (A); 8 credit points (52 hrs).
Assessment: seminar presentations.

This subject has been designed to prepare its participants to conduct rigorous and yet useful research in clinical psychology. Building on the earlier achievements of those who are eligible for it, it aims to develop research expertise in these specific areas:

1. evaluation of the existing clinical psychology research literature, from the points of view of both researchers and practising clinicians;
2. selection of viable clinical problems for research;
3. development of research projects/programs appropriate to those problems;
4. preparation and evaluation of funding proposals;
5. consultation about the research of other associated professional groups, including critical evaluation and proposal of solutions; and
6. awareness and minimizing of ethical problems in research in clinical psychology.

Textbooks: to be advised.
Co-ordinator: Associate Professor L Viney.

GHMC904 Clinical Psychology

Double session (A); 8 credit points (52 hrs).
Assessment: assignments; written examinations.

This subject aims to provide the student with an overview of descriptive adult psychopathology. Issues surrounding models of abnormal behaviour and the classification of mental disorders will be critically examined. The student will be taught how to identify and diagnose mental disorders encountered by clinical psychologists working with adult clients. Attention will be paid to current aetiological theories of these disorders. In addition, clinical assessment and a critical evaluation of the different methods of therapeutic intervention are important components of this course. The course format will include lectures, seminar presentations, and case discussions with diagnostic formulation exercises.

Textbooks:
There is no set text but all students are advised to purchase:

References:
A comprehensive list of references will be provided at the start of the course.
Co-ordinator: Dr J de Wet.

GHMC905 Child Clinical Psychology

Double session (A); 8 credit points (52 hours).
Assessment: assignments.

This subject will focus on a range of theory, assessment and intervention strategies and evaluative research in relation to specific topics in child, adolescent and family-based disturbances. Perspectives will include developmental, cognitive behavioural, psychodynamic, medical, family systems and cross-cultural. Specific topics include disturbances in pre-marital, child birth and post-partum; developmental disabilities; problems of adjustment in the under 5s; conduct and behaviour disorders; attention deficit and hyperactivity disorders; learning disabilities; grief and separation; anxiety and depression; problems associated with deviations in parenting (deprivation and abuse; separation and divorce, custody and access; adoption and fostering); physical disabilities; bonding and psychosocial functioning; perversion, psycho-pathy and antisocial functioning.

Textbooks: no set text.
Co-ordinator: Dr R M Henry.

GHMC906 Clinical Neuropsychology

Double session (A); 8 credit points (52 hours).
Assessment: Seminar presentations, assignments and examination.

The aim of this subject is to provide students with sufficient theory and knowledge about brain functioning for them to be able to carry out neuropsychological assessments and to plan and implement interventions to assist brain-damaged people. The subject will deal with:

1. basic brain anatomy;
2. theories of brain functioning;
3. the causes of brain dysfunction;
4. principles of neuropsychological assessment;
5. the use of neuropsychological tests;
6. neuropsychological report writing;
7. treatment and rehabilitation of the brain damaged.

Textbooks:
Co-ordinator: Ms V Blokas.

GHMC907 Psychotherapy with Individuals and Groups

Double session (A); 8 credit points (52 hrs).
Assessment: seminar papers, case work.

The aim of this subject is to provide students with an integrated theoretical and practical grounding in psychotherapy. It offers intensive training in one of a restricted number of psychotherapies with individuals or groups. The kinds of specialisations available will vary from year to year, depending on staff availability. They are likely to be from the psychoanalytic, cognitive-behavioural, constructivist and family approaches.

The work consists of clinical reading and seminars in the selected approach, and
supervision of work (therapeutic programmes, therapy cases etc) which participants will be required to undertake. The skills of peer supervision will also be developed. Where it is appropriate to the selected approach, there may also be workshop demonstrations of techniques or more experiential exercises.

Textbooks: to be advised. All students are required to design and carry out a small research project under supervision. This research will be in any area of Psychology relevant to Clinical Psychology subject to the approval of the Honours Co-ordinator.

GSQM912 Research Project
Double session (A); 24 credit points.
All applied psychologists should know how to answer psychological questions by recourse to raw data. All students are required to design and carry out a small research project under supervision. This research will be in any area of Psychology relevant to Clinical Psychology subject to the approval of the Honours Co-ordinator.

GSQM916 Practicum A
Double (A) or single sessions; 4 credit points (250 hours).
Assessment: Adult Clinical placement - 150 hours (100 of them in the Department’s Northfields Clinic); Child placement - 100 hours in the Learning and Behavioural Support Unit (LABSU) within Northfields Clinic.

The bulk of this practicum is taken up in the Department’s own clinic, where the main treatment approach is a cognitive-behavioural one. The LABSU placement is in a 4 months block and is tied to the Child Clinical subject, with the blocks spanning the entire year. The adult placement may be in a short block or spread over a longer period and will be linked to the subject of Cognitive Behaviour Therapy.

Co-ordinator: Dr J Freestone.

GSQM917 Practicum B
Double (A) or single sessions; 8 credit points (500 hours).
Assessment: Psychiatric placement - 150 hours; Child placement - 150 hours; Specialist placement: 150 hours. Any one of these three practicum categories may be further extended for 50 hours to make up the full complement of 500 hours.

The purpose is for students to have a range of supervised clinical placements so as to develop skills in interviewing, testing, diagnosis, report-writing, case presentation and the application of therapeutic techniques with different populations. The placements also provide opportunities to explore professional and ethical issues while working with other professionals in a variety of contexts.

Co-ordinator: Mr J Freestone.

MSC (PASS) IN PSYCHOLOGY

GSQM950 Psychology Honours Theory Seminar
Autumn session; 8 credit points.
Assessment: Seminar papers, major theory paper.

The Honours Theory Seminar, which is available as a separate subject to candidates for the MSc (Pass), with special permission from the Head of Department, will examine key theoretical and metatheoretical issues in psychology, especially as they affect the specializations and chosen courses of the students. The course also aims to sharpen critical reasoning and arguing skills. Topics may include ethical issues in psychological practice; the relation of psychology to other disciplines; ethical problems in contemporary psychological theories.

Co-ordinator: Dr N Mackay.

GSQM951 Health Psychology
Autumn session; 8 credit points (3 hrs lecture/seminar).
Assessment: essay, take home exam, program and evaluation presentations and final research report.

This subject will address key theoretical and empirical issues in the area of Health Psychology. It is predicated on preserving a balance between internal and external factors in the causation and maintenance of complex human behaviour. Since the delivery of any effective service or program presupposes that personal and social systems interact in health care, current theories about biological, psychological, social and cultural determinants of behaviour will be examined from a scientist-practitioner model. A range of psychological principles will be examined within the context of formulating a treatment and evaluation proposal or prevention program designed to change health injurious behaviour or support health enhancing behaviour. Topics that will be examined in this course include drug and alcohol problems, stress, pain management and weight control.


Co-ordinator: Associate Professor M Anshel.

GSQM953 Psychology of Information Processing
Spring session; 8 credit points (3 hrs lecture/seminar/laboratories per week).
Pre-requisites: PSYC345 or its equivalent
Assessment: seminar presentations and assignments.

This subject covers advanced theoretical topics in cognitive psychology. An emphasis is placed on theoretical models of cognition. The areas covered may include face recognition, long-term memory, ecological optics, selective attention and an introduction to neural network models. Classes will involve seminar presentations and discussions, but there will also be some laboratory classes to demonstrate and develop principles of neural networks.

Textbook: No set text.

Co-ordinator: Dr S Roddenrys.

GSQM958 Topics in Data Analysis
Double session (A); 8 credit points (26 hrs of seminars).
Assessment: practical exercises and major assignment.

A course of seminars dealing with the fitting of models to psychological data. Topics will include multidimensional scaling and clustering models, and methods for analysing categorical data, including log-linear models for multiway contingency tables. The emphasis of the course will be on the application of techniques in data analyses to practical problems, and issues pertaining to selection of an appropriate analysis will be discussed in depth. Towards the end of the course, a number of case studies in data analysis will be presented with the aim of promoting the integration of old and new techniques for the analysis of data. Students will be expected to have some familiarity with a statistical package and to perform some analyses using it.
Students will also be encouraged to discuss problems in data reading analysis arising from their own research projects. A reading list will be provided.

Co-ordinator: Mr P Caputi.

GHMC959 Research Project
Double session (A); 8 credit points.
This subject involves the completion of a single empirical study.
Co-ordinator: Dr S Ginsberg.

GHMC960 Psychology of Reading and Reading Disabilities
Autumn session; 8 credit points (3 hrs lecture/ seminar per week).
Pre-requisites: PSYC345 or its equivalent.
Assessment: seminar presentations, essay and assignments.
The aim of this subject is to consider the psychology of reading and reading disabilities within a human information processing framework. Models of reading acquisition and skilled reading will be considered, in terms of the available experimental evidence. A range of possible reasons for failing to learn to read will be considered. These will include visual, memory and language deficit theories. Placement, instructional strategies, remedial procedures will be considered. This subject will also consider the evidence regarding normal adult reading, that can be gained from studying acquired dyslexias.

Textbooks:
No set text. Research articles will mostly be used in this subject.
Co-ordinator: Dr S Roodenrys.

GHMC961 Assessment in Applied Psychology
Double session (A); 8 credit points (2 hrs lecture/seminar per fortnight).
Pre-requisite: PSYC235 or its equivalent, plus eligibility to MSc(Pass).
Assessment: 2 assignments worth 50% each.
This is a skills oriented course aimed at providing students with the opportunity to administer, score and interpret psychological tests under supervision. Assessment techniques used in a number of fields of applied psychology will be studied. In addition, attention will be devoted to ethical standards in psychological assessment.

Textbooks:
No set text. A list of references will be provided at the start of the course.
Co-ordinator: Dr J de Wet.

GHMC962 Counselling Psychology
Autumn session (may be repeated in Spring in 1996); 8 credit points (3 hrs lecture/practicals).
Assessment: tape transcript analysis, major essay, videotaped counselling skills assignment.
This subject will initially focus on a microskills approach to working with clients. This workshop oriented course aimed at observing, feedback and discussion will be used. Students will be expected to develop a critical and analytical understanding of the conceptual and developmental framework from which different counselling orientations can develop. In order to provide students with an alternative but complimentary framework from which counselling can proceed the second half of the course will examine a cognitive behavioural approach.

Textbooks:
Co-ordinator: Dr J Wragg.

GHMC963 Child and Adolescent Psychology
Autumn session; 8 credit points (2 hrs lecture, 1 hr practical per week).
Pre-requisites: PSYC235 and PSYC233 or their equivalent.
Assessment: 1 assessment 45%, 1 major essay 30%, 1 take home exam 25%.
This subject focuses on a range of childhood and adolescent concerns or problem behaviours within a broad developmental framework. The subject will provide students with a general introduction to the specific problems and needs of children and young people who present at community health or child guidance clinics. Individual and family based assessment and intervention approaches will be examined for such problems as conduct disorders, attention deficit hyperactive disorders, school based adjustment and learning problems, anxiety disorders, problems of abuse and adolescent health risk behaviours such as substance abuse and adolescent deviancy.

Textbooks:
No set text. Readings from several sources.
Co-ordinator: Dr J Wragg.

GHMC964 Cognitive and Affective Neuroscience2
Double session (A); 8 credit points (2 hrs lecture/seminars per fortnight and labs 3hrs per week).
Pre-requisites: PSYC352 or its equivalent.
Assessment: individual project 50%, lab reports based on laboratory exercises 50%.
The emphasis in this subject will be on the use of physiological measures to explore human brain function in relation to a range of psychological concepts such as arousal, stress, anxiety and repression, personality, perception, learning, cognition. Selected topics will include research investigating these connections in both normal and psychiatric patients will be discussed. The subject will include laboratory sessions developing expertise in electrophysiological recording, involvement in on-going departmental research, and a small individual pilot project (which may form the basis for subsequent independent research).

Textbooks: to be advised, plus readings from current journal articles.
Co-ordinator: Professor R J Barry.

GHMC965 Advanced Sport and Exercise Psychology
Spring session; 8 credit points (3 contact hrs).
Pre-requisite: PSYC399 or equivalent subjects.
Assessment: mid-term exam 30%, oral presentation 20%, lab report (3000 words) 20%, paper eg observations, counselling, research proposal 30%.
The subject will focus on the role of psychological factors in sport and exercise particularly as they relate to aspects of cognitive processes, psychosocial factors and health-related issues. Students will become familiar with and be able to interpret and apply research literature in sport and exercise psychology. They will experience the processes involved in performing research including data collection and analysis, and complete a manuscript in reporting their experiment using APS style. Students will also lead a seminar on a segment of the scientific literature and be familiar with the application and presentation of performance enhancement strategies.

Textbooks:
Co-ordinator: Associate Professor M Anshel.

GHMC966 Psychophysiology:
Insights into Brain and Behaviour3
Autumn and/or Spring session; 8 credit points (external course with residential requirement: may be available on campus in 1996).
Pre-requisites: a three year undergraduate degree deemed appropriate by the Head of Department. Assessment: weekly quizzes 15%, practical reports 45%, examinations 40%.
This subject will present psychophysiology as the systematic study of peripheral and central physiological correlates of perceptual and cognitive functioning. Students will be required to attain a basic level of proficiency in the electrical recording and assessment of a range of peripheral measures (including muscle, respiratory, cardiovascular, and electrodermal activity), as well as the traditional central indicators (EEG and event related potentials). Current research using these techniques to extend our understanding of cognitive/perceptual functioning in both normal and atypical individuals will be examined. Practical skills will be developed in two residential weekends.

Textbook: to be advised.
Co-ordinator: Professor R J Barry.

GHMC967 Models of the Human Brain and their Applications3
Autumn and/or Spring session; 8 credit points (external course: may be available on campus in 1996).
Pre-requisites: a three year undergraduate degree deemed appropriate by the Head of Department. Assessment: two assignments 40% and 60%.
This subject will have the biophysics of human brain function as the frame of reference for all content. It will explore a broad range of topics including evolutionary and anatomical models of the brain, models of electrical and metabolic brain function, psychological models of the brain, artificial neural networks and artificial intelligence models of the brain, the mind/body problem, psychoanalytic and psychotherapy models, brain imaging technologies, application of models of the brain to psychology, medicine, artificial neural networks and artificial intelligence, and human-computer interactions.

Textbook: to be advised.
Co-ordinator: Professor R J Barry.

2 May be available also in external mode in 1996.
3 Offered externally through PAGE.
GHMC974 Principles of Personal Construct Psychology
Spring session; 8 credit points (42 hrs).
Prerequisites: the completion of the requirements for any Bachelor level degree.
Assessment: laboratory report, case study and personal diary (relating the students' own construing to their own behaviour).
This subject will provide an introduction to the underlying assumptions, principles and methodologies of Personal Construct Psychology, including constructive alternativism, the person as scientist, behaviour as an experiment, construing as bipolar and hierarchical, relations with others and the process of transition. Laboratory work will focus on understanding of self and others using constructivist methods, ranging from self-characterisation to the repertory grid and dependency grid techniques. The resulting understanding of principles and methods will then provide a basis for examination of current applications of Personal Construct Psychology in counselling, organisational and health psychology.
Textbook:
Co-ordinator: Associate Professor BM Walker.

GHMC998 Thesis
(Honours Masters by Research)

GHMC999 Thesis
(Doctor of Philosophy)
COURSES OFFERED

1. RESEARCH DEGREES
   1.1 Doctor of Philosophy
   1.2 Doctor of Public Health
   1.3 Honours Master of Science

2. MASTERS DEGREES BY COURSEWORK AND RESEARCH
   2.1 Master of Public Health
   2.2 Master of Science
      a) Master of Science (Environmental Health)
      b) Master of Science (Health Policy and Management)
      c) Master of Science (Mental Health)
      d) Master of Science (Nutrition and Dietetics)
      e) Master of Science (Nutrition)
      f) Master of Science (Occupational Health and Rehabilitation)

3. GRADUATE DIPLOMAS
   3.1 Graduate Diploma in Public Health
   3.2 Graduate Diploma in Science
      a) Graduate Diploma in Science (Environmental Health)
      b) Graduate Diploma in Science (Health Policy and Management)
      c) Graduate Diploma in Science (Mental Health)
      d) Graduate Diploma in Science (Occupational Health and Rehabilitation)

4. GRADUATE CERTIFICATES
   4.1 Graduate Certificate in Health Policy and Management
   4.2 Graduate Certificate in Mental Health
   4.3 Graduate Certificate in Public Health Research Methods

CURRENT RESEARCH AREAS

Supervision in the following areas of research is likely to be available to candidates undertaking the Doctor of Philosophy, the Doctor of Public Health and the Honours Master of Science.

Cardiovascular disease prevention
Child and family health
Environmental Health
Geriatrics and rehabilitation
Health information systems
Health policy and management
Health promotion
Health services development and evaluation
Health and Society
Mental health
Nutrition (Obesity, Diabetes)
Occupational Health and Rehabilitation

POSTGRADUATE PROGRAMS OFFERED

1. Research program
   i) Doctor of Philosophy
   ii) Doctor of Public Health
   iii) (Honours) Master of Science

2. Health Policy and Management
   i) Master of Science
   ii) Graduate Diploma in Science
   iii) Graduate Certificate

3. Mental Health
   i) Master of Science
   ii) Graduate Diploma in Science
   iii) Graduate Certificate in Mental Health

4. Nutrition and Dietetics
   i) Master of Science (Nutrition and Dietetics)
   ii) Master of Science (Nutrition)

5. Occupational Health and Rehabilitation
   i) Master of Science
   ii) Graduate Diploma in Science

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1 Also offered externally through the Professional and Graduate Education Consortium (PAGE).
POSTGRADUATE PROGRAMS OFFERED (cont’d).

6. Public Health
   i) Master of Public Health
   ii) Graduate Diploma in Public Health
   iii) Graduate Certificate in Public Health Research Methods

7. Environmental Health
   i) Master of Science (Environmental Health)
   ii) Graduate Diploma (Environmental Health)

SCHEDULE OF PROGRAMS

1. RESEARCH DEGREES

(i) DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy (PhD) is available to candidates in the major research areas of the Department of Public Health and Nutrition for which supervision is available, namely, Public Health, Environmental Health, Health Policy and Management, Mental Health, Nutrition, Health Information Systems, International Health, Epidemiology, Medical Anthropology. The PhD provides supervised research training of excellence in a program of not less than three years duration (full-time).

Admission details and regulations governing the award are set out in the General Information: Postgraduate Admission section of the Calendar.

Potential candidates should discuss their research plan with the Head of Department at which time the supervision arrangements of the Department will be outlined. Research seminars are held in Autumn and Spring sessions to assist research students structure their program and, in particular, make rapid progress with proposal design. Opportunities exist for outstanding candidates to gain scholarship support by application to the University. Details of Research Scholarships are listed under Conditions of University Postgraduate Research Awards in the General Information section of the Calendar.

The Doctor of Philosophy degree is a widely recognised pathway to excellence in Public Health research.

(ii) DOCTOR OF PUBLIC HEALTH

The Doctor of Public Health degree aims to prepare professional leaders in Public Health. The program requires the successful completion of 48 credit points of coursework and at least two years of research leading to the presentation of a thesis. Coursework can either broaden the education in Public Health of a candidate who has a strong disciplinary background (e.g., a health economist who requires more reading in Public Health) or provide more specialized knowledge for a candidate who has already achieved a general education (e.g., MPH) in Public Health. Additionally, the Doctor of Public Health degree includes a major thesis. Admission to the research component is contingent upon acceptance of a formal proposal, presented after at least 36 credit points of coursework have been completed.

To qualify for entry, candidates must have an Honours Bachelor degree of at least Class II, Division I standard or have completed the coursework requirements in the Master of Public Health degree or equivalent.

The program for Doctor of Public Health candidates includes successful completion of:
   (i) 48 credit points of coursework, chosen in association with the Head of the Department, from the 900-level subjects offered by the Department or by other Departments within the University.
   (ii) a supervised research project on a topic in the field of Public Health. The research project will be submitted as a thesis as partial fulfilment of the requirements for the degree.

(iii) HONOURS MASTER OF SCIENCE

The degree of Honours Master of Science is designed to provide supervised training in independent research. For candidates who are admitted with an Honours Bachelor Degree, the program will consist of 48 credit points of research leading to the submission of a thesis. For candidates who are admitted with a Bachelor Degree, the program will consist of 96 credit points of research leading to the submission of a thesis, and may involve directed coursework in research design, methodology, and skills.

Potential candidates should discuss their research interest with the coordinator of the program and present a research project title and general outline. Once a supervisor has been nominated, the candidate will undertake an approved course recommended by the Departmental Head, together with such examinations and other work as may be prescribed by Council. Otherwise requirements shall be the same as requirements specified in the Honours Masters Degree Rules (refer to Calendar, General Information).

2. POSTGRADUATE PROGRAM IN HEALTH POLICY AND MANAGEMENT

leading to the degree of Master of Science (Health Policy and Management) or the Graduate Diploma in Science (Health Policy and Management) or the Graduate Certificate in Health Policy and Management.

Number Subject Credit Points

(i) Master of Science (Health Policy and Management)

Part-time Course

First Year
GHMD906 Health Services Organisation and Management 6
GHMD909 Comparative Health Systems: Policies and Politics 6
GHMD950 Financial Management for Health Services 6
GHMD983 Statistics in Health Research 6

1 Also offered externally through the Professional and Graduate Education Consortium (PAGE).
2. POSTGRADUATE PROGRAM IN HEALTH POLICY AND MANAGEMENT (cont’d).

leading to the degree of Master of Science (Health Policy and Management) or the Graduate Diploma in Science (Health Policy and Management) or the Graduate Certificate in Health Policy and Management.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Second Year</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECON918 Economics of Health Care</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>GHMD908 Health Services Planning and Evaluation</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>GHMD924 Health Information Systems</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>LAW960 Legal Studies for Professionals</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Third Year</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students may select one of the following options:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GHMD904 Epidemiology</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>and three electives selected from the subjects listed below under “Electives”.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GHMD997 Major Project*</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>*Students who select the Major Project option please note:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. membership of the Australian College of Health Service Executives requires completion of GHMD904 Epidemiology in place of ECON918 Economics of Health Care;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. GHMD984 Health Research Methodology is a pre-requisite for GHMD997 Major Project and should be taken in place of GHMD908 Health Planning and Evaluation.</td>
<td></td>
</tr>
</tbody>
</table>

(iii) Graduate Diploma in Science (Health Policy and Management)

**Part-Time Course**

<table>
<thead>
<tr>
<th>First Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMD906 Health Services Organisation and Management</td>
</tr>
<tr>
<td>GHMD909 Comparative Health Systems: Policies and Politics</td>
</tr>
<tr>
<td>GHMD950 Financial Management for Health Services</td>
</tr>
<tr>
<td>GHMD983 Statistics in Health Research</td>
</tr>
</tbody>
</table>

**Second Year**

| GHMD924 Health Information Systems | 6 |
| Selective | 6 |
| GHMD908 Health Services Planning and Evaluation | 6 |
| Selective | 6 |

Electives may be selected from the list of core subjects or elective subjects in the Master of Science (Health Policy and Management) with the agreement of the Head of Department. Candidates for the Graduate Diploma who have specific credit given for any of the above compulsory subjects are required to undertake elective study to make up the total credit points. The additional subjects can be selected from subjects in the Master program (core or elective) in consultation with the Program Co-ordinator.

Students who seek membership of the Australian College of Health Service Executives need to complete GHMD904 Epidemiology and LAW960 Legal Studies for Health Professionals.

(ii) Graduate Certificate in Health Policy and Management

The Graduate Certificate requires the completion of 4 subjects selected from the following:

| ECON918 Economics of Health Care | 6 |
| GHMD905 Social Foundations of Public Health | 6 |
| GHMD906 Health Services Organisation and Management | 6 |
| GHMD909 Comparative Health Systems: Policies and Politics | 6 |
| GHMD924 Health Information Systems | 6 |
| GHMD950 Financial Management for Health Services | 6 |
| GHMD983 Statistics in Health Research | 6 |

Electives

The electives for the Master degree may be chosen from the subjects listed below. The electives for the Graduate Diploma may be chosen from the Master degree and the subjects listed below. In addition, candidates can substitute other subjects offered at a postgraduate level at the University with approval of the Head of Department.

| GHMD907 Independent Study in Public Health | 6 |
| GSMH902 Nursing Management | 6 |
| GHMD905 Social Foundations of Public Health | 6 |
| MGMT911 Organisational Behaviour | 6 |
| MGMT915 Management of Change | 6 |
| MGMT938 Managing Services Marketing | 6 |
| MGMT953 Human Resource Management | 6 |
| GHMD984 Health Research Methodology | 6 |
| MGMT947 Quality Management | 6 |

3. POSTGRADUATE PROGRAM IN MENTAL HEALTH

leading to the degree of Master of Science (Mental Health) or the Graduate Diploma in Science (Mental Health) or the Graduate Certificate in Mental Health.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Master of Science (Mental Health)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schedule 1 Core Subjects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHMD905 Social Foundations of Public Health</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>GHMD963 Principles and Practices of Psychosocial Rehabilitation</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>GHMD970 Comprehensive Systems of Mental Health Care</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>GHMD971 Assessment and Diagnosis in Mental Health</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
3. POSTGRADUATE PROGRAM IN MENTAL HEALTH (cont'd).

leading to the degree of Master of Science (Mental Health) or the Graduate Diploma in Science (Mental Health) or the Graduate Certificate in Mental Health.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMD973</td>
<td>Case Management in Mental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>together with at least two subjects from the following:</td>
<td></td>
</tr>
</tbody>
</table>

### Schedule 2

**Electives**

- ECON918 Economics of Health Care 6
- GHMD904 Epidemiology 6
- GHMD905 Health Services Organisation and Management 6
- GHMD907 Independent Study in Public Health 6
- GHMD908 Health Services Planning and Evaluation 6
- GHMD909 Comparative Health Systems: Policies and Politics 6
- GHMD913 Drug Problems and Issues 6
- GHMD950 Financial Management for Health Services 6
- GHMD976 Supervised Clinical Practice 6
- GHMD984 Health Research Methodology 6

### Schedule 3

**Electives**

- GHMD997 Major Project (24 credit points)

**Note:** GHMD984 Health Research Methodology is a pre-requisite for GHMD997 Major Project.

A candidate for the Master of Science specialising in Mental Health shall undertake a 72 credit point program. This includes all core subjects listed in Schedule 1 (ie 36 credit points) and the Major Project (GHMD997) of 24 credit points, or 24 credit points of further course work including GHMD984, together with at least 12 credit points of additional course work chosen from Schedule 2 of this program.

Subject to approval relevant subjects from other programs may also be taken as electives.

**ii) Graduate Diploma in Science (Mental Health)**

### Schedule 1

**Core Subjects**

- GHMD905 Social Foundations of Public Health 6
- GHMD965 Principles and Practices of Psychosocial Rehabilitation 6
- GHMD970 Comprehensive Systems of Mental Health Care 6
- GHMD971 Assessment and Diagnosis in Mental Health 6
- GHMD973 Case Management in Mental Health 6
- GHMD983 Statistics in Health Research 6

**Electives**

- ECON918 Economics of Health Care 6
- GHMD904 Epidemiology 6
- GHMD905 Health Services Organisation and Management 6
- GHMD907 Independent Study in Public Health 6
- GHMD908 Health Services Planning and Evaluation 6
- GHMD909 Comparative Health Systems: Policies and Politics 6
- GHMD913 Drug Problems and Issues 6
- GHMD906 Financial Management for Health Services 6
- GHMD976 Supervised Clinical Practice 6
- GHMD984 Health Research Methodology 6

A candidate for the Graduate Diploma in Science specialising in Mental Health shall undertake a 48 credit point program. This includes all subjects listed in Schedule 1 of this Diploma (ie 36 credit points) with at least 12 credit points chosen from Schedule 2 of this Diploma.

Subject to approval relevant subjects from other programs may also be taken as electives.

**iii) Graduate Certificate in Mental Health**

A candidate for the Graduate Certificate in Mental Health shall undertake a 24 credit point program. This includes four of the five subjects below:

- GHMD965 Principles and Practices of Psychosocial Rehabilitation 6
- GHMD970 Comprehensive Systems of Mental Health Care 6
- GHMD971 Assessment and Diagnosis in Mental Health 6
- GHMD973 Case Management in Mental Health 6
- GHMD906 Health Services Organisation and Management 6
4. POSTGRADUATE PROGRAM IN NUTRITION AND DIETETICS
leading to the degree of Master of Science (Nutrition and Dietetics) or the Master of Science (Nutrition).

Students who have not completed an undergraduate program with a major in nutrition will be required to undertake a number of specific
nutrition subjects during the course. This will limit their opportunity to take elective subjects.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
</table>

(i) Master of Science (Nutrition and Dietetics)

Students should note that CHEM215, Food Chemistry, is a pre-requisite for GHMD934 Dietetics 2: Secondary and Tertiary Health Care.

Students who have not passed CHEM215 should take this subject in Autumn session. Students may count only one undergraduate subject
(PHN301 or CHEM215) towards their Masters program.

Session 1
All students
GHMD931 Dietetics 1: Primary Health Care 6
GHMD936 Public Health Nutrition 6
GHMD935 Nutrition and Food Services 6

Students without nutrition major do
PHN301 Nutrients and Metabolism 8

Students with nutrition major do
GHMD933 Communication and Education 6
GHMD934 Dietetics 2: Secondary and Tertiary Health Care 6
GHMD984 Health Research Methodology 6

Elective Subjects (select one)
GHMD904 Epidemiology
GHMD907 Independent Study in Public Health
GHMD912 Health Promotion
GHMD913 Drug Problems
GHMD938 Behavioural Aspects of Nutrition

Session 3
GHMD937 Practical Studies in Nutrition and Dietetics

Session 4
GHMD997 Major Project 24

Note: GHMD984 Health Research Methodology is a pre-requisite for GHMD997 Major Project.

(ii) Master of Science (Nutrition)

As for MSc (Nutrition and Dietetics) Session 1 and Session 2 only.

5. POSTGRADUATE PROGRAM IN OCCUPATIONAL HEALTH AND REHABILITATION
leading to the degree of Master of Science (Occupational Health and Rehabilitation) or the Graduate Diploma in Science (Occupational
Health and Rehabilitation).

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
</table>

(i) Master of Science (Occupational Health and Rehabilitation)

Schedule 1
Core Subjects
GHMA914 Ergonomics 8
GHMD904 Epidemiology 6
GHMD905 Social Foundations of Public Health 6
GHMD906 Health Services Organisation and Management 6
GHMD940 Principles and Practice of Occupational Health and Rehabilitation 6
GHMD941 Occupational Hygiene and Industrial Toxicology 6
GHMD983 Statistics in Health Research 6
GHMD984 Health Research Methodology 6

Plus
GHMD997 Major Project 24

Or 24 credit points chosen from Schedule 2 of this degree

Schedule 2
Electives
ECON918 Economics of Health Care 6
GHMD908 Health Services Planning and Evaluation 6
GHMD909 Comparative Health Systems: Policies and Politics 6
LAW960 Legal Studies for Professionals 6
MGMT939 Human Resource Management 6

A candidate for the MSc specialising in Occupational Health and Rehabilitation shall undertake a program of at least 72 credit point which
includes subjects listed in Schedule 1 of this degree, including either a major project (GHMD997) of 24 credit points or 24 credit points of
further coursework from subjects listed in Schedule 2 of this degree.

Note: GHMD984 Health Research Methodology is a pre-requisite for GHMD997 Major Project.
5. POSTGRADUATE PROGRAM IN OCCUPATIONAL HEALTH AND REHABILITATION (cont'd).
leading to the degree of Master of Science (Occupational Health and Rehabilitation) or the Graduate Diploma in Science (Occupational
Health and Rehabilitation).

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ii) Graduate Diploma in Science (Occupational Health and Rehabilitation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Schedule 1</strong></td>
<td><strong>Core Subjects</strong></td>
<td></td>
</tr>
<tr>
<td>GHMA914</td>
<td>Ergonomics</td>
<td>8</td>
</tr>
<tr>
<td>GHMD904</td>
<td>Epidemiology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD905</td>
<td>Social Foundations of Public Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD906</td>
<td>Health Services Organisation and Management</td>
<td>6</td>
</tr>
<tr>
<td>GHMD940</td>
<td>Principles and Practice of Occupational Health and Rehabilitation</td>
<td>6</td>
</tr>
<tr>
<td>GHMD941</td>
<td>Occupational Hygiene and Industrial Toxicology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
</tbody>
</table>

plus 6 credit points chosen from Schedule 2 of this degree

<table>
<thead>
<tr>
<th>Schedule 2</th>
<th>Electives</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON918</td>
<td>Economics of Health Care</td>
<td>6</td>
</tr>
<tr>
<td>GHMD908</td>
<td>Health Services Planning and Evaluation</td>
<td>6</td>
</tr>
<tr>
<td>GHMD909</td>
<td>Comparative Health Systems: Policies and Politics</td>
<td>6</td>
</tr>
<tr>
<td>GHMD984</td>
<td>Health Research Methodology</td>
<td>6</td>
</tr>
<tr>
<td>LAW960</td>
<td>Legal Studies for Professionals</td>
<td>6</td>
</tr>
<tr>
<td>MGMT953</td>
<td>Human Resource Management</td>
<td>6</td>
</tr>
</tbody>
</table>

6. POSTGRADUATE PROGRAM IN PUBLIC HEALTH
leading to the degree of Master of Public Health or the Graduate Diploma in Public Health or the Graduate Certificate in Public Health Research Methods.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Master of Public Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Schedule 1: MPH Core Subjects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHMD904</td>
<td>Epidemiology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD905</td>
<td>Social Foundations of Public Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD906</td>
<td>Health Services Organisation and Management</td>
<td>6</td>
</tr>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>GHMD984</td>
<td>Health Research Methodology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD997</td>
<td>Major Project</td>
<td>24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON918</td>
<td>Economics of Health Care</td>
<td>6</td>
</tr>
<tr>
<td>GEOG934</td>
<td>Nutrition and Hunger: Analysis and Policy</td>
<td>12</td>
</tr>
<tr>
<td>GHMC951</td>
<td>Health Psychology</td>
<td>8</td>
</tr>
<tr>
<td>GHMD902</td>
<td>Communication and Education</td>
<td>6</td>
</tr>
<tr>
<td>GHMD907</td>
<td>Independent Study in Public Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD912</td>
<td>Health Promotion</td>
<td>6</td>
</tr>
<tr>
<td>GHMD913</td>
<td>Drug Problems and Issues</td>
<td>6</td>
</tr>
<tr>
<td>GHMD925</td>
<td>Aboriginal Health Issues*</td>
<td>6</td>
</tr>
<tr>
<td>GHMD926</td>
<td>Qualitative Research: Methods and Issues*</td>
<td>6</td>
</tr>
<tr>
<td>GHMD936</td>
<td>Public Health Nutrition</td>
<td>6</td>
</tr>
<tr>
<td>GHMD980</td>
<td>International Health: Health Care Delivery in Developing Countries</td>
<td>6</td>
</tr>
<tr>
<td>GHMD981</td>
<td>Maternal and Child Health in Developing Countries</td>
<td>6</td>
</tr>
<tr>
<td>GHMD982</td>
<td>Special Topic in International Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD986</td>
<td>Environmental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD987</td>
<td>Risk Assessment</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: GHMD984 Health Research Methodology is a pre-requisite for GHMD997 Major Project.

(ii) Graduate Diploma in Public Health

| GHMD904 | Epidemiology | 6 |
| GHMD905 | Social Foundations of Public Health | 6 |
| GHMD906 | Health Services Organisation and Management | 6 |
| GHMD912 | Health Promotion | 6 |
| GHMD983 | Statistics in Health Research | 6 |

together with subjects selected from the Master of Public Health Schedule and subjects from other departments approved by the Head of
Department for a total of 48 credit points of coursework.

International students admitted to candidature in the Master of Public Health will discuss their educational needs with the coordinator and
may have a program of study specified which will best meet their homeland requirements.

(iii) Graduate Certificate in Public Health Research Methods

Entrants to the course normally hold a three year undergraduate degree (or equivalent). In special circumstances, an applicant holding other
acceptable qualifications and with relevant work experience of not less than two years may be admitted to studies.

The Graduate Certificate will be awarded on successful completion of 24 credit points of course work, selected from the following subjects.

| GHMD904 | Epidemiology | 6 |
| GHMD908 | Health Planning and Evaluation | 6 |

*Not on offer in 1996.
6. POSTGRADUATE PROGRAM IN PUBLIC HEALTH (cont'd).

leading to the degree of Master of Public Health or the Graduate Diploma in Public Health or the Graduate Certificate in Public Health Research Methods.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMD924</td>
<td>Health Information Systems</td>
<td>6</td>
</tr>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>GHMD984</td>
<td>Health Research Methodology</td>
<td>6</td>
</tr>
</tbody>
</table>

7. POSTGRADUATE PROGRAM IN ENVIRONMENTAL HEALTH

leading to the degree of Master of Science (Environmental Health) or the Graduate Diploma in Science (Environmental Health).

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Master of Science (Environmental Health)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Subjects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHMD904</td>
<td>Epidemiology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>GHMD984</td>
<td>Health Research Methodology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD985</td>
<td>Environmental Epidemiology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD986</td>
<td>Environmental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD987</td>
<td>Risk Assessment: Essential Methods and Techniques</td>
<td>6</td>
</tr>
<tr>
<td>ENVI921</td>
<td>Environmental Planning</td>
<td>8</td>
</tr>
<tr>
<td>STS991</td>
<td>Risk Assessment, Health and Safety*</td>
<td>12</td>
</tr>
<tr>
<td>and</td>
<td>GHMD997 Major Project</td>
<td>24</td>
</tr>
</tbody>
</table>

Enrolment in the Major Project will be contingent on the availability of supervision of the project and evidence of former successful research or project work by the student. The content matter must also fit with the research program carried out at the University.

The option exists to satisfy requirements for MSc (Environmental Health) by coursework only. This would require the substitution for the Major Project of 24 credit points from the following electives:

<table>
<thead>
<tr>
<th>Electives</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMD902</td>
<td>Communication and Education</td>
<td>6</td>
</tr>
<tr>
<td>GHMD905</td>
<td>Social Foundations of Public Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD906</td>
<td>Health Services Organisation and Management</td>
<td>6</td>
</tr>
<tr>
<td>GHMD909</td>
<td>Comparative Health Systems: Policies and Politics</td>
<td>6</td>
</tr>
<tr>
<td>GHMD940</td>
<td>The Principles and Practice of Occupational Health and Rehabilitation</td>
<td>6</td>
</tr>
<tr>
<td>GHMD941</td>
<td>Occupational Hygiene and Industrial Toxicology</td>
<td>6</td>
</tr>
<tr>
<td>LAW960</td>
<td>Legal Studies for Professionals</td>
<td>6</td>
</tr>
<tr>
<td>STS929</td>
<td>Studies in Resource and Environmental Policy*</td>
<td>8</td>
</tr>
<tr>
<td>or other subjects offered by the University with the approval of the Head of Department.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

♦Refer to Department of Public Health and Nutrition.

(ii) Graduate Diploma in Science (Environmental Health)

<table>
<thead>
<tr>
<th>Core Subjects</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMD904</td>
<td>Epidemiology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>GHMD984</td>
<td>Health Research Methodology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD986</td>
<td>Environmental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD987</td>
<td>Risk Assessment: Essential Methods and Techniques</td>
<td>6</td>
</tr>
</tbody>
</table>

plus 18 credit points chosen from the following electives:

<table>
<thead>
<tr>
<th>Electives</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMD902</td>
<td>Communication and Education</td>
<td>6</td>
</tr>
<tr>
<td>GHMD905</td>
<td>Social Foundations of Public Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD909</td>
<td>Comparative Health Systems: Policies and Politics</td>
<td>6</td>
</tr>
<tr>
<td>GHMD940</td>
<td>The Principles and Practice of Occupational Health and Rehabilitation</td>
<td>6</td>
</tr>
<tr>
<td>GHMD941</td>
<td>Occupational Hygiene and Industrial Toxicology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD985</td>
<td>Environmental Epidemiology</td>
<td>6</td>
</tr>
<tr>
<td>ENVI921</td>
<td>Environmental Planning</td>
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<td>LAW960</td>
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<td>STS929</td>
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<td>STS931</td>
<td>Risk Assessment, Health and Safety*</td>
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♦Refer to Department of Public Health and Nutrition.

COURSE REQUIREMENTS

1. RESEARCH DEGREES

1.1 DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy (PhD) is available to candidates in the major research areas of the Department of Public Health and Nutrition for which supervision is available, namely, Public Health, Primary Health Care, Environmental Health, Health Policy and Management, Mental Health, Nutrition, Health Information Systems, International Health, Epidemiology, Medical Anthropology. The PhD is designed to provide supervised research training of excellence in a program of not less than three years duration (full-time). Admission details and regulations governing the award are set out in the General Information: Postgraduate Admission section of the Calendar. Applicants should discuss their research plan with the Head of Department at which time the supervision arrangements of the Department will be outlined. Research seminars are held in Autumn and Spring sessions to assist research students structure their program and, in particular, make rapid
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progress with proposal design. Opportunities exist for outstanding candidates to gain scholarship support by application to the University. For information regarding scholarships refer to the Calendar, General Information: Postgraduate Scholarships section.

The Doctor of Philosophy degree is a widely recognised pathway to excellence in research in Public Health and Nutrition.

1.2 DOCTOR OF PUBLIC HEALTH

The purpose of the degree of Doctor of Public Health is to prepare professional leaders in Public Health. The Doctor of Public Health program requires the completion of two years of research leading to the presentation of a thesis together with 48 credit points of coursework. The coursework is selected to meet the individual requirements of the candidate. Coursework includes both advanced study and broadening the education in Public Health of a candidate who has a strong disciplinary background and has completed major research leading to the submission of a thesis.

A candidate for the Master of Public Health will complete 48 credit points of coursework and 24 credit points of research. The coursework requirements in the Master of Public Health degree are equivalent.

Course Requirements

A candidate for the Master of Public Health shall undertake at least 48 credit points of coursework comprising 24 credit points of major research project and 24 credit points of elective subjects.

Entry Requirements

To qualify for entry candidates must have an Honours Bachelor degree of at least Class 11, Division 1 standard or have completed the coursework requirements in the Master of Public Health degree or equivalent.

Entry Requirements

To qualify for entry candidates must have an Honours Bachelor degree of at least Class 11, Division 1 standard or have completed the coursework requirements in the Master of Public Health degree or equivalent.

2.2 MASTER OF SCIENCE DEGREES BY COURSEWORK AND RESEARCH

2.1 MASTER OF PUBLIC HEALTH

a) Master of Public Health

A candidate for the Master of Public Health shall undertake a thesis with at least 128 credit points of coursework and 24 credit points of major research project. The thesis shall be submitted as a thesis as partial fulfillment of the requirements for the award of the Degree.

Courses in the Master of Public Health degree include:

(i) a core course in Public Health and Nutrition;
(ii) a supervised research project on a topic in the field of Public Health;
(iii) elective courses in topics of Public Health interest.

The Master of Public Health degree structure includes a number of core subjects. Intending students are advised to obtain further course information from the Department of Public Health and Nutrition.

Candidates successfully completing the Graduate Diploma in Public Health may seek admission to the Master of Public Health degree.

b) Master of Science (Health Policy and Management)

The Health Policy and Management courses are available for on-campus attendance or nationally, by distance education (LIWS574), through the Professional and Graduate Education Consortium (PAGE). The aim of this degree is to provide advanced study which develops professional health service managers and enhances their competence for senior management roles in the health industry. The degree is intended for graduates in health service management and other related health professions wishing to pursue a management career.

Professional Programmes

The degree has been accredited by the Australian College of Health Service Executives and the Royal Australian College of Medical Administrators.

Course Design

The course develops the candidate's ability to cope with health service
management problems and challenges in a logical and analytical manner. It emphasises the social and environmental factors impacting on the manager's task and the dynamic and pluralistic nature of health service management. The candidate acquires concepts and knowledge relevant to the work of senior health service managers. Candidates who choose the all course work option select Epidemiology and three electives from a range of relevant topics including a 'Capstone' subject designed to integrate the knowledge gained throughout the course.

Course Structure
On a part-time basis the course can be completed in three years. There are approximately six hours of contact per week for the part-time candidate and where possible, classes are scheduled on one afternoon per week beginning at 1.30pm.

The course requires the completion of 72 credit points including eight core subjects (48 credit points). The remaining 24 credit points can be gained in one of two ways:

a) by undertaking GHD90 Epidemiology and three electives; or
b) by undertaking GHD997 Major Project (24 credit points).

Entry Requirements
Entrants to the course should normally hold a three year undergraduate degree (or equivalent) in a relevant discipline together with a minimum of four years of relevant work experience. In special circumstances, an applicant holding other acceptable academic qualifications and with relevant work experience of not less than four years may be admitted as a candidate. For students with less that four years of relevant work experience, a planned one session program of field experience is required in addition to the course work.

c) Master of Science (Mental Health)
Also available (UWS74) externally through the Professional and Graduate Education Consortium (PAGE).

The postgraduate mental health program responds to national priorities to equip a) the mental health workforce, and b) the general health workforce, for comprehensive, community-based treatment and rehabilitation of people suffering from serious mental illness. The program is multidisciplinary and in line with the National Mental Policy and Plan, provides knowledge and supervised skills for case-management, rehabilitation, health services management and mental health research.

The Mental Health program is available for on-campus attendance or nationally, by distance education, through the Professional and Graduate Education Consortium (PAGE).

Course Structure
The course can be undertaken full-time over 18 months or part-time over 3 years. The Master of Science (Mental Health) degree, is designed with the part-time student in mind within the on-campus program. There are approximately four hours of contact per week for the part-time candidate and wherever possible, classes are scheduled on one afternoon per week beginning at 1.30pm.

The course requires the completion of 72 credit points including six core subjects and 2 electives (48 credit points). The remaining 24 credit points can be gained in one of two ways:

a) by undertaking four approved elective subjects totalling at least 24 credit points; or
b) by undertaking GHD997 Major Project (24 credit points).

GHD994 Health Research Methodology is a pre-requisite for this option.

Course Requirements
A candidate for the Master of Science (Mental Health) will successfully complete a 72 credit point program. This includes 36 credit points of coursework from the core schedule, 24 credit points for Major Project, and 12 credit points chosen from the elective schedule. Students who wish to complete the degree by course work only, as detailed in point (a) above, may select this option with approval from the course coordinator.

The course is multidisciplinary and is open to appropriately qualified health professionals interested in further education and training in mental health.

Entry requirements include:
(i) a relevant 3 year undergraduate degree or equivalent from an approved tertiary institution;
(ii) two years (minimum) of relevant experience in the field. Candidates satisfactorily completing the Graduate Diploma in Science (Mental Health) may seek admission to the Master of Science program.

Assessment
Assessment of coursework is the responsibility of the subject coordinator and the Assessment Committee. All other Rules shall be as for the Graduate Diploma in this Calendar.

d) Master of Science (Nutrition and Dietetics)
Graduates holding the Master of Science (Nutrition and Dietetics) are eligible for membership of the Dietitians Association of Australia and thus may be employed as nutritionists/dietitians in Australia and some overseas countries.

The Master of Science (Nutrition and Dietetics) program of coursework and placements will develop the knowledge and skills required by nutritionists/dietitians working in a variety of community settings and in public health, as well as in hospital and other tertiary health care facilities. It will also provide students with the opportunity to undertake a supervised research project on a subject related to nutrition and dietetics.

Course design
The course is designed to equip graduates with knowledge and skills to address the major nutritional problems in Australia. The curriculum is based on the national competency standards for professional dietitian-nutritionists and has a focus on community nutrition and the principles of primary health care.

The course commences with an overview of the role nutrition plays in health and disease in the Australian community. Following this, studies are included to develop the knowledge and skills required by a nutritionist/dietitian working in particular environments, for example hospitals, community locations, public health. The theme is that, in any of these capacities, the nutritionist/dietitian is working towards the goal of addressing major causes of ill-health through supportive nutritional practices, through professional practice at the primary, secondary or tertiary level.

Course Requirements
A candidate for the Master of Science (Nutrition and Dietetics) will undertake a program of study, student placements and a research project. The program is designed to cover those areas essential for the professional practice of dietitians in Australia, with an emphasis on community aspects of dietetics and nutrition. Some of the subjects are taken in common with other postgraduate programs and there is limited flexibility of subject choice to allow students to pursue individual interests.

The placement involves supervised training for the candidate in nutrition and dietetics in hospitals, community health organisations and other units involved in aspects of nutrition care or health promotion. The major project provides an opportunity for students to learn research skills under supervision in a particular area of dietetics and/or nutrition.

Duration
The Master of Science (Nutrition and Dietetics) is a two year, full-time course of 96 credit points. Opportunity exists to undertake part-time study, with the approval of the Departmental Head.

Entry Requirements
Entry will be based on selection by a panel. The panel will include at least the Departmental Head, course coordinator, together with members of the program's External Advisory Committee. Applicants should obtain a supplementary application form from the course coordinator.

Students should have completed a Bachelor of Science or equivalent degree. The University of Wollongong Bachelor of Science majoring in nutrition is an appropriate qualification for entry. This includes studies in food chemistry, nutrition through the human lifecycle, social/behavioural aspects of nutrition and metabolic nutrition. These
studies are in addition to full year studies in both metabolic biochemistry and human systems physiology at second year BSc level which is a requirement for the profession. Completed studies in statistics and the ability to use computers are desirable attributes.

An average assessment of not less than credit level (65 per cent) in the major study of the previous four sessions (2 years) of equivalent full-time study should normally be achieved for selection. These criteria may be varied in the case of students who have become in the workforce since graduation; in such cases other criteria relating to postgraduate activity may be applied.

Graduates holding a BSc or equivalent degree from other recognised tertiary institutions may be admitted as candidates for the Master of Science (Nutrition and Dietetics) provided their undergraduate performance is deemed equivalent to those entering with the University of Wollongong Bachelor of Science (Nutrition). Bridging courses are available where students do not have the required subjects in their undergraduate degree and potential candidates should seek advice on this matter from the course coordinator.

e) The Master of Science (Nutrition)
Comprises the first year of the MSc (Nutrition and Dietetics) and is intended for students who do not seek the Australian professional dietetic qualification. Places in this course are very limited.

Student intake is at the discretion of the Head of Department

f) Master of Science (Occupational Health and Rehabilitation)
The aim of this degree is to provide advanced study which develops knowledge and professional skills for practice in Occupational Health and/or Rehabilitation Services. The degree is intended for graduates in a health-related discipline who wish to advance their career by working in an Occupational Health or Rehabilitation setting.

Course Design
This program provides core studies in Public Health and specialist subjects in Occupational Health and Rehabilitation, including research skill training in relation to a current issue in Occupational Health or Rehabilitation.

The Department has developed close relationships with BHP Port Kembla, and The Institute of Rehabilitation and Geriatrics of the Illawarra Area Health Service which support this program. Industry-relevant teaching and research opportunities are available to students through participation from senior professionals in Occupational Health and Rehabilitation.

Course Structure
The degree of Master of Science (Occupational Health and Rehabilitation) requires the satisfactory completion of at least 72 credit points, including at least 48 credit points of coursework and either 24 credit points of major research project or 24 credit points of further coursework. The course can be undertaken full-time over one and a half years or part-time over three years. In some sessions, subjects are timetabled to ensure that the part-time load (2 subjects per session) can be undertaken in one half-day of attendance on campus.

Entry Requirements
Students admitted to the Masters Degree normally hold a Bachelor Degree, plus at least one year of relevant work experience. In special circumstances an applicant who holds other acceptable academic qualifications and with relevant work experience may be admitted as a candidate.

3. GRADUATE DIPLOMAS

3.1 GRADUATE DIPLOMA IN PUBLIC HEALTH

The Graduate Diploma in Public Health is designed for health professionals working in Public Health. It caters for health professionals who do not wish to undertake a research component in their studies. Those who do wish to undertake such a component may apply for enrolment in the Master of Public Health degree.

3.2 GRADUATE DIPLOMA IN SCIENCE

a) Graduate Diploma in Science (Environmental Health)
The Graduate Diploma in Science (Environmental Health) is designed to cater for environmental health professionals in government or industry settings who want to update their knowledge, or to Public Health Officers with an interest in environmental issues.

Course Structure
The course can be undertaken full-time over one year or part-time over two years. The course is designed with the part-time student in mind. The course requires a total of at least 48 credit points by satisfactory completion of subjects outlined in the accompanying schedule. A brief description of each subject appears in this calendar.

Articulation with the Master of Science (Environmental Health)
Candidates who satisfactorily complete the Graduate Diploma in Science (Environmental Health) may be admitted to the Master of Science (Environmental Health) if they undertake the Master of Science degree following completion of the Graduate Diploma in Science (Environmental Health) and surrender the testamur prior to the conferring of the Master degree.

Entry Requirements
Entrants to the course normally hold a relevant degree or other acceptable qualifications, together with one year of work in a relevant health area.
c) Graduate Diploma in Science (Mental Health)

Also available externally (UW650) through the Professional and Graduate Education Consortium (PAGE).

The Graduate Diploma in Science (Mental Health) is designed to provide education and training for the multidisciplinary group of practitioners who provide services for clients in comprehensive, community based mental health services. It aims to produce graduates with the clinical and professional competence to work across the full range of mental health services and to provide assessment, diagnosis, treatment, rehabilitation and support for people with serious mental illness and their families in line with the National Mental Health Policy and Plan.

Course Requirements

A candidate for the Graduate Diploma in Science (Mental Health) will successfully complete subjects with a total value of 48 credit points, 36 of which will be core subjects in Schedule 1 of the Mental Health Program, and 12 of which will be chosen from elective subjects as set out in the Schedule or relevant subjects chosen from other programs subject to approval of Departmental Head. Not all subjects in Schedule 2 will be offered each year. Elective subjects will be offered subject to demand and according to availability of teachers.

Entry Requirements

Admission to the course is normally by applicants who hold a relevant degree or other acceptable qualifications (e.g. Registered Nursing Certificate), together with a minimum of one year of work in a mental health service setting. In special circumstances an applicant holding other acceptable academic or professional qualifications may be admitted to studies.

Entry requirements will be as for Graduate Diploma Rules paragraphs 5(1), 5(2a), 5(2c) and 5(3) in this Calendar including at least 1 year of appropriate experience in the field.

Assessment

Assessment of course work is the responsibility of the subject coordinator and the Assessment Committee. All other Rules shall be as for the Graduate Diploma in this Calendar.

Articulation with the Master of Science (Mental Health)

The Graduate Diploma articulates with The Master of Science (Mental Health) in that students who successfully complete the Diploma may apply for advanced standing in 48 credit points of course work in the Master of Science degree. (Note that GHMD984 is a pre-requisite for enrolling in the Major Project).

On completion of the requirements for the Master of Science and prior to graduation, a student who has received the Graduate Diploma of Science (Mental Health) will be required to surrender the testamur in order to receive the Master of Science degree.

d) Graduate Diploma in Science (Occupational Health and Rehabilitation)

The aim of this course is to provide the knowledge and industry experiences necessary to successfully work as a practitioner in Occupational Health and Rehabilitation services. The course is intended to cater for a multidisciplinary group of students who have gained their primary qualifications in a health-related discipline and who seek a core Occupational Health and Rehabilitation services.

The Graduate Diploma articulates with the Master of Science (Occupational Health and Rehabilitation) in that students who successfully complete the Diploma may apply for advanced standing in 50 credit points of course work in the Master of Science degree.

Course Requirements

A candidate for the Graduate Diploma in Science (Occupational Health and Rehabilitation) will successfully complete subjects with a total value of 48 credit points, 36 of which will be core subjects in Schedule 1 of the Mental Health Program, and 12 of which will be chosen from elective subjects as set out in the Schedule or relevant subjects chosen from other programs subject to approval of Departmental Head. Not all subjects in Schedule 2 will be offered each year. Elective subjects will be offered subject to demand and according to availability of teachers.

Entry Requirements

Admission to the course is normally by applicants who hold a relevant degree or other acceptable qualifications (e.g. Registered Nursing Certificate), together with a minimum of one year of work in a mental health service setting. In special circumstances an applicant holding other acceptable academic or professional qualifications and with relevant work experience of not less than four years may be admitted as a candidate. For students with less than four years of relevant work experience, a planned one session program of field experience is required in addition to the course work.

Assessment

Assessment of course work is the responsibility of the subject coordinator and the Assessment Committee. All other Rules shall be as for the Graduate Diploma in this Calendar.

Articulation with the Master of Science (Occupational Health and Rehabilitation)

The Graduate Diploma articulates with the Master of Science (Occupational Health and Rehabilitation) in that students who successfully complete the Diploma may apply for advanced standing in 50 credit points of course work in the Master of Science degree. (Note that GHMD984 is a pre-requisite for enrolling in the Major Project).

On completion of the requirements for the Master of Science and prior to graduation, a student who has received the Graduate Diploma of Science (Occupational Health and Rehabilitation) will be required to surrender the testamur in order to receive the Master of Science degree.

4. GRADUATE CERTIFICATES

4.1) Graduate Certificate in Health Policy and Management

Also available externally (UW693) through the Professional and Graduate Education Consortium (PAGE).

The aim of this course is to provide an introduction to advanced professional education for health service managers in the concepts, theories, approaches and practices of health policy and management.

Course Design

The course provides students with the opportunity to gain a qualification in health service management in a flexible manner, including a wide choice of subjects and a manageable investment of time and money.

Articulation with the Graduate Diploma in Science (Health Policy and Management)

Students who complete the Graduate Certificate may, on application, be granted advanced standing totalling 24 credit points towards the award of the Graduate Diploma in Science (Health Policy and Management). On completion of the requirements for the Graduate Diploma and prior to graduation, a student who has received the Graduate Certificate will be required to surrender the testamur in order to receive the Graduate Diploma.

Entry Requirements

Entrants to the course normally hold a three year degree (or equivalent) together with a minimum of four years of relevant work experience. In special circumstances an applicant holding other acceptable academic or professional qualifications and with relevant work experience of not less than four years may be admitted as a candidate. For students with less than four years of relevant work experience, a planned one session program of field experience is required in addition to the course work.

Course Structure

The Graduate Certificate will be awarded on successful completion of 24 credit points of course work, selected from the six subjects listed previously for this award.

Professional Recognition

For members of the Australian College of Health Service Executives, successful completion of individual subjects attracts Continuing Professional Development (CPD) credit.

4.2) Graduate Certificate in Mental Health

Also available externally (UW693) through the Professional and Graduate Education Consortium (PAGE).

The aim of this course is to provide an introduction to advanced professional
education for mental health practitioners in current legislation and policy regarding the care of people with serious mental illness and recent developments in concepts, theories, and practices of mental health intervention including assessment, diagnosis, treatment and rehabilitation.

Course Design
The course provides students with the opportunity to gain a qualification in mental health in a flexible manner, including a manageable investment of time and money.

Articulation with the Graduate Diploma in Science (Mental Health)
Students with appropriate entry qualifications, who complete the Graduate Certificate may, on application, be granted advanced standing totalling 24 credit points towards the award of the Graduate Diploma in Science (Mental Health). On completion of the requirements for the Graduate Diploma and prior to graduation, a student who has received the Graduate Certificate will be required to surrender the testamur in order to receive the Graduate Diploma.

Entry Requirements
Admission to the course is normally by applicants who hold a relevant degree or other diploma qualifications (e.g.; Registered Nursing Certificate), together with a minimum of one year of work in a mental health service setting. In special circumstances an applicant holding other acceptable academic or professional qualifications may be admitted to studies.

For students with less than one year of relevant work experience, a planned one session program of field experience is required in addition to the course work.

Entry requirements will be as for Graduate Diploma Rules paragraphs 5(1), 5(2a), 5(2c) and 5(3) in this Calendar including at least 1 year of appropriate experience in the field.

Course Structure
The Graduate Certificate will be awarded on successful completion of 24 credit points of course work, selected from core mental health subjects of the Graduate Diploma, i.e. GHMD970, GHMD971, GHMD973 and GHMD965.

4.3) Graduate Certificate in Public Health
Only available externally (UW693) through the Professional and Graduate Education Consortium (PAGE).
The aim of this course is to provide health professionals with the opportunity to develop primary competencies in public health research and evaluation.

Course Design
The course provides students with the opportunity to gain a qualification in public health research in a flexible manner, including a wide choice of subjects and a manageable investment of time and money.

Entry Requirements
Entry to the course normally hold a three year undergraduate degree (or equivalent). In special circumstances, an applicant holding other acceptable qualifications with relevant work experience of not less than two years may be admitted to studies.

Course Structure
The Graduate Certificate will be awarded on successful completion of 24 credit points of course work.

On completion of the Graduate Certificate in Public Health Research Methods, students may apply to enter the Graduate Diploma in Public Health. Successful applicants will be required to complete a further 24 credit points of coursework from the Diploma Schedule. Candidates who undertake the Graduate Certificate in Public Health following the completion of the Graduate Certificate must surrender the testamur prior to the conferring of the Graduate Diploma.

EXTERNAL COURSES
Currently, four programs of study are available externally: Health Policy and Management, Mental Health, Graduate Diploma in Public Health, and the Graduate Certificate in Public Health Research Methods. They are available through the Professional and Graduate Education (PAGE) Consortium of the University of Wollongong.

SUBJECT DESCRIPTIONS
GHMD902 Communication and Education
Autumn session; 6 credit points (2 hrs).
Assessment: Major assignment incorporating small group studies and seminar presentations 50%. Mid session class exam 30%, Participation 20%.
Students will be able to identify the relationship between communication and culture and appreciate the social construction of talk in the institutional setting. They will analyse and discuss communication processes in the small group learning context.

Textbooks:
Readings on the range of topics are provided in the closed reserve section of the library.

Co-ordinator: Ms L Tapsell.

GHMD904 Epidemiology
Spring session; 6 credit points (2 hrs).
Pre-Requisite: GHMD983 or approval from the Co-ordinator.
Assessment: two minor assignments on study design and critical appraisal; end of session written examination.

Principles and methods of epidemiological investigation including analytic and experimental epidemiology. Topics to be covered are: measurement in epidemiology, descriptive epidemiology, screening, design of case-control and cohort studies, analysis of studies, critical appraisal, clinical trial design, biological inference and causality.

Textbooks:

Co-ordinator: Dr IA Kreis.

GHMD905 Social Foundations of Public Health
Autumn session; 6 credit points (2 hrs).
Assessment: two written assignments 60%, final exam 40%.
This subject introduces students to theories and concepts that form the scientific basis for the understanding and analysis of public health issues. Topics include: trends in public health, socio-economic and environmental influences on health and health inequities, biomedical and anthropological models of health and illness, the role of culture in health and health behaviour and the political economy of health.

Textbook:

Book of readings.

Co-ordinator: Dr L Harrison.

GHMD906 Health Services Organisation and Management
Spring session; 6 credit points (1 hr lecture, 1 hr tutorial).
Assessment: satisfactory completion of two assignments and an examination.

This subject aims to provide students with knowledge and skills relevant to the management of health care services through the application of management theories and concepts to practice. The subject examines the complex and multiple tasks which challenge the health service manager and provides options for issue analysis and action based on management theory and the literature of health service management.

Textbooks:

Co-ordinator: Ms M G Harris.

GHMD907 Independent Study in Public Health
Spring session, Autumn session; 6 credit points.
Assessment: Major Report.
The candidate, in conjunction with a supervisor appointed by the Departmental Head of Public Health and Nutrition, will present a proposal for an independent study of 6 credit points which incorporates objectives, methods and criteria for assessment of the independent study. The proposal is approved by a committee of the Department of Public Health and Nutrition responsible for academic oversight of programs. The time commitment involved in the independent study would be at least as great as that involved in a subject of equivalent credit points. Candidates will be expected to meet their supervisors regularly and to conduct independent library research as well as directed readings, assignments and assessments.

Textbooks: No set text.

Co-ordinator: Associate Professor R D Harris.
GHMD908 Health Services Planning and Evaluation
Spring session; 6 credit points (2 hrs seminar per wk).
Practical and theoretical aspects of health service planning and evaluation will be covered in this subject. Topics include: planning, its scope and theory; planning approaches and methods; corporate planning; strategic planning; strategy formulation and analysis; operational planning; and facility planning. Principles of evaluation will be illustrated through design and implementation of health program evaluation. Topics include: process evaluation; impact and outcome evaluations; monitoring and outcome management.
Textbooks: References will be provided.
Co-ordinator: Ms K Eagar.

GHMD909 Comparative Health Systems: Policies and Politics
Autumn session; 6 credit points (2 hrs seminar).
Assessment: satisfactory completion of 2 essays and an examination.
This subject examines how ideologies and political processes influence health policy development and health service delivery. International measures of performance are used to identify and explore similarities and differences between countries. The impact of broad socio-economic forces on health status and health policy development are emphasized. The subject is designed to assist individuals to develop analytical and strategic skills which will enable them to influence health policy development.
Textbooks:
Co-ordinator: Ms M G Harris.

GHMD912 Health Promotion
Spring session; 6 credit points (2 hrs seminar per wk).
Pre-requisite: GHMD902.
Assessment: seminar presentation and discussion. Assignments will examine the assessment of need for health promotion programs and will evaluate the relative cost-effectiveness of different health promotion strategies. Passes in all components are necessary for satisfactory completion of the course.
This subject will develop and understand the concept of health promotion; health advocacy; principles of the Ottawa Charter. Students will critically review current approaches to health promotion at the local, state and/or national level. Areas discussed may include use of the media; community development programmes; healthy public policies; lifestyle change programmes. A needs assessment on a particular health issue will be undertaken by each student. Students will develop health advocacy skills and will identify potential health promotion aspects of the health care system.
Textbooks:
Co-ordinator: Ms H Yeatman.

GHMD913 Drug Problems and Issues
Spring session; 6 credit points (2 hrs seminar per wk).
Assessment: seminar presentation and discussion. Satisfactory completion of individual assignments related to literature review and analysis of a specific problem or issue within the field of alcohol or drug misuse. Passes in all components are necessary for satisfactory completion of the course.
This course will provide an understanding of the pharmacological, psychological, and sociological basis of drug dependence; methods of treatment and prevention of drug abuse; an analysis of government policies to combat drug related problems; the development and management of drug and alcohol services; contemporary issues and controversies.
Textbooks: to be advised.
Co-ordinator: Ms G Lake, Drug and Alcohol Service, Illawarra Area Health Service.

GHMD924 Health Information Systems
Autumn session; 6 credit points (2hrs per wk lecture/seminar, practicals and practical sessions).
This subject examines issues of managing information systems in health services. It is designed to provide health service managers with an understanding of the principles of: data and data storage, classification, and coding, data communication and networking, decision support and knowledge based systems. These principles will be applied to information systems in Hospitals, Nursing and Primary Health Care. Current issues in information systems design and implementation in health services will be covered.
Textbook: to be advised.
Co-ordinator: Dr R Jayasuriya.

GHMD925 Aboriginal Health Issues
Autumn session; not offered in 1996; 6 credit points (2hrs seminar).
Assessment: written assignments 65%, seminar participation 25% and seminar participation 10%.
This subject is offered in alternate years and examines the current health status of Aboriginal people from a social and historical perspective. Discussed topics may include the interaction between culture and health, the experience of ill-health, and the political and economic context of health. It also focuses on access to and use of health services and problems of cross-cultural communication within the health sector. Emphasis will be placed on communities in settled rather than remote Australia and comparisons will be made, where appropriate, with the health experiences of similar populations, such as Native Americans.
Textbook:
Co-ordinator: Dr L Harrison.

GHMD926 Qualitative Research: Methods and Issues
Autumn session; not offered in 1996, 6 credit points (3 hrs per wk).
Pre-requisite: GHMD984 or equivalent.
Assessment: class participation 25%; practical interview 35%; review and analysis of interview data 40%.
Students enrolling in this subject will explore a variety of qualitative research methodologies and issues within this particular research paradigm. Philosophical and epistemological issues will be addressed. Field research, interview techniques, sampling strategies, the use of content analysis and other forms of data analysis will be discussed. Issues of reliability, validity and triangulation will also be examined.
Textbook:
Co-ordinator: Dr L Harrison.

GHMD931 Dietetics 1: Primary Health Care
Autumn session; 6 credit points (2 hrs lectures, 2hrs seminar/hk, 3 hrs clinic/session).
Pre-requisite: admission to MSc (Nutrition and Dietetics).
Assessment: assignments completed during the session 30%; end of session examination 50%; participation in clinic and journal club 20%.
Students must demonstrate competence in the diet history to pass the subject.
Students will be able to list and describe the significance of common nutritional problems in the community; describe the nutritional requirements of individuals throughout the lifespan and pathophysiology of major nutrition related diseases in the community. They will outline the processes of nutritional assessment, compare and contrast different methods of dietary assessment, develop skills in taking dietary histories, and analyse and evaluate dietary intake data. Students will outline appropriate dietary prescriptions and develop and utilise a 'ready reckoner' for estimating these formulations. Students will critically review their performance in a nutrition outpatient clinic.
Textbooks:
Department of Nutrition and Dietetics, School of General Health, Dietitian's Pocketbook, Curtin University of Technology, Perth, WA, 1994.
National Health and Medical Research Council, Recommended Dietary Intakes for Use in Australia, AGPS, Canberra, 1991.
Co-ordinator: Ms L Tapsell.

GHMD933 Communication in Nutrition and Dietetics
Spring session; 6 credit points (2 hrs seminars, 2 hrs seminar/hk, 3 hrs clinic/session).
Pre-requisite: admission to MSc (Nutrition and Dietetics).
Assessment: assessment of competence in nutrition counselling 40%; assessment of competence in nutrition education skills 40%; assessment of critical skills in conflict resolution 20%.
Students will be able to counsel individuals
and families on nutrition, food and diet issues; plan, implement and evaluate a nutrition education program for a small group and explore other aspects of communication in nutrition and dietetics practice.

Textbook:
Co-ordinator: Ms L Tapell.

GHMD934 Dietetics 2: Secondary and Tertiary Health Care
Spring session; 6 credit points (2 hrs lectures, 2 hr seminar, 1 hr tutorial per wk).
Pre-requisite: CHEM215, GHMD931.
Pre-requisite: admission to MSc (Nutrition and Dietetics).
Assessment: one three hr examination at the end of the Spring session 50%; written assignments during the session 50%. It is necessary to pass all assignments and the examination in order to pass this subject.
This subject is designed to build on the knowledge and skills studied in GHMD931 through the study of nutritional management of individuals with acute illness. Students will be required to undertake a case study for presentation. Topics are introduced through the study of case management and supported by lectures provided by specialist clinicians from the medical and dietetic professions. Topics include enteral and parenteral nutrition, the pathophysiology of disease states of the gastrointestinal, endocrine, cardiovascular, renal systems, stroke, hypermetabolic conditions, AIDS, clinical paediatrics and the rationale and protocol for the associated diet therapy.
Textbooks: to be advised. Plus: Medical Dictionary as required for GHMD931.
Co-ordinator: Mr B Gazibarich.

GHMD935 Nutrition and Food Services
Autumn session: 9 credit points (wkly management/food services seminars; sessions with TAFE Food School – timetable to be advised).
Pre-requisite: GHMD931.
Pre-requisite: admission to MSc (Nutrition and Dietetics).
Assessment: written assignments on food services 30%, small group report and presentation on menu planning 30%, written assignment on management 20%, group report and presentation on management 20%.
Students will examine the theoretical and practical aspects of management and organisation in health services particularly with respect to management of hospital food services. Aspects of the subject will focus on the development of basic cooking skills in small and large scale operations and the manipulation of standard recipes in keeping with dietary modifications. Basic food groups will be investigated in relation to food principles, food skills and food science. Students will also develop the skills and knowledge necessary to assist in and/or manage the provision of meals via a hospital or institutional food service.
Textbooks and other readings: to be advised.
Co-ordinator: Mr B Gazibarich.

GHMD936 Public Health Nutrition
Autumn session: 6 credit points (4 hrs seminars per wk).
Assessment: small group report and presentation 35%; seminar presentation and report 55%; participation 10%.
This subject will introduce the student to the principles of community health and the history of public health nutrition in Australia. Key areas of public health nutrition include food and nutrition surveillance, food policy, programme planning and health promotion. Selected public health nutrition programmes designed to reach different segments of the community will be examined.

Pre-requisite: CHEM215, GHMD931.
Pre-requisite: admission to Msc (Nutrition and Dietetics).
Assessment: one three hr examination at the end of Spring session 50%; written assignments during the session 50%. It is necessary to pass all assignments and the examination in order to pass this subject.
This subject is designed to build on the knowledge and skills studied in GHMD931 through the study of nutritional management of individuals with acute illness. Students will be required to undertake a case study for presentation. Topics are introduced through the study of case management and supported by lectures provided by specialist clinicians from the medical and dietetic professions. Topics include enteral and parenteral nutrition, the pathophysiology of disease states of the gastrointestinal, endocrine, cardiovascular, renal systems, stroke, hypermetabolic conditions, AIDS, clinical paediatrics and the rationale and protocol for the associated diet therapy.
Textbooks: to be advised. Plus: Medical Dictionary as required for GHMD931.
Co-ordinator: Mr B Gazibarich.

GHMD937 Practical Studies in Nutrition and Dietetics
Over three sessions; 24 credit points (21 wk placements; 35 hrs of seminars).
Pre-requisite: GHMD931, GHMD934.
Pre-requisite: admission to MSc (Nutrition and Dietetics).
Assessment: the development of skills and satisfactory achievement of objectives and completion of assignments (as outlined in the subject handbook) will be necessary for a pass in this subject. Specific tasks or assignments will be allocated to each student, negotiated between the field supervisor and subject co-ordinator prior to the commencement of each placement component. Assignments will include seminar and workshop presentations. Where a student does not pass this subject, a second opportunity is not normally provided. This decision is made after consideration of both the professional and resource implications.
This subject comprises a practicum of 20 weeks which is spent in hospitals, community health centres and other food-related organisations/units under the supervision of experienced dietitians or nutritionists. The placements are designed to develop the student’s skills in areas such as specialised therapeutic diets, food service management, provision of community nutrition programs etc. Placements will be arranged to suit individual student needs, at the same time as meeting the minimum standards as set down by the Dietitians Association of Australia. A minimum of 5 weeks of the practicum will be spent at a major teaching hospital. Students will also be able to spend periods of time (2 wks minimum) in various other locations including country hospitals, community health units programs, food industries, non-government organisations, nutrition research units, departments of public health, health promotion and rehabilitation or other government departments. While on placement students will be supervised by a dietitian or nutritionist who has a minimum of 3 years experience in her/his current field. Also included in this subject is a series of seminars on professional skills, to assist students to undertake their responsibilities while on placement. A series of therapeutic diet workshops will be held to update students on the latest information and therapeutic principles in a number of specialised dietary/nutrition areas.
Textbooks: to be advised.
As required for GHMD931 and GHMD934.
Co-ordinator: Mr B Gazibarich.

GHMD938 Behavioural Aspects of Nutrition
Spring session; 6 credit points (2 hrs seminars, 1 hr tutorial).
Pre-requisite: normally some undergraduate study of Psychology or Sociology.
Assessment: assignments 50% and seminar presentation and reports 50%.
This subject outlines and discusses the social, cultural and psychological determinants of health-related behaviour. Basic concepts of sociology and anthroplogy are illustrated by health-related examples. Models of individual behaviour and behaviour change are discussed, together with theories of social change, including community development, legislative action, and healthy public policy.

Textbooks:
Fieldhouse, P Food and Nutrition: Customs and Culture, Croom Helm, 1986.

Co-ordinator: Ms H Yeatman.

GHMD939 Human Nutrition in Health and Disease
Spring session; 6 credit points (2 hrs lecture, 1 hr tutorial).
Pre-requisite: entry into Masters program.
Assessment: assignments 50% and seminar presentation and reports 50%.
Nutrition needs through the life cycle – foetus, childhood, pregnancy, middle and old age. Clinical conditions and their nutritional implications eg metabolic disease, renal disease, diseases of the digestive tract, coronary heart disease, trauma, burns, eating disorders (bulimia, anorexia nervosa), AIDS, alcoholism, drugs, basic principles of pharmacology.

Textbook:

Co-ordinator: Mr B Gazibarich.

GHMD940 The Principles and Practices of Occupational Health and Rehabilitation
Autumn session; 6 credit points (2 hrs seminar).
Pre-requisite: admission to MPH (Occupational Health and Rehabilitation).
Assessment: seminar presentation 50%; written examination 50%.
Topics include history and development of occupational health, occupational health services and programs, health development in industry, management of occupational industry and disease, public and community health in the workplace, health promotion in the workplace, including stress management and the principles of a healthy lifestyle, ethics of occupational medical practice, management of occupational health and safety programs.

Textbook:
Co-ordinator: Associate Professor R D Harris.
GHMD941 Occupational Hygiene and Industrial Toxicology

Spring session; 6 credit points (2hrs seminar).
Pre-requisite: admission to MPH (Occupational Health and Safety) and 30 credit points in Industrial Toxicology. Assessment: end of session written examination plus major written assignment 70%; presentation of research proposal 30%

This subject introduces the fundamental aspects of toxicology, including toxic response mechanisms, models of cancer, dose response, threshold and tolerance, basic principles of pharmacokinetic models for humans, mechanism of disease induction, and the formulation of health risk assessment protocols for use in occupational settings and environmental health; monitoring methods and the use of monitored information to manage risks; legal aspects of health protection and safety. Technological ways to reduce hazards and risks will also be discussed. The subject aims to develop a sound appreciation of the principles of toxicology, carcinogenesis, and other fundamental aspects of the discipline, and to provide students with the means to interpret the data associated with these mechanisms and apply them to practical situations where humans are at risk.

Textbook: Book of readings, available at cost from department Co-ordinator: Associate Professor P Ricci.

GHMD950 Financial Management for Health Services

Spring session; 6 credit points (3hrs tutorials per wk).
Assessment: written report and discussion presentation.

Moving from management of costs towards management of value for money. Efficiency and effectiveness. Measuring cost, quality of care, outcome, and utility. Product costing and resource allocation. Textbooks:

GHMD962 Adolescent Mental Health

6 credit points (2hrs per wk).
Assessment: a variety of methods including literature review, case reports, seminar presentation, research proposals.

This subject presents a sociocultural overview of the concept of adolescence and introduces major theories of adolescent psychological development. It examines family, social, cultural, and political influences upon the developing adolescent. It provides the student with a comprehensive description of adolescent mental health disorders, indiviudal and family assessment, intervention and treatment options. Special topics include suicide and para-suicide, substance abuse, delinquency, behavioural disorders, sexual assault, and parent-child conflict.

Textbooks: to be advised. Co-ordinator: Mr P O'Halloran.

GHMD964 Mental Health Problems of the Aged

6 credit points (2hrs per wk).
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.

This subject presents an overview of the aging process, including physical, social, cultural, and psychological factors. It provides a comprehensive examination of common psychiatric and behavioural disorders, assessment, diagnosis, psycho-pharmacology and therapeutic and management approaches. Special topics include death and bereavement, alcohol and drug abuse, legal and ethical issues.

Textbooks: to be advised. Co-ordinator: Mr P O'Halloran.

GHMD965 Principles and Practices of Psychosocial Rehabilitation

Spring session; 6 credit points (2hrs per wk).
Assessment: a variety of methods including literature review, case reports, seminar presentation, research proposals.

This subject provides an examination of current approaches and practices in the rehabilitation of people following long-term mental illness. Students will examine and utilise functional assessments; develop individul-management plans; design, implement and evaluate living skills programs across a range of functional domains.

Textbook:

GHMD966 Family and Systems Interventions for Mental Health

6 credit points (2hrs per wk).
Assessment: a variety of methods including literature review, case reports, seminar presentation, research proposals.

This subject examines the current research of the effects of social and emotional milieu on mental illness. It also examines various inter-ventions and support strategies, particularly family involvement in the burden and distress of mental illness.

Textbooks:

GHMD970 Comprehensive Systems of Mental Health Care

Autumn session; 6 credit points (2hrs per wk).
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.

This subject provides an overview of basic and applied science used to explain psychiatric disorder and presents a historical overview of mental health services. It outlines the design, impact and legislation, deinstitutionalisation, and the subsequent development of a comprehensive service model. It provides students with an understanding of each component of a community service network, including the role and function of crisis services; residential and community care services, community health centres, living skills and rehabilitation services, hospital based services, and multidisciplinary mental health structures. The role, structure, function and policy of relevant government, non-government and advocacy organisations is examined with particular reference to NSW organisations.

Textbook:

GHMD971 Assessment and Diagnosis in Mental Health

Autumn session; 6 credit points (2hrs per wk).
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.

This subject examines the definition, classification, assessment, diagnosis, therapeutic approaches and management of mental health problems at major stages of human development, with particular emphasis on serious psychiatric disorders. The formulation of management plans and the therapeutic and pharmacological considerations are addressed.

Textbooks:

GHMD973 Case Management in Mental Health

Spring session; 6 credit points (2hrs per wk).
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.

This subject provides an overview of intervention and treatment options for people presenting with acute psychiatric disorders as well as those requiring more intensive rehabilitation. Principles and strategies for crisis intervention including pharmacological management and family and social network interventions are examined in detail. The principles and practices of case management are examined and utilised as the basis of current and subsequent service delivery.

Textbooks:

GHMD976 Supervised Clinical Practice

Offered in Autumn or Spring sessions according to demand; 6 credit points (not offered through page).
Assessment: upon commencement of the placement, students must present a written report detailing goals and objectives of the placement as contracted with the field supervisor. Upon conclusion of the practicum, students must submit an evaluative report indicating clinical activity, competencies developed, difficulties encountered and positive outcomes for self, client and service agency. The student must also present a daily log of clinical activities during the course of the placement. The clinical supervisor must support this report and submit a report to the student's academic advisor.

Students must complete a supervised clinical practicum. A range of placements exist, both in the Public Health Service and in Rural and Metropolitan areas. Students are to negotiate details in conjunction with the academic advisers.
and nominated clinical supervisors before they begin and must develop and submit an outline including a description of the nature of the clinical work, specific competencies to be developed, and how the development of competencies will be monitored and evaluated by the clinical supervisor.

Co-ordinator: Mr P O'Halloran.

GHMD980 International Health: Health Care Delivery in Developing Countries
Autumn session; 6 credit points (2 hrs per wk).
Assessment: students will submit two papers. The first (approximately 2000 words) will describe health and the health care delivery system in a developing country, identifying major issues for health development. The second paper (approximately 2500 words) will be a detailed analysis of one such issue and a plan for strengthening management of the program. This subject provides an orientation to health care systems in developing countries. Issues of socio-economic development and health decentralisation and health financing will be addressed. The relationship of the environment and nutrition to morbidity and mortality, and of population dynamics to service delivery will be covered. Health Program Management issues such as resource management, logistics, information systems in this context will be illustrated.

Textbooks: Special reading lists will be provided.

Co-ordinator: Dr R Jayasuriya.

GHMD981 Maternal and Child Health in Developing Countries
Spring session; 6 credit points (2 hrs per wk).
Assessment: two written papers. The first paper of about 1500 words will review the literature on a selected aspect of Maternal and Child Health in Developing Countries. The second of about 2500 words will be a proposal for strengthening the selected program in the context of a selected developing country. Students taking this subject will examine the components of the “safe motherhood” intervention and “child survival” strategies in developing countries. The subject will give emphasis to the delivery of care in a primary health care approach and the use of appropriate technology. Issues of integration of maternal community health and planning of services and the organisation of services in decentralised settings will be discussed.


Co-ordinator: Dr R Jayasuriya.

GHMD982 Special Topic in International Health
Spring session; 6 credit points.
Pre-requisite: GHMD984 or equivalent research subject.
Co-requisite: GHMD980.
Assessment: a research proposal with substantial review of the literature on a topic chosen for research in a developing country (about 5000 words). This subject will enable students to further their knowledge in a special topic of interest relevant to health in developing countries. The student will also obtain skills in developing and writing a research proposal for Health Systems Research. Topics for study currently include Aspects of Maternity Services, Injury Control, Nutritional Issues, Training of Health Care Workers, Health Information Systems. The topic chosen may assist the student by providing background for the choice of topic for their major project. The subject will be taught in tutorials rather than formal lectures.

Textbook: Special reading list will be supplied.

Co-ordinator: Dr R Jayasuriya.

GHMD983 Statistics in Health Research
Autumn session; 6 credit points (3 hrs).
Assessment: three written assignments. Students will be introduced to statistical concepts and techniques in developing health research studies. Topics include the use of probability samples, probability theory and statistical inference, distributions, and regression methods.

Textbooks: to be advised.

Co-ordinator: Associate Professor P Ricci.

GHMD984 Health Research Methodology
Spring session; 6 credit points (2 hrs).
Pre-requisites: GHMD983 or equivalent.
Assessment: semi-structured interview 40%, design of survey 40%, research proposal 20%. This subject introduces students to health research methodology. Topics include formulating a research question, conducting a literature review and writing a research proposal. Students will acquire skills in interviewing, survey design and appropriate methods of qualitative and quantitative analysis. Ethical issues such as informed consent and confidentiality will be addressed.


Co-ordinator: Associate Professor R D Harris.

GHMD985 Environmental Epidemiology
Spring session, 6 credit points (2 hrs).
Co-requisite: GHMD984.
Assessment: 3 essays and 1 short research report based on a computer practice and a seminar presentation of these results. The course will consist of a 4 part computer practice to be conducted in teams of 2 students. The practice concerns a case of a local environmental contamination and the methods to investigate the situation and its health effects. The student will be placed in the situation of a local public health official with a limited financial budget and many options for research. Primary investigation, risk evaluation, potential study designs and actual study analysis will be covered. Presenting the results to a critical audience will be simulated in the final presentation.

Textbook: to be advised.

Co-ordinator: Dr I A Kreis.

GHMD986 Environmental Health
Autumn session; 6 credit points.
The course will cover various cases studies in environmental health where the students will take an active part in presenting some of these cases. The course will consist of lectures in which some of the theories and internationally relevant cases are presented. In the seminars the students will present cases they are working on or planning to present and aspects related to these cases will be discussed.

Textbook: to be advised.

Co-ordinator: Dr I A Kreis.

GHMD987 Risk Assessment
Autumn session; 6 credit points.
Pre-requisite: GHMD904.
This course will address issues related to concepts of risk, risk modelling and setting guidelines for exposure and acceptable risks. The implications for management of risk, research and policy will be addressed. The emphasis will be on environmental issues related to risk to health.

Textbook: to be advised.

Co-ordinator: Associate Professor P Ricci.

GHMD997 Major Project
24 credit points.
The major project forms the main problem-oriented component of the course. It is an individual endeavour under supervision. The candidate is encouraged to research a contemporary issue in their area of specialisation. It is expected that there be both a substantive theoretical and empirical content to the project. A series of seminars provides a structured and supervised setting for the development of the project proposal.


Co-ordinator: Dr I A Kreis.

GHMD998 Thesis
36 credit points.
Co-ordinator: Associate Professor R D Harris.

GHMD999 Major Thesis
Co-ordinator: Associate Professor R D Harris.
FACULTY OF INFORMATICS
MEMBERSHIP

The Faculty of Informatics is made up of the following Departments:

- Applied Statistics
- Computer Science
- Electrical and Computer Engineering
- Information and Communication Technology
- Mathematics

RESEARCH COURSES AVAILABLE

The Faculty offers Honours Master of Information Technology and Communication, Honours Master of Engineering, Honours Master of Science and Doctor of Philosophy degrees by research.

POSTGRADUATE PROGRAMS

Major coursework programs are available in the Faculty in the following areas:

- Applied Statistics
- Automation and Power Engineering
- Computer Security
- Computer and Telecommunications Engineering
- Engineering and Industrial Mathematics
- Intelligent Systems
- Pure Mathematics
- Software Engineering
- Telecommunications Engineering

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PhD Georgia IT

Administrative Assistants
Carolyn Silveri
Paula Madden

FACULTY VISITING COMMITTEE

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Mr R F Evans, Chief Engineer, Engineering Technology, BHP Slab and Plate
Products Division
Dr J Gray, Manager, Quantitative Research, AMP Investments Australia Ltd
Mr J Mann, Regional Manager, BHP Information Technology (Chair)
Dr D Nicholls, Dean, Faculty of Economics and Commerce, Australian National
University
Mr J Park, Siemens Limited
Dr P Pentony, Assistant Statistician, Australian Bureau of Statistics
Mr I Robinson, Engineering Operations Manager, Illawarra Electricity
Mr A Whitworth, Systems Consultant, Keycorp Ltd
Ms J Wright, Director of Public Libraries
and Extension Services, State Library of NSW
COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Science by Research or Coursework
3. Master of Statistics
4. Graduate Diploma in Statistics

POSTGRADUATE PROGRAM

Applied Statistics

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of Science degree by research and the Doctor of Philosophy degree:

- Epidemiology
- Experimental design
- Goodness of fit
- Image analysis
- Multivariate analysis
- Population dynamics and plant growth
- Quasi-likelihood
- Sample survey design and methodology
- Statistical decision theory
- Statistical quality control

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN APPLIED STATISTICS

leading to the degree of Honours Master of Science or Master of Statistics or the Graduate Diploma in Statistics.

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* Not on offer in 1996.

For further details, see Course Requirements below.

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in STAT993.

2. HONOURS MASTER OF SCIENCE (in STATISTICS)

The degree of Honours Master of Science shall subject to the University Course Rules for the award of the degree of Honours Master together with the following conditions.

(1) A candidate shall undertake research, or a course of graduate studies and research, normally chosen from one of the postgraduate programs offered by the Department of Applied Statistics.

(2) Entry to the Honours Master of Science will normally be from an Honours bachelor degree in Statistics at a standard of Class II, Division 2 or higher. Entry may also be approved for candidates with the qualification of Master of Statistics on the recommendation of the Head of the Department of Applied Statistics.

(3) The Honours Master of Science will normally occupy two sessions of full-time study or four sessions of part-time study, and requires satisfactory completion of 900 level subjects to the value of at least 48 credit points chosen from one of the postgraduate programs offered by the Department of Applied Statistics including either:

(a) the subject STAT993 (48 credit points), or
(b) the subject STAT992 (36 credit points) and other 900 level subjects to the value of at least 12 credit points approved by the Head of Department. In exceptional circumstances, and subject to approval of the Head of the Department, subjects with the value of...
at most 6 credit points from the program may be replaced by any other 900 level subjects with value of at least 3 credit points.

(4) The registration of a candidate will be subject to termination if that candidate fails subjects to the total value of 18 or more credit points.

(5) Each candidate shall have a supervisor appointed on the recommendation of the Head of the Department of Applied Statistics.

(6) Before the award of Honours Master of Science is conferred on a candidate who holds a testamur of the University of Wollongong for the degree of Master of Statistics, the candidate shall surrender the testamur and the corresponding rights to the degree of Master of Statistics.

3. MASTER OF STATISTICS

The degree of Master of Statistics shall be subject to the University Course Rules for the award of the degree of Master together with the following conditions.

(1) A candidate shall undertake a course of study, normally chosen from the graduate Statistics subjects offered by the Department of Applied Statistics.

(2) Entry to the Master of Statistics will normally be from a pass degree with an appropriate 3 year sequence in Statistics, or an appropriate Graduate Diploma, or, subject to the approval of Council on the recommendation of the Head of Department, from a degree or diploma containing substantial study in an appropriate discipline.

(3) The Master of Statistics will normally occupy two sessions of full-time study or four sessions of part-time study, and requires satisfactory completion of 900 level Statistics subjects to the value of at least 48 credit points approved by the Head of Department. The subject STAT990 must be included, except that with the approval of the Head of the Department the subject STAT991 may replace STAT990. In some circumstances, and subject to approval of the Head of the Department, Statistics subjects with the value of at most 12 credit points may be replaced by other 900 level subjects with the same or greater credit point value.

(4) The registration of a candidate will be subject to termination if that candidate fails subjects to the total value of 18 or more credit points.

(5) Each candidate shall have a supervisor appointed on the recommendation of the Head of the Department of Applied Statistics.

Satisfactory completion of the Master of Statistics permits registration for HONOURS MASTER OF SCIENCE (in the Department of Applied Statistics).

4. GRADUATE DIPLOMA IN STATISTICS

In addition to the University's Rules for Graduate Diplomas, candidates for the Graduate Diploma in Statistics shall:

(a) complete Statistics subjects to a value not less than 36 credit points from those listed in the schedule of the BMath and MStat, at least 24 credit points being for subjects at the 300- level or 600-level. With approval of the Departmental Head STAT949 may be included instead of a 100 or 200 level subject;

(b) not include in the diploma program subjects which, in the opinion of the Departmental Head, are equivalent in contents to those for which credit has already been obtained towards some other degree or diploma;

(c) have their programs approved by the Departmental Head before enrolling.

Satisfactory completion of the Graduate Diploma in Statistics permits registration for MASTER OF STATISTICS.

SUBJECT DESCRIPTIONS

Subjects

For further details, see the Head of Department.

Textbooks

Students will be advised on the appropriate texts for each subject in the first lecture of the subject. In all cases, the lecturer should be consulted before textbooks are purchased.

Credit Points

All subjects listed below, with the exception of STAT990, STAT992 and STAT993, have a credit point value of 6.

Contact Hours

All subjects listed below involve at least one contact hour per week for both sessions, or its equivalent.

Method of Assessment

All 900-level subjects will be assessed by final examinations, or final examinations and limited assignments.

STAT901 Modern Inference

Assessment: examination 75%, assignments 25%.

- Replication, jackknife, bootstrapping; Cross-validation; Non-parametric confidence intervals; Permutation tests; Monte-Carlo tests; Robust estimation.

Co-ordinator: Dr P Davy.

STAT902 Advanced Data Analysis

Assessment: examination 75%, assignments 25%.

- A selection of topics from: Regression model building and checking; Causal modelling; Cluster analysis; Multi-dimensional scaling; Log-linear models; Generalized linear models; Time series methods; Principal components, Factor analysis; Canonical correlations; Statistical computer packages.

Co-ordinator: Professor D Griffiths.

STAT903 Survey Design and Analysis

Assessment: examination 75%, assignments 25%.

- Survey methods - survey development; Cluster and multi-stage sampling; Repeated and longitudinal surveys; Non-sampling errors; General methods of variance estimation; Small area estimation; Non-response adjustment; Analysis of complex survey data; Report writing.

Co-ordinator: Dr D Steel.

STAT904 Statistical Consulting

Assessment: examination 75%, assignments 25%.

- Project management; Client liaison; Problem identification; Consulting ethics and principles; Sources of data; Choosing design and analysis procedures; Common problems in statistical consulting; Setting sample size; Power calculations; Consulting case studies; Report writing.

Co-ordinator: Dr K Russell.

STAT905 Time Series

Assessment: examination 75%, assignments 25%.

- Prediction theory; Linear models - identification, estimation, diagnostic checking; Multivariate models.

Co-ordinator: Dr C Gulati.

STAT906 Experimental Design

Assessment: examination 75%, assignments 25%.

- The general linear model; Complete and incomplete block designs; The construction of optimal block designs; Factorial designs and fractional factorial designs; Response surface methodology.

Co-ordinator: Dr K Russell.

STAT911 Quality Control

Assessment: examination 75%, assignments 25%.

- Control charts. Level of variability; Differences between specification limits and control limits; Deming's philosophy; Quality circles; Cause and effect diagrams; Pareto diagrams; Control charts; Benefits of using control charts; Shewhart charts, such as x-charts, c-charts, p-charts, R-charts, s-charts; Cumulative sum (CUSUM) control charts; Exponentially weighted moving averages; Moving average and moving range charts; Average run length of the above mentioned control charts; Comparison of charting methods; Process capability indices; Determining process capability using control charts; Some case studies.

Co-ordinator: Dr C Gulati.

STAT921 Design and Analysis for Quality Control

Assessment: examination 75%, assignments 25%.

- Linear regression; Principles of design; Importance of randomisation; Randomised block designs; Factorial designs; Fractional factors; Taguchi's philosophy and how it relates to experimental design; Introduction to variance components; Fixed models as opposed to random (mixed) models; Estimation of variance components; Evolutionary processes.

Co-ordinator: Dr YX Lin.

STAT944 Observational Studies and Regression Techniques

Assessment: examination 75%, assignments 25%.

- Linear regression; Regression diagnostics; Multicollinearity; Residual analysis; Response surface methodology; Logistic

*Not on offer in 1996.
regression; Planning of observational studies; Effects of matching and covariates as controls. Concepts of confounding.

Co-ordinator: Dr C Gulati.

STAT949 Statistical Thinking
6 credit points.
Assessment: assignments and tutorial work 50%, examination 50%.
The importance of variability; Why statistics?; Statistics and quality; Exploratory data analysis; Numerical and graphical summaries; Measures of location and spread; Elementary probability; The Binomial; Poisson and Normal Distributions; The role of the Central Limit Theorem in statistics; The nature and purpose of statistical inference; Point estimation and confidence intervals; Concepts of hypothesis testing; Simulation techniques; Sampling methods; Elementary control charts.
Co-ordinator: Professor D Griffiths.

STAT971 Preliminary Topics in Statistics A
Assessment: examination 75%, assignments 25%.
A selection of topics will be available from time to time to serve as preliminary material in the Master of Statistics.
Co-ordinator: Head of Department.

STAT972 Preliminary Topics in Statistics B
Assessment: examination 75%, assignments 25%.
A selection of topics will be available from time to time to serve as preliminary material in the Master of Statistics.
Co-ordinator: Head of Department.

STAT981 Advanced Topics in Statistics A
Assessment: examination 75%, assignments 25%.
A selection of advanced topics will be available from the research interests of current members of staff and from visitors to the Department of Applied Statistics.
Co-ordinator: Head of Department.

STAT982 Advanced Topics in Statistics B
Assessment: examination 75%, assignments 25%.
A selection of advanced topics will be available from the research interests of current members of staff and from visitors to the Department of Applied Statistics.
Co-ordinator: Head of Department.

STAT983 Advanced Topics in Statistics C
Assessment: examination 75%, assignments 25%.
A selection of advanced topics will be available from the research interests of current members of staff, and from visitors to the Department of Applied Statistics.
Co-ordinator: Head of Department.

STAT990 Minor Project
6 credit points.

STAT991 Project
12 credit points.

STAT992 Thesis
36 credit points.

STAT993 Major Thesis
48 credit points per year.
COMPUTER SCIENCE

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Science by Research or Coursework
3. Master of Computer Science

POSTGRADUATE PROGRAMS

Computer Security
Software Engineering
Intelligent Systems

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of Science degree by research and the Doctor of Philosophy degree:

Computer Security
- Communication security
- Cryptographic primitive design
- Access control
- Security protocols
- Authentication
- Network security
- Data and system integrity
- Distributed systems security

Software Engineering
- Graphical user interfaces
- Object-oriented programming
- Database management systems
- Computer-aided learning
- Science of computer programming

Intelligent Systems
- Artificial intelligence
- Expert systems
- Robotics
- Neural networks

Algorithms
- Combinatorial designs
- Hadamard matrices and Bent functions
- Error correction codes

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN COMPUTER SECURITY
leading to the Honours Master of Science.

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<tbody>
<tr>
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<td>CSC965</td>
<td>Design and Analysis of Algorithms</td>
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<tr>
<td>CSC966</td>
<td>Information Theory and Coding</td>
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<td>CSC967</td>
<td>Complexity Theory</td>
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<td>CSC971</td>
<td>Computer Security</td>
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plus subjects from the other Programs.
For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN SOFTWARE ENGINEERING
leading to the Honours Master of Science.

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<td>CSC945</td>
<td>Parallel Architectures and Algorithms</td>
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<td>CSC955</td>
<td>Computer Networks</td>
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<td>CSC957</td>
<td>Advanced Topics in Database Management</td>
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<tr>
<td>CSC963</td>
<td>Advanced Computer Graphics</td>
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<td>CSC973</td>
<td>Computer Assisted Learning</td>
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<tr>
<td>CSC974</td>
<td>Systems Analysis</td>
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</tbody>
</table>

plus subjects from the other Programs.
For further details, see Course Requirements below.
POSTGRADUATE PROGRAM IN INTELLIGENT SYSTEMS
leading to the Honours Master of Science.

<table>
<thead>
<tr>
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<td>Advanced Topics in Computer Science B</td>
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<td>CSC1944</td>
<td>Robot Perception and Planning</td>
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<td>CSC1954</td>
<td>Artificial Intelligence</td>
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<td>CSC1956</td>
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<td>CSC1962</td>
<td>Logic Programming</td>
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</tr>
<tr>
<td>CSC1964</td>
<td>Neural Computing</td>
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<td></td>
<td>plus subjects from the other Programs</td>
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For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

<table>
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<td>Preliminary Topics in Computer Science A</td>
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<tr>
<td>CSC1981</td>
<td>Preliminary Topics in Computer Science B</td>
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<tr>
<td>CSC1982</td>
<td>Preliminary Topics in Computer Science C</td>
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<tr>
<td>CSC1983</td>
<td>Preliminary Topics in Computer Science D</td>
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<tr>
<td>CSC1991</td>
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<td>12</td>
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<tr>
<td>CSC1992</td>
<td>Minor Thesis</td>
<td>24</td>
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<tr>
<td>CSC1993</td>
<td>Thesis</td>
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</tbody>
</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in CSC1993.

2. HONOURS MASTER OF SCIENCE

The degree of Honours Master of Science shall be subject to the University Course Rules for the award of the degree of Honours Master, together with the following conditions.

- A candidate shall undertake research, or a course of graduate studies and research, normally chosen from the graduate subjects offered by the Department of Computer Science.

- Entry to the Honours Master of Science will normally be from an Honours bachelor degree in Computer Science at a standard of Class II, Division 2 or higher. Entry may also be approved for candidates with the qualification of Master of Computer Science on the recommendation of the Head of the Department of Computer Science.

3. MASTER OF COMPUTER SCIENCE

The Master of Computer Science is designed to provide advanced studies in Computer Science at a professional level to graduates of this or another university who have some background in Computer Science.

4. GRADUATE DIPLOMA IN SCIENCE (IN COMPUTING)

This course is intended for graduates in disciplines with no Computer Science background. The course consists of a fixed program of first and second year undergraduate subjects from the Department of Computer Science, and can only be taken part-time, because of the pre-
requisite relationships between the subjects.

Prospective candidates who have already satisfactorily completed more than one of the prescribed subjects, or equivalent, will not be permitted to register for this course. Such applicants should register for the Bachelor of Computer Science or the Master of Computer Science. However, substitution of one of these subjects by another subject offered by the Department of Computer Science may be permitted, with the approval of the Head of Department.

The Graduate Diploma in Science (in Computing) shall be subject to the University Rules for the award of Graduate Diplomas together with the following conditions:

(1) The Graduate Diploma in Science (in Computing) is a coherent program of study with the value of at least 48 credit points which requires the satisfactory completion of each of the subjects:

CSCI100 Computing Studies;
CSCI111 Computer Science IA;
CSCI121 Computer Science IB;
CSCI131 Introduction to Computer Systems;
CSCI202 Computer Science IIA;
CSCI205 Computer Science IIB;
CSCI212 Operating Systems; and
CSCI235 Databases.

with the exception that an alternative Computer Science subject from the General Schedule may replace one of the above with the approval of the Head of Department.

(2) A candidate who accumulates failures in subjects to the value of 18 or more credit points shall be required to show cause why enrolment should be allowed to continue.

SUBJECT DESCRIPTIONS

Assessment
Where not otherwise specifically stated, assessment will be by a combination of assignments, seminar presentations, and final examination. Precise details will be announced in the first lecture for each subject.

CSCI943 Advanced Topics in Computer Science C

Autumn or Spring session; 6 credit points (2 hrs per wk).

Topics will be selected from those areas of computing science in which visiting staff members of the Department are engaged in active research.

Co-ordinator: to be advised.

CSCI944 Perception and Planning

Autumn or Spring session; 6 credit points (2 hrs per wk).

Perception involves the organisation of data to achieve understanding of the environment. It facilitates planning, which involves: developing a model of the problem and inferring from that model the consequences of current or proposed actions. In robotics, we collect the data with sensors and external sensors. Internal sensors are the sensors used to measure robot parameters relative to the reference frame of the robot. Robot parameters include: joint angle, joint motion, linkage deflection, grip force and joint torque. External sensors are used to measure the environment. External sensing includes touch, range finding and vision. Once the parameters have been measured, the data must be fused into a coherent model of the environment which can be used for planning.

Co-ordinator: Dr P McKerrow.

CSCI945 Parallel Architectures and Algorithms

Autumn or Spring session; 6 credit points (2 hrs per wk).

The immense computational power required for many modern applications has led to the development of both hardware and software techniques to harness the capabilities of complex multi-processor machines. The subject concentrates on defining the many different approaches adopted to the construction of parallel algorithms and architectures. Emphasis is placed on the suitability of each paradigm to potential and actual application areas. This is developed both in theory and practice, with practical work based on a network of transputers running ocaml.

Co-ordinator: Mr J Fulcher.

CSCI954 Artificial Intelligence Programming

Autumn or Spring session; 6 credit points (2 hrs per wk).


Co-ordinator: Dr M Balachandran.

CSCI955 Computer Networks

Autumn or Spring session; 6 credit points (2 hrs per wk).


Co-ordinator: Professor C J Anido.

CSCI956 Robot Modelling

Autumn or Spring session; 6 credit points (2 hrs per wk).


Co-ordinator: Dr A Zelinsky.

CSCI957 Advanced Topics in Database Management

Autumn or Spring session; 6 credit points (2 hrs per wk).

The objective of this course is to study the implementation aspects of a Database Management System (DBMS), i.e. the software that handles all access to the database. A DBMS runs on top of an operating system and complements and/or duplicates many operating system functions. The functional components discussed in the course include the file manager, the buffer manager, the query optimizer, the recovery manager, and the concurrency controller.

Co-ordinator: Dr J Gatta.

CSCI962 Logic Programming

Autumn or Spring session; 6 credit points (2 hrs per wk).

The guiding idea of logic programming is that a program should be a logical theory and that the processing of a query by a logic programming system should be an attempt to prove a theorem in that theory. If the ideal were realised, logic programs would have the clear and precise semantics available for logical theories, and the imposition of control over the execution of queries would be managed entirely by the implementation. Actual logic programming languages, the most widely known of which is Prolog, fall well short of the ideal, in that it is typically necessary for programs to contain both non-logical code and control information.

This subject covers the theoretical and practical issues raised by the above description, and includes most or all of the following topics: propositional calculus; predicate calculus; model-theoretic semantics; resolution; logic programming and Prolog (theory, applications, extensions, integration with other programming paradigms and implementation).

References:

Co-ordinator: to be advised.

CSCI963 Advanced Computer Graphics

Autumn or Spring session; 6 credit points (2 hrs per wk).

The representation of three-dimensional scenes by continuous tone images has advanced significantly over the last 20 years. One of the major advances in
imaging has been the use of ray tracing to produce highly realistic pictures containing features such as shadows, reflection, refraction, texturing, penumbras and motion blur. These techniques can be implemented in an object-oriented fashion using a const-ructive solid geometry approach. The purpose of this course is to acquaint the student with the current status of ray tracing techniques and their subsequent implementation into a CSC ray tracer.

Co-ordinator: Mr P Castle.

CSCI964 Neural Computing
Autumn or Spring session; 6 credit points (2 hrs per wk).

Students will become familiar with the structures, algorithms and capabilities of neural networks. Topics covered will include: The biological neuron - cell, synapses, dendrites, axon, threshold, firing rate; Origins of neural computing: Hebbian learning, McCulloch & Pitts simple threshold model, perceptron, adaline; Multi-layer feedforward networks (multi-layer perceptron), error backpropagation, gradient descent in weight space, escape from local minima, convergence; Supervised learning/ training; Later refinements - counter-propagation, Boltzmann machines; Hopfield networks; symmetrical weights, training, convergence, Hamming nets; Characteristics of neural nets - long-term memory (connections), short-term memory (input firing pattern), adaptive weights, learning ability, generalization, noise and fault-tolerance; Hardware realisation - massively parallel architectures, VLSI (digital & analog), optical. Comparison/contrast of neural networks versus digital computers; Connections versus traditional (rule-based, heuristic) artificial intelligence; Applications of neural nets - pattern recognition (handwriting, speech, image). Laboratory exercises and assignments will be conducted using public domain neural network simulators on the IBM PC, Apple Macintosh and Unix.

References:


Co-ordinator: Professor S Berbery.

CSCI966 Information Theory and Coding
Autumn or Spring session; 6 credit points (2 hrs per wk).

Pre-requisite: CSCI202, CSCI203, Discrete Maths (including probability).
Assessment: 3 assignments, each worth 10%, final examination 70%.

Transmission of data over a channel or its storage in any kind of memory is subject to data corruption due to noise addition. In late 1940s Shannon introduced channel capacity as the fundamental bound on the rate of error free data transmission. In this course basic concepts of information theory such as entropy and mutual information are studied and are used to define and calculate capacity of a channel (communication or storage). This is followed by a study of various kinds of error detecting/correcting codes which provide the required protection against noise and allow efficient coding/decoding.

Topics include:
(1) entropy, joint entropy, conditional entropy;
(2) relative entropy and mutual information;
(3) asymptotic equipartition property (AEP);
(4) channel capacity;
(5) linear codes and their fundamental parameters;
(6) cyclic codes and their coding/decoding using shift registers;
(7) BCH codes;

References:


Co-ordinator: Dr R Safavi-Naini.

CSCI967 Complexity Theory
Autumn or Spring session; 6 credit points (2 hrs per wk).

Pre-requisite: CSCI203, Knowledge of Discrete Math.
Assessment: 3 assignments, each worth 10%, final examination 70%.

The aim of the course is to introduce basic notions of the complexity theory. The theory has emerged as the answer to the questions about inherent difficulty of problems. A problem can be solved by a computer if it is possible to design an algorithm for it. It turns out that there are problems for which it is impossible to find algorithms. An example of such a problem is the well-known halting problem which asks if a given computer program eventually halts. For some problems it is easy to find algorithms but they may not be efficient ones. For example the travelling salesperson problem has resisted all attempts to find an efficient algorithm and all known algorithms are not much better than trying all possible solutions.

Complexity theory deals with problems which can be programmed and solved by computers. As the basic model of computation we use Turing machines.

During the course, the classes of P, NP, NPI and NP-complete will be defined. Cook's theorem and its implications will be discussed. We will also show some standard methods of proving the complexity of some problems. Some applications of complexity theory will also be discussed.

References:

Co-ordinator: Associate Professor J Pieprzyk.

CSCI971 Advanced Computer Security
Autumn or Spring session; 6 credit points (2 hrs per wk).

Pre-requisite: CSCI361 Computer Security.
Assessment: seminar presentation 40%, final examination 60%.

Topics to be covered will include:
• computer crimes, legal aspects of information protection;
• mathematical methods used in cryptography, overview of selected aspects of complexity theory, information theory versus cryptography;
• review of classical ciphers;
• symmetric encryption algorithms, information access control mechanisms, secure communication protocols, public-key cryptography, authentication methods;
• applications of cryptography in computer networks and databases.

Textbooks:

References:

Co-ordinator: Professor J Seberry.

CSCI973 Computer Assisted Learning
Autumn or Spring session; 6 credit points (2 hrs per wk).
Assessment: literature review 20%, written report 20%, seminar presentation 30%, practical project 30%.
"Whenever a computer and a human interact and one of them learns something then computer assisted learning has taken place", Professor Dan Bitzer. Many claims are made for the advantages provided by computer-assisted learning. There appears to be, however, a shortfall between "dreams" and "reality". In this course students will research the current state of CAL developments, the technology available, the software tools used and the general "styles" of CAL applications. We will discuss the current state of CAL from the point of view of the inter-relationship between pedagogical theory and technological developments. Students will display their understanding of CAL by producing a short CAL sequence. Topics covered will include: What is CAL? Where is CAL used? Types of CAL material - e.g. drill and practice, tutorial, programmed feedback, drill and practice, tutorial, programmed feedback, etc. Technological feasibility and educational/social acceptance. "Authoring systems". Practical work will use Apple Macintosh and Hypercard and other available systems. Written assignments are to be word processed.

References:

Co-ordinator: Dr I Pirie.

CSCI974 Systems Analysis
Autumn or Spring session; 6 credit points (2 hrs per wk).
Pre-requisite: CSCI311 Software Engineering.
Assessment: three assignments each 10%, seminar presentation 10%, final examination 60%.

This course is intended to follow CSCI311 Software Engineering that introduces topics related to the development of large scale systems.

Objectives
The course concentrates on the analysis and design stages of the software implementation process, both for initial implementation, and for long term maintenance. The aim is to present an integrated view of a number of software engineering models.

Topics
Basic tools including dataflow models, entity-relationship and access and object-relationship data models, control flow and access diagrams, and event tables. Combination of basic tools into software engineering environments such as IPSEs and Quality Function Deployment (QFD) environments, together with additional process modelling and process control support tools. Case studies are based on representation large scale projects in the real time arena.

Textbooks:

Co-ordinator: to be advised.

CSCI980 Preliminary Topics in Computer Science A
Autumn or Spring session; 6 credit points (2 hrs per wk).
A selection of topics will be available from time to time to serve as preliminary material in the Master of Computer Science.

Co-ordinator: to be advised.

CSCI981 Preliminary Topics in Computer Science B
Autumn or Spring session; 6 credit points (2 hrs per wk).
A selection of topics will be available from time to time to serve as preliminary material in the Master of Computer Science.

Co-ordinator: to be advised.

CSCI982 Preliminary Topics in Computer Science C
Autumn or Spring session; 6 credit points (2 hrs per wk).
A selection of topics will be available from time to time to serve as preliminary material in the Master of Computer Science.

Co-ordinator: to be advised.

CSCI983 Preliminary Topics in Computer Science D
Autumn or Spring session; 6 credit points (2 hrs per wk).
A selection of topics will be available from time to time to serve as preliminary material in the Master of Computer Science.

Co-ordinator: to be advised.

CSCI991 Project
12 credit points.

CSCI992 Minor Thesis
24 credit points.

CSCI993 Thesis
48 credit points.
ELECTRICAL AND COMPUTER ENGINEERING

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Engineering by Research
3. Honours Master of Engineering in Telecommunications Engineering by Coursework/Research
4. Master of Engineering Studies
5. Graduate Certificate in Engineering (Telecommunications)

POSTGRADUATE PROGRAMS

Automation and Power Engineering
Computer and Telecommunications Engineering
Telecommunications Engineering

CURRENT RESEARCH AREAS

There are two major research centres within the Department. These are the Switched Networks Research Centre and the Industrial Automation Research Centre. Under these two programs, the following areas of research are available to candidates undertaking the degrees of Honours Master of Engineering by research and the Doctor of Philosophy:

Switched Networks
- Antenna arrays and microwave antennas
- Coding
- Communications
- Computer networks
- Computer systems
- Digital signal processing
- Expert systems
- Microwave imaging
- Microwave heating
- Sensors and image processing
- System identification

Industrial Automation
- Advanced control systems
- Computer integrated manufacturing systems
- Electric motors
- Mobile robots, navigation and control
- Power electronics
- Power system control and stability
- Robotics and sensors
- Variable speed drives

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN AUTOMATION AND POWER ENGINEERING

leading to the Master of Engineering Studies.

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<td>ELEC953</td>
<td>Report</td>
<td>12</td>
</tr>
<tr>
<td>ELEC911</td>
<td>Choppers and Inverters</td>
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<tr>
<td>ELEC912</td>
<td>AC Converters</td>
<td>6</td>
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<td>ELEC922</td>
<td>Industrial Design</td>
<td>6</td>
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<tr>
<td>ELEC924</td>
<td>Power Systems</td>
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<tr>
<td>ELEC925</td>
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<td>ELEC926</td>
<td>Machine Transients</td>
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<td>ELEC928</td>
<td>Variable Speed Drives</td>
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<tr>
<td>ELEC943</td>
<td>Computer Controlled Systems</td>
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<tr>
<td>ELEC944</td>
<td>Identification and Optimum Control</td>
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<tr>
<td>ELEC953</td>
<td>Advanced Laboratory</td>
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<tr>
<td>ELEC970</td>
<td>Advanced Topics in Engineering</td>
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</tr>
<tr>
<td>ELEC973</td>
<td>Advanced Robotics and Sensory Systems</td>
<td>6</td>
</tr>
</tbody>
</table>

*Only a limited number of subjects will be available in any one year. Subject to the approval of the Head of Department relevant subjects from other programs may also be taken as electives.

For further details, see Course Descriptions below.
POSTGRADUATE PROGRAM IN COMPUTER AND TELECOMMUNICATIONS ENGINEERING
leading to the Master of Engineering Studies.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>Core</td>
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<tr>
<td>ELEC953</td>
<td>Report</td>
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</table>

Electives* (a total of 36 credit points to be chosen from the following):

- ELEC915 Advanced Logic Design
- ELEC932 Computer Hardware Architecture
- ELEC933 Real-time Computing
- ELEC955 Advanced Laboratory
- ELEC960 Telecommunication Systems
- ELEC961 Digital Signal Processing
- ELEC962 Analysis and Transmission of Signals
- ELEC963 Advanced Digital Signal Processing
- ELEC965 Telecommunications Network Management
- ELEC969 Computer Communications
- ELEC970 Advanced Topics in Engineering

*Only a limited number of subjects will be available in any one year. Subject to the approval of the Head of Department relevant subjects from other programs may also be taken as electives.

For further details, see Course Descriptions below.

POSTGRADUATE PROGRAM IN TELECOMMUNICATIONS ENGINEERING
leading to the Honours Master of Engineering in Telecommunications Engineering.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<tbody>
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<td>Core</td>
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<td>36</td>
</tr>
<tr>
<td>ELEC952</td>
<td>Thesis</td>
<td></td>
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</tbody>
</table>

Electives* (choice of not less than 12 credit points from the following):

- ELEC964 Integrated Service Networks
- ELEC966 Telecommunications Signal Processing
- ELEC967 Teletraffic Engineering
- ELEC968 Transmission Systems

*Note: Only three elective subjects will be offered in any one year. With the approval of the Head of Department, one elective may be replaced by a suitable equivalent subject offered by another department.

For further details, see Course Requirements below.

SCHEDULE OF POSTGRADUATE SUBJECTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tr>
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<td>Graduate Certificate in Engineering (Telecommunications)</td>
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<tr>
<td>ELEC861</td>
<td>Telecommunications Systems</td>
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<tr>
<td>ELEC862</td>
<td>Transmission Systems</td>
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<tr>
<td>ELEC863</td>
<td>Telecommunication Signal Processing</td>
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<tr>
<td>ELEC864</td>
<td>Telecommunication System Management</td>
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</table>

|        | Master of Engineering Studies    |               |
| ELEC911| Choppers and Inverters           | 6             |
| ELEC912| AC Converters                    | 6             |
| ELEC915| Advanced Logic Design            | 6             |
| ELEC922| Industrial Design                | 6             |
| ELEC923| Power Systems                    | 6             |
| ELEC926| Machine Transients               | 6             |
| ELEC928| Variable Speed Drives            | 6             |
| ELEC932| Computer Hardware Architecture   | 6             |
| ELEC933| Real-time Computing              | 6             |
| ELEC943| Computer Controlled Systems      | 6             |
| ELEC944| Identification and Optimal Control | 6       |
| ELEC953| Report                          | 12            |
| ELEC955| Advanced Laboratory              | 6             |
| ELEC960| Telecommunication Systems        | 6             |
| ELEC961| Digital Signal Processing        | 6             |
| ELEC962| Analysis and Transmission of Signals | 6        |
| ELEC963| Advanced Digital Signal Processing | 6         |
| ELEC965| Telecommunications Network Management | 6       |
| ELEC969| Computer Communications          | 6             |
| ELEC970| Special Topics in Engineering    | 6             |
| ELEC973| Advanced Robotics and Sensory Systems | 6      |
SCHEDULE OF POSTGRADUATE SUBJECTS (cont’d).

<table>
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<th>Subject</th>
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<td>ELEC967</td>
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<td>ELEC968</td>
<td>Transmission Systems</td>
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<tr>
<td>ELEC951</td>
<td>Thesis</td>
<td>48 per year</td>
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</tbody>
</table>

For the Master of Engineering Studies, unless demand warrants, only seven (7) subjects will be available in any one year.

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in ELEC951 Thesis.

2. HONOURS MASTER OF ENGINEERING

Under the Rules for the degree of Honours Master of Engineering, candidates may meet the major requirements by satisfactorily completing a thesis embodying the results of an investigation.

Entry for graduates with an Honours Degree at a standard of Class II, Division 2 or higher or approved equivalent qualification.

Under the Honours Masters Rules, candidates must accumulate a total of not less than 48 credit points by the satisfactory completion of subjects as indicated below.

(a) ELEC952 Thesis;
(b) three elective subjects, worth not less than 12 credit points chosen from those listed below and for which details appear under Subject Descriptions in the following pages:

ELEC964 Integrated Service Networks
ELEC966 Telecommunications Signal Processing
ELEC967 Teletraffic Engineering
ELEC968 Transmission Systems

(Note: Only three elective subjects will be offered in any one year. With the approval of the Departmental Head, one elective may be replaced by a suitable equivalent subject offered by another department.)

Entry for graduates with a degree below a standard of Class II, Division 2

Under the Honours Masters Rules, candidates are required to accumulate 96 credit points of which at least 48 points shall be from subjects included in the Schedule of Graduate Subjects; the remaining 48 credit points however, need not be for subjects at the Postgraduate level.

The Department, however, requires that candidates who qualify for entry under these provisions enrol in the Master of Engineering Studies and gain a weighted average mark of 67.5% or higher to be admitted to the Honours Master of Engineering program.

3. HONOURS MASTER OF ENGINEERING IN TELECOMMUNICATIONS ENGINEERING

Introduction

This course has been designed to provide students with a thorough and working knowledge of the key telecommunications disciplines and systems of the future. It will provide sufficient coursework to enable students to be able to design networks, transmission and digital signal processing systems. Students will be able to apply and develop the knowledge acquired in these courses to important research problems in advanced telecommunications.

The course is aimed at recent graduates in Computer, Electrical or Electronic Engineering who wish to pursue a career in telecommunications, and practising engineers seeking to update their knowledge in this rapidly advancing field.

Entrance Requirements

The entrance requirements for this course are the same as that for the Honours Master of Engineering Degree.

Entry for graduates with an Honours Degree at a standard of Class II, Division 2 or higher or approved equivalent qualification.

Under the Honours Masters Rules, candidates must accumulate a total of not less than 48 credit points by the satisfactory completion of subjects as indicated below:

(a) six subjects, approved by the Head of Department, as indicated below:

(b) three elective subjects, worth not less than 12 credit points chosen from those listed below and for which details appear under Subject Descriptions in the following pages:

ELEC964 Integrated Service Networks
ELEC966 Telecommunications Signal Processing
ELEC967 Teletraffic Engineering
ELEC968 Transmission Systems

(Note: Only three elective subjects will be offered in any one year. With the approval of the Departmental Head, one elective may be replaced by a suitable equivalent subject offered by another department.)

Entry for graduates with a degree below a standard of Class II, Division 2

Under the Honours Masters Rules, candidates are required to accumulate 96 credit points of which at least 48 points shall be from subjects included in the Schedule of Graduate Subjects; the remaining 48 credit points however, need not be for subjects at the Postgraduate level.

The Department, however, requires that candidates who qualify for entry under these provisions enrol in the Master of Engineering Studies and gain a weighted average mark of 67.5% or higher to be admitted to the Honours Master of Engineering program.

With the approval of the Head of Department, up to three of the above six credit point subjects listed in (a) may be replaced by suitable equivalent subjects offered by other Departments.

5. GRADUATE CERTIFICATE IN ENGINEERING (TELECOMMUNICATIONS)

The Rules governing the Graduate Certificate in Engineering are detailed in the section called General Information within this Calendar.

For the Graduate Certificate in Engineering (Telecommunications), candidates enrol in the following subjects:

ELEC861 Telecommunications Systems
ELEC862 Transmission Systems
Autumn or Spring session; 6 credit points (42 hrs of lectures and tutorials, delivered by mixed mode techniques, including television broadcasts).
Assessment: see statement at beginning of Subject Descriptions.

ELEC863 Telecommunication Signal Processing
Autumn or Spring session; 6 credit points (42 hrs of lectures and tutorials, delivered by mixed mode techniques, including television broadcasts).
Assessment: see statement at beginning of Subject Descriptions.

ELEC864 Telecommunication System Management
Autumn or Spring session; 6 credit points (42 hrs of lectures and tutorials, delivered by mixed mode techniques, including television broadcasts).
Assessment: see statement at beginning of Subject Descriptions.

Details of these subjects are presented in the Subject Descriptions below. It should be noted that these subjects are to be delivered by mixed mode techniques, including television broadcasts as the Graduate Certificate in Engineering (Telecommunications) is offered as a distance learning course.

SUBJECT DESCRIPTIONS
Assessment
All subjects offered by the Department of Electrical and Computer Engineering are normally assessed by means of a final examination. In addition, set project work, library assignments, seminar presentations, laboratory reports and tutorial problems undertaken by the student throughout the session may also be taken into account.

Lecturers in the individual subjects will provide details at the beginning of each session. As a general rule, the assessment for a subject is such that not less than 80% of the assessment material is identifiably the student’s own work.

Subject Co-ordinators
Whilst a Subject Co-ordinator has been given for each subject, it should be noted that the Co-ordinator this year may not be as printed. For all subjects, students will be given Subject Information Sheets in the first week of lectures with details of the Subject Co-ordinators, Lecturers, Demonstrators, Assessment, etc.

ELEC861 Telecommunications Systems
Autumn or Spring session; 6 credit points (42 hrs of lectures and tutorials, delivered by mixed mode techniques, including television broadcasts).
Assessment: see statement at beginning of Subject Descriptions.

Introduction to communications systems, including analogue and digital transmission systems, radio, cellular mobile radios and satellite communications. Time and frequency domain analysis of linear systems and deterministic signals (Fourier Transform; convolution and correlation; continuous and discrete time systems). Analogue modulation systems and spectra (amplitude, frequency and phase modulation).

Co-ordinator: Professor G J Anido.

ELEC862 Transmission Systems
Autumn or Spring session; 6 credit points (42 hrs of lectures and tutorials, delivered by mixed mode techniques, including television broadcasts).
Assessment: see statement at beginning of Subject Descriptions.

Wave propagation in cables, waveguides and atmosphere, radiation and antennas.

Co-ordinator: Professor G J Anido.

ELEC863 Telecommunication Signal Processing
Autumn or Spring session; 6 credit points (42 hrs of lectures and tutorials, delivered by mixed mode techniques, including television broadcasts).
Assessment: see statement at beginning of Subject Descriptions.

Band-limited signals, sampling theorem, aliasing. Finite and infinite impulse response digital filter structures and frequency response, design methods for digital filters. The discrete Fourier Transform; Fast Fourier Transform algorithms. Linear prediction and its application to reduced bandwidth transmission of signals.

Co-ordinator: Professor G J Anido.

ELEC864 Telecommunication System Management
Autumn or Spring session; 6 credit points (42 hrs of lectures and tutorials, delivered by mixed mode techniques, including television broadcasts).
Assessment: see statement at beginning of Subject Descriptions.

Aims of private and public communications systems; Local Area Networks (LANs) and Simple Network Management Protocol (SNMP); Narrowband versus broadband communications; Integration of voice, data and video in national and global networks; General management issues, such as cost control and business development in telecommunications systems, both public and private; International standards; Dimensioning telecommunications systems. Regulatory structure and international networking.

Co-ordinator: Professor G J Anido.

ELEC911 Choppers and Inverters
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars).
Assessment: see statement at beginning of Subject Descriptions.

Power transistors, MOSFETs and diodes; commutation, snubbing, drive and protection; waveform control and filtering; choppers, inverters, switched mode power supplies. Current research developments.

Co-ordinator: Associate Professor V J Gosbell.

ELEC912 AC Converters
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars).
Assessment: see statement at beginning of Subject Descriptions.

Diode, SCR, Triac; their characteristics and protection. AC to DC conversion; single-phase and three-phase, single-quadrant, two-quadrant and four-quadrant phase controlled converters, applications. AC to DC conversion; AC voltage controllers, single-phase and three-phase cycloconverters, applications. Harmonics in phase controlled systems. Current research developments.

Co-ordinator: Associate Professor V J Gosbell.

ELEC915 Advanced Logic Design
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars).
Assessment: see statement at beginning of Subject Descriptions.


Co-ordinator: Professor G J Anido.

ELEC922 Industrial Design
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars).
Assessment: see statement at beginning of Subject Descriptions.

This subject will cover selected topics from design techniques for electrical equipment, such as electric motors, transformers, reactors, contactors, transistors, busbars, etc. Topics to be covered will include machinery and electromagnetic systems in insulated, thermal systems, mechanical constraints, audible noise and skin effect. Current research developments.

Co-ordinator: Associate Professor V J Gosbell.

ELEC924 Power Systems
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars).
Assessment: see statement at beginning of Subject Descriptions.

Power system components, layout, frequency control, voltage control, fault analysis, stability, protection. Current research developments.

Co-ordinator: Associate Professor V J Gosbell.

ELEC925 Computer Applications in Power Systems
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars).
Assessment: see statement at beginning of Subject Descriptions.

On-line and off-line applications of computers to the following areas: power system analysis, digital protection, centralised and distributed control of active and reactive power. Current research developments.

Co-ordinator: Associate Professor V J Gosbell.

ELEC926 Machine Transients
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars).
Assessment: see statement at beginning of Subject Descriptions.


Co-ordinator: Associate Professor V J Gosbell.

ELEC928 Variable Speed Drives
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars).
Assessment: see statement at beginning of Subject Descriptions.


Co-ordinator: Associate Professor V J Gosbell.

ELEC932 Computer Hardware Architecture
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars).
Assessment: see statement at beginning of Subject Descriptions.

Memory organisation and management, including cache memory; input/output systems; DMA and interrupts; I/O processors; pipeline processors, multiprocessors, complex instruction set processors; and reduced instruction set processors. Micro-programming; micro-processors; and micro-computer hardware (bus system, multiplex bus system organisation); and interface design. Programming of micro-computers with
including the design and construction of experimental apparatus; a software project, including the development of software; or an extensive literature survey; or a combination of any of these. Where possible the projects are related to the research programs of the Department and are chosen to develop the student's initiative. Each student is required to deliver an oral seminar and to prepare a final thesis on the result of the work undertaken.

Textbooks:
Bligo, Technically - Write!, Prentice-Hall.

Co-ordinator: Professor C D Cook.

ELEC965 Advanced Laboratory
Autumn or Spring session; 6 credit points (84 hours of practical).
Assessment: see statement at beginning of Subject Descriptions.

Aim:
The aim of this subject is to provide students with an opportunity to apply and verify theory in areas associated with the postgraduate programs through laboratory experiments and computer studies.

Content:
Students will be expected to design, perform, analyse and write reports on projects selected to illustrate practical issues selected from the two postgraduate programs.

Objectives:
On successfully completing this subject, the student should be able to:
(i) understand the theory underpinning the projects;
(ii) design and perform experiments and computer studies to illustrate theory;
(iii) write reports covering the theoretical background, justification and description of the experimental procedure, analysis of results and conclusions arising from the experiments; and
(iv) show initiative and ability in solving engineering problems and producing practical results with minimum supervision.

Co-ordinator: Dr F Naghdy.

ELEC960 Telecommunication Systems
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars).
Assessment: see statement at beginning of Subject Descriptions.

Strand A: Introduction to teletraffic engineering; Queuing theory; Delay and loss systems; Elementary and intermediate queues; Little's theorem; Throughput and congestion; Erlang distribution and blocking probability; Markov chain analysis; Mixed voice and data queuing systems.

Strand B: Network engineering; Optimal capacity allocation; Direct and alternate routing; Overflow traffic; Telephone networks and switching systems; Step-by-step, X-bar, electronic and digital switching. Time and space switching; Blocking probability and availability; Current research developments.

Co-ordinator: Professor G J Anido.

ELEC961 Digital Signal Processing
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars).
Assessment: see statement at beginning of Subject Descriptions.

Band-limited signals, sampling theorem, aliasing; finite- and Infinite- impulse response digital filter structures and frequency response, design methods for digital filters; the discrete Fourier transform; Fast Fourier Transform algorithms; current research developments.

Co-ordinator: Professor G J Anido.

ELEC962 Analysis and Transmission of Signals
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars).
Assessment: see statement at beginning of Subject Descriptions.

High frequency signal propagation in transmission lines, waveguides and atmosphere, radiation and antennas, fibre optics, filters; current research developments.

Textbook: to be advised.

Co-ordinator: Professor G J Anido.

ELEC963 Advanced Digital Signal Processing
Spring session; 6 credit points (42 hrs lectures, tutorials and practical work).
Pre-requisite: ELEC961.
Assessment: see statement at beginning of Subject Descriptions.

Aim:
The aim of this subject is to provide a thorough understanding of the theory and application of advanced digital signal processing techniques.

Content:
Theory: topics covered include: multirate processing, spectral estimation and least squares methods. Applications: topics may cover adaptive signal processing, speech processing and image processing.

Objectives:
On successfully completing this subject, the student should be able to:
(i) analyse and understand advanced digital signal processing algorithms;
(ii) implement digital signal processing techniques in new applications;
(iii) understand both theoretical and applications related problems of adaptive, speech and image processing systems; and
(iv) apply advanced digital signal processing solutions to problems in research or industrial environments.

Textbook: to be advised.

Co-ordinator: Professor G J Anido.

ELEC964 Integrated Service Networks
Autumn or Spring session; 4 credit points (42 hrs lectures and tutorials).
Assessment: see statement at beginning of Subject Descriptions.

Characteristics of telecommunication traffic; voice, data and video; Packet and Circuit Switching; Narrowband ISDN Networks. Broadband ISDN Networks. LAN and MAN networks.

Textbooks:
ELEC965 Telecommunications Network Management

Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs practical and 14 hrs tutorials).

Assessment: see statement at beginning of Subject Descriptions.

Preamble: ELEC965 is one of a number of elective subjects available within the Postgraduate Program in Computer and Telecommunications Engineering. The aims of this subject are to provide students with an understanding of the technical issues of telecommunications management, current management systems and their future evolution, to provide practical hands-on experience of network configuration and management systems for a selection of voice and data networks and to make students aware of economic, management and political issues in telecommunications management.

Content:
Topics covered will include: aims of private and public telecommunication systems; Local Area Networks (LANs) and Simple Network Management Protocol (SNMP); narrowband versus broadband communications; integration of voice, data and video in national and global networks; general management issues, such as cost control and business development, in telecommunication systems, both public and private; international standards; designing telecommunication systems; regulatory structure and international interworking issues and current research areas.

Objectives:
On successfully completing this subject, the student should be able to:
(i) demonstrate an understanding of the technical issues involved in telecommunications management;
(ii) explain strategic management issues, including the options created by emerging technologies;
(iii) undertake practical experimentation in network configuration; and
(iv) write technical reports on practical and project work undertaken.

Textbook: to be advised.

Co-ordinator: Professor G J Anido.

ELEC966 Telecommunications Signal Processing

Autumn or Spring session; 4 credit points (42 hrs lectures and tutorials).

Assessment: see statement at beginning of Subject Descriptions.


Textbooks:

Co-ordinator: Professor G J Anido.

ELEC967 Teletraffic Engineering

Autumn or Spring session; 4 credit points (42 hrs lectures and tutorials).

Assessment: see statement at beginning of Subject Descriptions.

The subject is designed to give students the fundamental and advanced knowledge of teletraffic analysis, monitoring and measurements in voice and data systems and networks. It provides clear insight into the analytical and practical aspects of traffic behaviour of links and switches. The case examples, based on the real traffic data collected on national and international links, allow students to practice analysis of systems performance and to compare the results with those obtained from theoretical models. The students after the completion of this subject will be able to use traffic theory for provisioning of systems/networks, for performance analysis of existing and planned systems and for more advanced traffic studies.


Textbooks:

Co-ordinator: Professor G J Anido.

ELEC968 Transmission Systems

Autumn or Spring session; 4 credit points (42 hrs lectures and tutorials).

Assessment: see statement at beginning of Subject Descriptions.


Textbooks:

Co-ordinator: Professor G J Anido.

ELEC969 Computer Communications

Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars).

Not to count with CSCI955

Assessment: see statement at beginning of Subject Descriptions.


Co-ordinator: Professor G J Anido.

ELEC970 Advanced Topics in Engineering

Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars).

Assessment: see statement at beginning of Subject Descriptions.

Aim:
The aim of this subject is to enable students to further their knowledge and abilities in topics selected from the advanced technical subject areas in the relevant postgraduate program areas.

Content:
Selected topics within the fields of computer and telecommunications engineering or automation and power engineering.

Objectives:
On successfully completing this subject, the student should be able to:
(i) develop theoretical understanding of the topics presented;
(ii) demonstrate this understanding by solving problems in the topic areas presented; and
(iii) undertake a literature search and present a written critical evaluation of a selected advanced technical topic.

Co-ordinator: Professor C D Cook.

ELEC973 Advanced Robotics and Sensory Systems

Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials).

Not to count with CSCI956 or MECH950

Assessment: see statement at beginning of Subject Descriptions.

Robotic manipulation, direct kinematics, inverse kinematics, workspace analysis and trajectory planning, differential motion and statics, manipulator dynamics, robot control. Robotic sensors, including tactile and vision, task planning, robotics in automated manufacturing. Current research developments.

Textbook: to be advised.

Co-ordinator: Professor C D Cook.
COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Information and Communication Technology by Coursework and/or Research
3. Master of Information and Communication Technology
4. Graduate Certificate in Information and Communication Technology

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of Information and Communication Technology degree by research and the Doctor of Philosophy degree:

Health Informatics
Smart Cards
Information Privacy and Security
Risk Analysis and Management

Telecommunications
Management
Policy
Regulation
International Communications
Network Planning
Industry Development

Information Technology
Education Delivery
Information Privacy and Security
Infrastructure
Management of Change
Computer Mediated Communication

SCHEDULE OF GRADUATE SUBJECTS

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<th>Number</th>
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<th>Credit Points</th>
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<td>IACT913</td>
<td>Policy Issues in Information Technology</td>
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<td>IACT915</td>
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<td>The Information Market</td>
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Part B

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<th>Subject</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CSCI948*</td>
<td>Theory and Tools of Database Design</td>
</tr>
<tr>
<td>CSCI954*</td>
<td>Artificial Intelligence</td>
</tr>
<tr>
<td>CSCI955*</td>
<td>Computer Networks</td>
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<tr>
<td>CSCI957*</td>
<td>Advanced Topics in Database Management</td>
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<tr>
<td>CSCI964*</td>
<td>Neural Computing</td>
</tr>
<tr>
<td>CSCI962*</td>
<td>Logic and Databases</td>
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<tr>
<td>STS 945</td>
<td>Technology and Economics</td>
</tr>
<tr>
<td>STS946</td>
<td>Management of Technological Change</td>
</tr>
</tbody>
</table>

Any 900 level BUSS subject, subject to approval by the relevant Heads of Departments.
No candidate may select more than 18 credit points from Part B.

* These subjects have pre-requisites.
All subjects may not be available every year.
SCHEDULE OF SUBJECTS FOR GRADUATE CERTIFICATE

Core Subjects

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>IACT913</td>
<td>Policy Issues in Information Technology</td>
<td>6</td>
</tr>
<tr>
<td>IACT916</td>
<td>Organisational Issues in Information Technology</td>
<td>6</td>
</tr>
<tr>
<td>IACT918</td>
<td>Telecommunications Management</td>
<td>6</td>
</tr>
<tr>
<td>IACT919</td>
<td>On-line Information Services</td>
<td>6</td>
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</table>

Elective Subjects

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<tr>
<td>IACT911</td>
<td>Telecommunications in Australia</td>
<td>6</td>
</tr>
<tr>
<td>IACT912</td>
<td>International Communications</td>
<td>6</td>
</tr>
<tr>
<td>IACT915</td>
<td>Carrier Regulation in Telecommunication</td>
<td>6</td>
</tr>
<tr>
<td>IACT917</td>
<td>The Information Market</td>
<td>6</td>
</tr>
<tr>
<td>IACT920</td>
<td>Globalisation in Informatics</td>
<td>6</td>
</tr>
<tr>
<td>IACT922</td>
<td>Case Studies in Information Technology Applications</td>
<td>6</td>
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<tr>
<td>IACT923</td>
<td>IT and Small Business</td>
<td>6</td>
</tr>
<tr>
<td>IACT924</td>
<td>Advanced Telecommunications Network Planning</td>
<td>6</td>
</tr>
<tr>
<td>IACT925</td>
<td>IT and Asian Economies</td>
<td>6</td>
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<tr>
<td>IACT926</td>
<td>The Impact of IT on Education &amp; Training</td>
<td>6</td>
</tr>
<tr>
<td>IACT930</td>
<td>Special Topics</td>
<td>6</td>
</tr>
</tbody>
</table>

All candidates may not be available every year. A candidate must satisfactorily complete at least 12 credit points from the core subjects.

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in IACT970.

2. HONOURS MASTER OF INFORMATION AND COMMUNICATION TECHNOLOGY

The degree of Honours Master of Information and Communication Technology shall be subject to the University Course Rules for the award of the degree of Honours Master, together with the following conditions:

(1) Entry to the Honours Master of Information and Communication Technology will be on the recommendation of the Head of the Department of Information and Communication Technology. Candidates would normally have:

(a) a Bachelor of Information and Communication Technology (Hons) at a standard of Class II, Division 2 or better (or equivalent) or
(b) a Master of Information and Communication Technology (or equivalent)

(2) The Master of Information and Communication Technology (Hons) degree will normally occupy one year of full-time study or part-time equivalent, and requires satisfactory completion of one of the following options:

(a) IACT970, or
(b) IACT960 and 900 level subjects with the value of at least 12 credit points selected from the Schedule of Graduate Subjects, Department of Information and Communication Technology. Candidates in this option may not enrol in any subjects from Part B of the Schedule.

(3) Each candidate shall have a supervisor appointed on the recommendation of the Head of Department of Information and Communication Technology.

3. MASTER OF INFORMATION AND COMMUNICATION TECHNOLOGY

The purpose of this degree is to provide graduates working in the area of information technology and telecommunications with a deeper understanding of the organisational, economic and policy issues essential to the effective management of information technology.

The degree of Master of Information and Communication Technology shall be subject to the University Course Rules for the award of the degree of Master, together with the following conditions:

(1) Entry to the Master of Information and Communication Technology will be on the recommendation of the Head of the Department of Information and Communication Technology. Candidates would normally have:

(a) the Graduate Certificate in Information and Communication Technology (with an average of a credit grade or better over all subjects); or
(b) a degree related to one of the following areas: computing; engineering; communication studies; information studies and management; or
(c) an appropriate balance between a University degree and relevant professional experience in information and/or communication technology.

In addition, applicants must have at least one year of relevant professional experience in information and/or communication technology.

(2) The Master of Information and Communication Technology degree will normally occupy one year of full-time study or part-time equivalent, and requires satisfactory completion of 900 level subjects to the value of at least 48 credit points (excluding the subjects IACT960 and IACT970), selected from the Schedule of Graduate Subjects, Department of Information and Communication Technology.

4. GRADUATE CERTIFICATE IN INFORMATION AND COMMUNICATION TECHNOLOGY

This one year part-time course is designed for graduates from a recognised tertiary institution. The objective of the Graduate Certificate is to provide an introductory study of the concepts of information and communication technology. The course will cover the issues which arise in the implementation and application of information technology. It addresses the challenge of educating managers and executives about the organisational, economic, regulatory and social problems that must be solved as highly complex technological systems are implemented.

The Graduate Certificate in Information and Communication Technology shall be subject to the University Rules for the award of Graduate Certificate together with the following conditions:

(1) Applicants for the Graduate Certificate in Information and Communication Technology must have been admitted to the degree of Bachelor in the University or other approved institution. In special circumstances an applicant holding other academic or professional qualifications and with relevant work experience and/or employer support may be admitted as a candidate.
Candidates must satisfactorily complete at least 24 credit points from the Schedule of Subjects for the Graduate Certificate, of which at least 12 credit points are from the list of Core Subjects.

Students qualifying for the Graduate Certificate in Information and Communication Technology who have achieved an average of a credit grade or better over all subjects, will be able to proceed to the Master of Information and Communication Technology. They will receive advanced standing of 24 credit points. The completion of the Masters will then require the satisfactory completion of a further 24 credit points as specified in the schedule for that course.

Prior to the conferring of a Master of Information and Communication Technology upon a candidate who holds the Graduate Certificate in Information and Communication Technology of this University, the candidate shall surrender the testamur and all rights relating to the graduate certificate.

SUBJECT DESCRIPTIONS

Not all 900 level subjects will be offered every year. Intending candidates should consult with academic advisers in the Department (or the University Timetable) for further advice.

Textbooks

Textbooks will be advised where appropriate otherwise comprehensive reading lists will be provided in the first lecture of each subject.

IACT911 Telecommunication in Australia

Autumn or Spring session; 6 credit points (3 contact hrs);
Assessment: 2 essays x 3,000 words 60%, tutorial assignments 40%.

In recent years there has been a period of rapid technological innovation, industry restructuring and regulatory change in Australian telecommunications. This subject analyses the emergence of political, economic and technological change in telecommunications over the last decade. The development of government policy towards the telecommunications carriers from the Davidson Report to the present is examined. The role of large user organisations in pressing for changes and their use of overseas models of deregulation and privatisation will be studied. The combined effect of these forces on the future structure, ownership and use of the Australian network will be scrutinised.

Co-ordinator: Dr R Joseph.

IACT912 International Communications

Autumn or Spring session; 6 credit points (3 contact hrs);
Assessment: 2 essays x 3,000 words 60%, tutorial assignments 40%.

The growth in international information flows has brought conflict between global marketplaces and national economic and political priorities. This subject will examine the forces pressing for the removal of national policies that inhibit the flow of information across geographical borders. The attempts of nation states to maintain technological autonomy and political sovereignty will also be studied. In particular, the issues of trans-border data flows and the imbalance between the North and South will be critically reviewed. The implications for international bodies such as Intelsat and the International Telecommunication Union will be analysed.

Co-ordinator: Dr R Joseph.

IACT913 Policy Issues in Information Technology

Autumn or Spring session; 6 credit points (3 contact hrs);
Assessment: 2 essays x 3,000 words 60%, tutorial assignments 40%.

The emergence of information in electronic form as a key source of value in highly developed economies has prompted governments to develop national policies that establish a framework for the growth of services in this area. Approaches taken by governments to this question in Australia, the USA, UK and Japan will be contrasted. Issues that will be analysed include national information technology policies, information technology and the organisation of work and legal aspects of information technology.

Co-ordinator: Dr R Joseph.

IACT914 Carrier Regulation in Telecommunications

Autumn or Spring session; 6 credit points (3 contact hrs);
Assessment: 2 essays x 1,500 words 70%, tutorial assignments 30%.

Historical emergence of the role of governments in the regulation of telecommunications; the European and the North American experience; public ownership of telecommunications infra-structure versus private; monopoly versus competitive carriage; global pressures toward re-regulation; operation of basic and value added services and the third-party traffic issue.

Co-ordinator: to be advised.

IACT915 Organisational Issues in Information Technology

Autumn or Spring session; 6 credit points (3 contact hrs);
Assessment: 3 essays 75%, seminars 15%, tutorials 10%.

Effect on organisational information flows of growth in size and complexity: the management and technological response; information technology as a catalyst in codifying work procedures and creating new organisational structures; hierarchical versus horizontal approaches to information management; implications of broadband networks for traffic integration.

Co-ordinator: Mr A Dean.

IACT916 Organisational Issues in Information Technology

Autumn or Spring session; 6 credit points (3 contact hrs);
Assessment: 3 essays 75%, seminars 15%, tutorials 10%.

Effect on organisational information flows of growth in size and complexity: the management and technological response; information technology as a catalyst in codifying work procedures and creating new organisational structures; hierarchical versus horizontal approaches to information management; implications of broadband networks for traffic integration.

Co-ordinator: Mr A Dean.

IACT917 The Information Market

Autumn or Spring session; 6 credit points (3 contact hrs);
Assessment: 2 x 3,000 word essays 60%, seminars/tutorials 40%.

In its investigation of the information market, this subject examines the ownership and exploitation of information as a source of social, political and economic power. Legal protection for information as an economic good (for example as patents, copyrights and moral rights) and property (intellectual property) is also explored. The development of an information infrastructure with the spread of computer networks is facilitating the emergence of a global information marketplace. An important focus in this subject is the effect of information and communication technologies on the economics of information delivery.

Co-ordinator: Ms C Alcock.

IACT918 Telecommunications Management

Autumn or Spring session; 6 credit points (3 contact hrs);
Assessment: 1 examination 50%, 2 x 1,500 word essays 30%, seminars 20%.

Role of telecommunications in corporate strategy: cost control versus business development; regulatory and strategic issues in the use of private and public networks; service options in Local Area Networks (LANs); private automatic branch exchange and public exchange; monopoly versus competitive carriage; global versus broadband in intra-office communications; integration of voice, data and video in national and global networks.

Co-ordinator: Ms R Lindley.

IACT919 Online Information Services

Autumn or Spring session; 6 credit points (3 contact hrs);
Assessment: 1 x 3,000 word essay 30%, 1 report 30%, seminars 40%.

This subject examines the emergence of electronic information supermarkets and the changes in ownership that have taken place within the online information industry as mass media conglomerates have entered the field. Other aspects covered include: the role of government in the development of online databases and networks; the creation of "value-added" products through re-formatting, marketing and packaging; the role of intermediaries; the potential of network development such as AARNet, the Internet, and NREN in the delivery of online information resources. Some practical experience in the use of electronic information services is provided including Australian and international databases and computer networks.

Co-ordinator: Ms C Alcock.

IACT920 Globalisation in Informatics

Autumn or Spring session; 6 credit points (3 contact hrs);
Assessment: 1 examination 40%, 1 report 40%, seminars 20%.

Topics covered will be: dominance of transnational suppliers in global markets for computing and telecommunications; geographic diversity and division of labour in research and development; cost structures and strategic issues in choice of manufacturing locations; vertical versus horizontal integration; cross-ownership and the emergence of pro-competitive strategic alliances.

Co-ordinator: to be advised.
ICT922 Case Studies in Information Technology Applications
Autumn or Spring session; 6 credit points (3 hrs per wk).
Assessment: 2 written reports 70%, seminar presentations 30%.
Topics covered will include: innovative uses of information technology to create new services and systems e.g., electronic banking, international currency trading; centralised mainframe computing versus distributed intelligence; technology options for high-speed data networks; video-conferencing as a travel substitute; public information retrieval systems e.g., videotex.
Co-ordinator: Professor J Cooper.

ICT923 IT and Small Business
Autumn or Spring session, 6 credit points (3 contact hrs).
Assessment: written assignments 85%, seminar presentations 15%.
This subject will study the relationship between small business and IT, the management of IT in small business and the impact of IT on small business with regard to a number of critical areas such as productivity, staff development, accessibility of technology, business size and activity, change management, research and development.
Co-ordinator: Mr A Dean.

ICT924 Advanced Telecommunications Network Planning
Autumn or Spring session; 6 credit points (3 contact hrs).
Assessment: essay 20%, seminar presentation 20%, tutorial paper 10%, and case study 50.
The process of developing a telecommunications network plan is becoming a more difficult task with the rapid diversification and advances in the technological and design options available. This subject investigates Telecommunications Network Planning in greater depth, providing details of the operation of a telecommunications network as a complex, interrelated set of operations. It examines the scope of the network operation plan from the user's perspective. Topics will include: (1) the need for forward network planning; (2) traffic flow control and forecasting; (3) network security; (4) long range planning considerations; (5) dimensioning; and, (6) project management techniques that are relevant to the telecommunications network planning and implementation process.
Case Study
Students will be required to critically analyse the telecommunications network plan for a large corporation.
Co-ordinator: Ms R Lindley.

IAC925 Information Technology And The Asian Economies
Spring or Autumn Session; 6 credit points (3 hrs per week).
Assessment: group Research Project 40%, 2 essays 30% each.
Textbooks: Prescribed readings on measurement of the information sector (e.g., Machlup and Porat); problems of developing countries (e.g., Todaro); and IT and telecommunications development (selected readings).
Co-ordinator: to be advised.

Content:
The subject will examine the significance of information technology and telecommunications in the diverse economies of Asia. The contribution of the information sector in creating wealth and jobs will be examined, having regard to differences in population density, political organisation, infrastructure development, rate of technology transfer, and trading agreements. The activities of large multinational computing, telecommunications and media conglomerates will receive special treatment. Factors that inhibit the uptake of information and telecommunications technology will be analysed, together with sources and conditions of foreign capital for infrastructural development and foreign assistance in technical training. Throughout the course, the relationship of Australia with the countries under study will be examined.

Objectives:
On completion of this subject, students should be able to:
1) discuss the economies of Asian nations in general terms;
2) explain the various methods of measuring the contribution of information/telecommunication products and services to a national economy;
3) analyse the role of information technology and telecommunications in the development of the Asian economies;
4) discuss the activities of multinational corporations in relation to Asian governments and indigenous IT industries;
5) evaluate the importance of bilateral and multilateral trading agreements for development of the information sector in each country;
6) outline the implications for each country of global networking and information sharing;
7) assess the role of Australia with regard to information and telecommunications technology in the Asian economies - as aid donor, partner in infrastructural and skill development, and commercial trader.

ICT926 The Impact of IT on Education and Training
Spring or Autumn Session; 6 credit points (3-4 hrs per week).
Assessment: written assignments (seminar, projects, case studies, essays)

Content:
The subject will examine the changing composition of the work force and relate this to the introduction and application of IT. An examination of the trends in Australia, and internationally, with respect to increasing credentialism, life-long learning and other education and training issues will be undertaken. Study of the appropriate use of techniques and technologies of education, including expansion of distance education, will form another component of the subject.

Objectives:
After successful completion of this subject students should be able to:
1) explain the role of IT in the trends relating to the composition of the Australian work force;
2) isolate the major issues associated with the use (and impact of same) of IT and compile suggestions about how commerce and industry can respond to the need for knowledge and skill development;
3) report on the major trends in education/training in Australia (and to a lesser extent overseas) as they relate to skill and knowledge development and use of IT;
4) list and explain a range of techniques and technologies used in developing knowledge and skills including those applicable to distance education;
5) analyse and report on national (and/or state) plans for the continuing development of skills and knowledge.
Co-ordinator: Professor J Cooper.

ICT930 Special Topics
Spring or Autumn Sessions; 6 credit points (3 hrs per wk).
Assessment: to be advised.
Topics will be selected from areas of interest of staff members or visiting staff members to the Department. These will include topics in the application of information and communication technology. Noting that IT is a rapidly changing area, this subject will allow for the inclusion in the MInfoTech degree topics at the forefront of the discipline.
Co-ordinator: Professor J Cooper.

ICT950 Research Report
Annual; 12 credit points.
This subject involves undertaking a project. Where possible the projects are related to the research interests of the Department and/or staff and are chosen to develop the student's research skills. Each student is required to deliver an oral seminar and to prepare a final thesis on the result of the work undertaken.

ICT960 Minor Thesis
Annual; 36 credit points.
This subject will be externally accessed.

ICT970 Major Thesis
Annual; 48 credit points per year of enrolment.
MATHEMATICS

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Science by either Research or both Coursework and Research
3. Master of Mathematics

POSTGRADUATE PROGRAMS

Engineering & Industrial Mathematics
Pure Mathematics

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of Science degree by research and the Doctor of Philosophy degree:

- Combinatorial designs
- Continuum mechanics
- Fluid mechanics
- Functional analysis
- Hadamard matrices
- Industrial applications of mathematics
- Logic
- Measure theory
- Non-linear boundary value problems
- Non-linear partial differential equations
- Numerical wave modelling
- Oceanography
- Quantum mechanics
- Set theory
- Solid and fracture mechanics
- Topological Groups
- Topology

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN ENGINEERING & INDUSTRIAL MATHEMATICS

leading to the degree of Honours Master of Science or Master of Mathematics.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>Core</td>
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</tr>
<tr>
<td>Either</td>
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<td></td>
</tr>
<tr>
<td>MATH91</td>
<td>Project</td>
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<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td>MATH92</td>
<td>Minor Thesis</td>
<td>36</td>
</tr>
<tr>
<td>Electives</td>
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<tr>
<td>MATH902</td>
<td>Solution of Differential Equations by One-Parameter Groups</td>
<td>6</td>
</tr>
<tr>
<td>MATH911</td>
<td>Coastal Dynamics</td>
<td>6</td>
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<tr>
<td>MATH912</td>
<td>Mathematics of Microwave Heating</td>
<td>6</td>
</tr>
<tr>
<td>MATH913</td>
<td>Fluid Mechanics and Wave Theory</td>
<td>6</td>
</tr>
<tr>
<td>MATH914</td>
<td>Analytical Dynamics</td>
<td>6</td>
</tr>
<tr>
<td>MATH915</td>
<td>Applied Nonlinear Partial Differential Equations</td>
<td>6</td>
</tr>
<tr>
<td>MATH916</td>
<td>Heat Conduction and Moving Boundary Problems</td>
<td>6</td>
</tr>
<tr>
<td>MATH917</td>
<td>Advanced Numerical Analysis</td>
<td>6</td>
</tr>
<tr>
<td>MATH918</td>
<td>Computational Fluid Mechanics</td>
<td>6</td>
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<tr>
<td>MATH971</td>
<td>Advanced Topics in Applied Mathematics A</td>
<td>6</td>
</tr>
<tr>
<td>MATH972</td>
<td>Advanced Topics in Applied Mathematics B</td>
<td>6</td>
</tr>
<tr>
<td>MATH980</td>
<td>Preliminary Topics in Mathematics A</td>
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</tr>
<tr>
<td>MATH981</td>
<td>Preliminary Topics in Mathematics B</td>
<td>6</td>
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</table>

For further details, see Course Requirements below.
POSTGRADUATE PROGRAMS IN PURE MATHEMATICS
leading to the degree of Honours Master of Science or Master of Mathematics.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>Program A - Analysis</td>
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<tr>
<td>Either</td>
<td>MATH991 Project</td>
<td>12</td>
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<tr>
<td>or</td>
<td>MATH992 Minor Thesis</td>
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<tr>
<td>Electives</td>
<td>MATH904 Stability for Partial Differential Equations</td>
<td>6</td>
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<tr>
<td></td>
<td>MATH905 Functional Analysis and Control Theory</td>
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<tr>
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<td>MATH921 Advanced Functional Analysis</td>
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<td>MATH923 Measure and Integration</td>
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</tr>
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<td>MATH924 Distributions</td>
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<td>MATH928 Advanced Measure Theory</td>
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<td>MATH973 Advanced Topics in Pure Mathematics A</td>
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<td>MATH974 Advanced Topics in Pure Mathematics B</td>
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<tr>
<td></td>
<td>MATH980 Preliminary Topics in Mathematics A</td>
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</tr>
<tr>
<td></td>
<td>MATH981 Preliminary Topics in Mathematics B</td>
<td>6</td>
</tr>
</tbody>
</table>

Program B - Foundations of Mathematics

| Core | Either | MATH991 Project | 12 |
| or | MATH992 Minor Thesis | 36 |
| Electives | MATH903 Mean Periodic Functions | 6 |
| | MATH925 Topics in Algebra | 6 |
| | MATH926 Logic and Set Theory | 6 |
| | MATH927 Combinatory Logic | 6 |
| | MATH929 General Topology | 6 |
| | MATH973 Advanced Topics in Pure Mathematics A | 6 |
| | MATH974 Advanced Topics in Pure Mathematics B | 6 |
| | MATH980 Preliminary Topics in Mathematics A | 6 |
| | MATH981 Preliminary Topics in Mathematics B | 6 |

For further details, see Course Requirements below.

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in MATH993.

2. HONOURS MASTER OF SCIENCE

The degree of Honours Master of Science shall be subject to the University Course Rules for the award of the degree of Honours Master together with the following conditions.

(1) A candidate shall undertake research, or a course of graduate studies and research, normally chosen from one of the postgraduate programs offered by the Department of Mathematics.

(2) Entry to the Honours Master of Science will normally be from an Honours bachelor degree in Mathematics at a standard of Class II, Division 2 or higher. Entry may also be approved for candidates with the qualification of Master of Mathematics on the recommendation of the Head of the Department of Mathematics.

(3) The Honours Master of Science will normally occupy two sessions of full-time study or four sessions of part-time study, and requires satisfactory completion of 900 level subjects to the value of at least 48 credit points chosen from one of the postgraduate programs offered by the Department of Mathematics including either:

(a) the subject MATH993 (48 credit points), or
(b) the subject MATH992 (36 credit points) and other 900 level subjects to the value of at least 12 credit points approved by the Head of Department.

In exceptional circumstances, and subject to approval of the Head of the Department, subjects with the value of at most 6 credit points from the program may be replaced by any other 900 level subjects with value of at least 6 credit points.

(4) The registration of a candidate will be subject to termination if that candidate fails subjects to the total value of 18 or more credit points.

(5) Each candidate shall have a supervisor appointed on the recommendation of the Head of the Department of Mathematics.

(6) Before the award of Honours Master of Science is conferred on a candidate who holds a testamur of the University of Wollongong for the degree of Master of Mathematics, the candidate shall surrender the testamur and the corresponding rights to the degree of Master of Mathematics.

3. MASTER OF MATHEMATICS

The degree of Master of Mathematics shall be subject to the University Course Rules for the award of the degree of Master together with the following conditions.

(1) A candidate shall undertake a course of graduate studies and research, normally chosen from the graduate subjects offered by the Department of Mathematics.

(2) Entry to the Master of Mathematics will normally be from a pass degree with an appropriate 3 year sequence in Mathematics, or, subject to the approval of Council on the recommendation of the Head of Department, from a degree or diploma containing substantial study in an appropriate discipline.

(3) The Master of Mathematics will normally occupy two sessions of full-time study or four sessions of part-time study, and requires satisfactory completion of 900 level subjects to the value of at least 48 credit points including the subject MATH991 (12 credit points) and other 900 level subjects to the value of at least 36 credit points approved by the Head of Department. In exceptional circumstances, and subject to approval of the Head of the Department, subjects with the value of at most 12 credit points, other than MATH991, may be replaced by other 900 level subjects with value
of at least 12 credit points offered by departments other than the Department of Mathematics.

(4) The registration of a candidate will be subject to termination if that candidate fails subjects to the total value of 18 or more credit points.

(5) Each candidate shall have a supervisor appointed on the recommendation of the Head of the Department of Mathematics.

SUBJECT DESCRIPTIONS

Subjects
For further details, see the postgraduate coursework co-ordinator: Associate Professor J Hill.

Textbooks
Students will be advised on the appropriate texts for each subject in the first lecture of the subject. In all cases, the lecturer should be consulted before textbooks are purchased.

Credit Points
All subjects listed below, with the exception of MATH991, MATH992 and MATH993, have a credit point value of 6.

Contact Hours
All subjects listed below involve at least one contact hour per week for both sessions, or its equivalent.

Method of Assessment
All 900-level subjects will be assessed by final examinations, or final examinations and coursework.

MATH902 Solution of Differential Equations by One - Parameter Groups
Assessment: examination 75%, assignments 25%.
Co-ordinator: Associate Professor P Laird.

MATH903 Mean Periodic Functions
Assessment: examination 75%, assignments 25%.
Co-ordinator: Associate Professor P Laird.

MATH904 Stability for Partial Differential Equations
Assessment: essay 15%, examination 60%, assignment 25%.
Pre-Requisite: MATH305.
This subject is concerned with parabolic and elliptic partial differential equations. The main topic is the stability of solutions under changes in initial values or other parameters connected with the equations. Some of the tools that will be used are an analysis of the spectrum for elliptic operators and the Linearization Principle.
Co-ordinator: Dr V Belov / Dr G Williams.

MATH905 Functional Analysis and Control Theory
Assessment: examination 75%, assignments 25%.
Pre-Requisite: MATH305, MATH222.
This subject introduces several function spaces and then examines how they can be used in the theory of partial differential equations and control theory. Some of the topics considered will be the existence and uniqueness of solutions for hyperbolic and parabolic partial differential equations and the exact controllability for systems governed by the wave equation.
Co-ordinator: Dr V Belov / Dr G Williams.

MATH911 Coastal Dynamics
Assessment: examination 75%, assignments 25%.
Generation and propagation of continental shelf waves of high and low frequency in homogeneous and non-homogeneous oceans, response of the ocean over a shelf to atmospheric disturbances, detection and measurement of shelf waves, dissipative influences, standing edge waves and their relation to beach geomorphology, modelling of physical marine systems.
Co-ordinator: Associate Professor D Clarke.

MATH912 Mathematics of Microwave Heating
Assessment: examination 75%, assignments 25%.
Electromagnetics, Gauss' law, magnetic fields, induction, Maxwell's equations, the damped wave equation, the forced heat equation, solutions of microwave heating for constant conductivity, temperature dependent conductivity, hotspots.
Co-ordinator: Dr T Marchant.

MATH913 Fluid Mechanics and Wave Theory
Assessment: examination 75%, assignments 25%.
Hyperbolic partial differential equations, conservation laws, shallow water equations, dispersive waves, soliton theory, gas dynamics, shock waves, flow past bodies, conformal mapping, aerofoil theory.
Co-ordinator: Dr T Marchant.

MATH914 Analytical Dynamics
Assessment: examination 75%, assignments 25%.
Lagrangian and Hamiltonian formulations, symmetry and conservation laws. Regular and chaotic motion. Strange attractors.
Co-ordinator: Professor P Broadbridge.

MATH915 Applied Nonlinear Partial Differential Equations
Assessment: examination 75%, assignments 25%.
Co-ordinator: Professor P Broadbridge.

MATH916 Heat Conduction and Moving Boundary Problems
Assessment: examination 75%, assignments 25%.
Solutions of the heat equation, semi-infinite media, solution by Fourier series, solutions by heat-balance, classical moving boundary problems, large Stefan number expansions, integral formulation, bounds, integral equations, polynomial approximations, boundary fixing series solutions.
Co-ordinator: Associate Professor J Hill.

MATH917 Advanced Numerical Analysis
Assessment: examination 75%, assignments 25%.
Co-ordinator: to be advised.

MATH918 Computational Fluid Mechanics
Assessment: examination 75%, assignments 25%.
Finite-difference and finite element methods applied to incompressible inviscid flow problems and incompressible viscous flow problems. Introduction to Boundary-element technique and its application to potential flows. The relationship between these numerical approaches will also be discussed.
Co-ordinator: Dr S Zhu.

MATH919 Advanced Functional Analysis
Assessment: examination 75%, assignments 25%.
Normed spaces, Banach spaces, linear operators, applications of the theory of linear operators to other areas of analysis such as Fourier analysis, quadrature formulae and integral equations.
Co-ordinator: Associate Professor R Nillsen.

MATH920 Advanced Measure and Integration
Assessment: examination 75%, assignments 25%.
Lebesgue measure and more general measures, measurable functions, Lebesgue integration and its properties, behaviour of integrals under taking limits, product integrals.
Co-ordinator: Associate Professor R Nillsen / Dr G Williams.

MATH921 Advanced Numerical Analysis
Assessment: examination 75%, assignments 25%.
Mikusinski's theory of convolution quotients and an introduction to L. Schwartz's theory of distributions. Properties of the space of continuous functions of a single real variable (equipped with a suitable topology) and dual space.
Co-ordinator: Associate Professor P Laird.

MATH922 Topics in Algebra
Assessment: examination 75%, assignments 25%.
Partially ordered sets, lattices, modular lattices, Boolean Algebras and Boolean rings, orthomodular lattices.
Co-ordinator: Dr F Prokop.

MATH923 Logic and Set Theory
Assessment: examination 75%, assignments 25%.
Axiomatic propositional and predicate logic,
nondclassical logics, applications to circuit theory and logic programming, introduction to Axiomatic Set Theory.
Co-ordinator: Associate Professor M Bunder.

MATH927 Combinatory Logic
Assessment: examination 75%, assignments 25%.
Pre-Requisite: MATH926.
Introduction to Pure and Illature combinatorial logic, relation to lambda-conversion, functionality, application to propositional and predicate calculus.
Co-ordinator: Associate Professor M Bunder.

MATH928 Advanced Measure Theory
Assessment: examination 75%, assignments 25%.
Pre-Requisite: MATH923.
Construction of outer, measures, Hausdorff measures, signed measures, Radon-Nikodym theorem, differentiation of measures.
Co-ordinator: Dr G Williams.

MATH929 General Topology
Assessment: examination 75%, assignments 25%.
Prerequisite: MATH222.
This subject is a systematic discussion of topological spaces and associated concepts which are of fundamental importance in various areas of mathematics. The topics covered will include topologies, bases and subbases for topologies, separation properties of topologies, product and quotient topologies, and connectedness and compactness. Depending upon students' interests and backgrounds, excursions into the following or other areas are possible: topological groups, programming language semantics, elementary algebraic topology, dimension theory and cardinal invariants.
Co-ordinator: Dr P Nickolas.

MATH974 Advanced Topics in Pure Mathematics B
Assessment: examination 75%, assignments 25%.
Topics will be selected from the areas of interest of staff members or visiting staff members of the department. These may include topics in Analysis, Algebra, Logic or Number Theory.
Co-ordinator: Head of Department.

MATH980 Preliminary Topics in Mathematics A
A selection of topics will be available from time to time to serve as preliminary material in the Master of Mathematics.
Co-ordinator: Head of Department.

MATH981 Preliminary Topics in Mathematics B
A selection of topics will be available from time to time to serve as preliminary material in the Master of Mathematics.
Co-ordinator: Head of Department.

MATH991 Project
12 credit points.

MATH992 Minor Thesis
36 credit points.

MATH993 Thesis
48 credit points per year.
FACULTY OF LAW
Faculty Office

Dean: Professor Helen Gamble
Associate Dean: Associate Professor Colin Thomson
Sub Dean: Ms Patricia Blazey-Ayoub
Dean's Assistant: Ms Felicia Martin
Executive Officer: Ms Wendy Raikes (042) 21 3194
Administrative Assistant: Ms Maria Agnew (042) 21 3456

Research Courses Available

The Faculty offers Honours Master of Laws, Honours Master of Arts, Honours Master of Commerce, Honours Master of Laws (Natural Resources Law), Honours Master of Natural Resources Law, Honours Master of Laws (Court Management), Honours Master of Court Management and the Doctor of Philosophy degrees by research.

Postgraduate Programs

Postgraduate programs are available in the Faculty in the following areas:

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<td>Court Management</td>
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<tr>
<td>Law</td>
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<tr>
<td>Natural Resources Law</td>
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</tr>
</tbody>
</table>
Dean
Professor Helen E C Gamble, LLB LLM
ANU, Barrister and Solicitor ACT, Barrister NSW

Associate Dean
Associate Professor Colin J H Thomson, BA LLM Syd, Solicitor NSW, Barrister and Soliciotr ACT

Sub-Dean
Patricia J Blazy-Ayoub, SRN Lon, BA LLM Macq, LLM Syd, Solicitor NSW

Executive Officer
Wendy Raikes, BA, MMgt, MAITEA

Administrative Assistants
Maria Agnew
Shelley Johnson
Felicia Martin
Frances Sullivan, BA, MAITEA

Professors
M David Farrier, LLB Lond, LLM Col, DipCrim Cemb, Barrister NSW
John Goldring, BA LLM Syd, LLM Col, Barrister NSW and Solicitor ACT and PNG

Associate Professors
Kenneth W Hale, BA, LLB Qld, LLM Syd, Barrister NSW and High Court
Robin P Handley, LLB Waru, LLM ANU, Solicitor NSW, England and Wales, Barrister and Solicitor ACT and High Court
Ainslie Lamb, LLB Melb, GDipSoc La Trobe, GDipFamLaw Monash, MEd Melb

Adjunct Professor
Lindsay J Curtis, BSc LLB Melb, Barrister and Solicitor ACT and PNG

Honorary Professorial Fellows
G Leroy Certoma, BA LLB(Hons)Syd, Dott in Giur Firenze, Solicitor NSW
Peter Hopkins, BSc LLB(Hons) ANU
Beverley Hoskinson-Green, LLB NSW, LLM(Hons) Harvard
Jillian Segal, BA LLB NSW, LLM Harvard
Shane Simpson, LLB LLM Auckland
John Whitehouse, BA LLB Syd, BSc Macq, DipLegalScience UTS

Senior Lecturers
Charles Y C Chew, MA Syd, DipEd NE, BLegs Macq, Barrister and Solicitor VIC, Solicitor NSW
Damien Considine, BA LLB UNSW, LLM Syd, Solicitor and Attorney NSW and High Court
Jane G Innes, BSc LLM Syd, Solicitor NSW, Barrister and Solicitor ACT and Vic

Lecturers
Margaret Bond, BSW LLB UNSW, Solicitor NSW
Andrew D Frazer, BA LLB Syd, PhD ANU
D Scott Grattan, BA LLB Macq, Solicitor NSW
Andrew H H Kelly, BTP LLB, UNSW, Grad Dip Leg Prac UTS, Solicitor NSW
Luke McNamara, BA LLB UNSW, LLM Manit
Sandra Mercado, BA LLB Syd, Barrister NSW

Thomas Musgrave, BA Winds, LLB BCL McGill, LLM Melb, PhD Syd, Solicitor and Barrister Supreme Court Ontario
Natalie P Stoianoff, BSc LLB MAAppSc UNSW, Solicitor NSW
Penelope Watson, BA Tas, LLB UNSW, LLM Syd, Solicitor NSW

Research Director
Richard Mohr, BA PhD UNSW

Honorary Fellows
William Dalley, BA LLM Syd, Barrister ACT and NSW
Liane Devigle, BA Qld, LLB Adelaide, LLM Keio, Tokyo
Danny Lagopodis, BLegs Macq, BCom MStudAcc, Solicitor NSW
Ian McCall, Solicitor NSW
William McKinnon Macquarie, Solicitor NSW

LAW LIBRARY

Librarian
Elizabeth White, BA GDipLib & Information Science (CSU)

Library Staff
Gay Antonopoulous, BA Wisconsin, AALIA
Cheryl Brindle-Jones, BA CSU
Vicki Dodd, BSc Macq, Dip IM-Lib NSW
Annette Meldrum
Sandi Wooton

FACULTY VISITING COMMITTEE

The Honourable Judge R O Blanch, Chief Judge, District Court
Ms Patricia Bergin, Barrister, Sydney
Ms Marion Brown, Guardianship Board
Ms Sharyn Ch'ang, Legal Counsel, IBM Australia
Mr Stephen Gates, Partner, Clayton Utz, Sydney
Mr Laurie Glenfield, Director-General, Attorney General's Department of NSW
Mr Peter Hadden, QC, Sydney
The Honourable Dr Robert M Hope, QC, Chancellor, University of Wollongong (ex-officio)
Ms Gai McDowell, Director of Wollongong Office, Director of Public Prosecutions
The Honourable Daryl Melham, MP, Chair House of Representatives Standing Committee on Legal and Constitutional Affairs
Ms Nancy Milne, Phillips Fox, Sydney
Ms Hilary Penfold, First Parliamentary Counsel
His Honour Judge Joseph Phelan, District Court of NSW
Mr Mark Richardson, Deputy Chief Executive Officer, Law Society of NSW
The Honourable Ms Helen Sham-Ho, MLC
Mr Richard St John, Secretary and General Counsel, BHP
Ms Sue Tongue, Deputy President, Australian Law Reform Commission
Justice William Windeyer, RFD, Supreme Court of NSW
COURSES OFFERED

The Faculty offers the following postgraduate diplomas and degrees:

1. Doctor of Philosophy
2. Honours Master of Laws by Research
3. Honours Master of Arts by Research
4. Honours Master of Commerce by Research
5. Honours Master of Laws (Natural Resources Law) by Research
6. Honours Master of Natural Resources Law by Research
7. Honours Master of Laws (Court Management) by Research
8. Honours Master of Court Management by Research
9. Honours Master of Arts by Coursework
10. Honours Master of Commerce by Coursework
11. Master of Laws (Court Management)
12. Master of Court Management
13. Master of Laws (Natural Resources Law) by Coursework
14. Master of Natural Resources Law by Coursework
15. Graduate Diploma in Law
16. Graduate Diploma in Law (Court Policy and Administration)
17. Graduate Diploma in Natural Resources Law

CURRENT RESEARCH AREAS

Supervision in research in the following areas is likely to be available to candidates undertaking research degrees:

Administrative law
Anti-discrimination law
Commercial and finance law
Company law
Comparative law
Constitutional law
Consumer protection law
Contract law
Court policy and administration
Criminal law
Cross-cultural legal issues
Dispute Resolution
Environmental and planning law
Family law and welfare policy
Feminism and law
Industrial relations law
Information technology law
Insurance law
Intellectual property law
International law
Jurisprudence
Law and literature
Law relating to evidence, remedies and court procedure
Law relating to the sea
Natural resources law
Property law
Refugee law
Regulation of economic activity
Taxation law and practice
Torts.

SCHEDULE OF PROGRAMS

HONOURS MASTER OF ARTS BY COURSEWORK and
HONOURS MASTER OF COMMERCE BY COURSEWORK

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<td>LAW951</td>
<td>Taxation Policy and Practice</td>
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<td>LAW963</td>
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<td>LAW964</td>
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<tr>
<td>LAW965</td>
<td>Studies in Administrative Law</td>
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<td>LAW987</td>
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<td>LAW988</td>
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**MASTER OF LAWS (COURT MANAGEMENT) and MASTER OF COURT MANAGEMENT**

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<tr>
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<tr>
<td>LAW801</td>
<td>Court Management I - Principles of Judicial Administration</td>
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<td>LAW802</td>
<td>Court Management II - Processes of Dispute Resolution</td>
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<tr>
<td>LAW803</td>
<td>Court Management III - Case Management</td>
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<tr>
<td>LAW901</td>
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<td>BUSS903</td>
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**MASTER OF LAWS (NATURAL RESOURCES LAW)* and MASTER OF NATURAL RESOURCES LAW* **

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>LLB930</td>
<td>Research Project in Natural Resources Law</td>
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*Candidates must complete the requirements for the Graduate Diploma in Natural Resources Law as well as the above subject.

**GRADUATE DIPLOMA IN LAW**

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<tr>
<th>Number</th>
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<tbody>
<tr>
<td>LAW810</td>
<td>Law in Society</td>
<td>8</td>
</tr>
<tr>
<td>LAW811</td>
<td>Law of Contracts</td>
<td>8</td>
</tr>
</tbody>
</table>

Candidates will also complete subjects to a value of at least 32 credit points selected from the Legal Studies Schedule set out in the Undergraduate Calendar.

**GRADUATE DIPLOMA IN LAW (COURT POLICY AND ADMINISTRATION)**

<table>
<thead>
<tr>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>LAW801</td>
<td>Court Management I - Principles of Judicial Administration</td>
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<tr>
<td>LAW802</td>
<td>Court Management II - Processes of Dispute Resolution</td>
<td>6</td>
</tr>
<tr>
<td>LAW803</td>
<td>Court Management III - Case Management</td>
<td>6</td>
</tr>
<tr>
<td>LAW804</td>
<td>Court Management IV - Current Issues in Judicial Administration</td>
<td>12</td>
</tr>
</tbody>
</table>

Candidates will also complete BUSS903; MGMT911; ACCY850 - refer to the Faculty of Commerce section.

**GRADUATE DIPLOMA IN NATURAL RESOURCES LAW**

<table>
<thead>
<tr>
<th>Number</th>
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<tbody>
<tr>
<td>LLB910</td>
<td>Introduction to Law</td>
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<tr>
<td>LLB911</td>
<td>Introduction to Natural Resources Law</td>
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<tr>
<td>LLB913</td>
<td>Resources Decision Making</td>
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**Compulsory subjects:**

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<tbody>
<tr>
<td>LLB914</td>
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</tr>
<tr>
<td>LLB915</td>
<td>Commercial Aspects of Resources Development</td>
<td>8</td>
</tr>
<tr>
<td>LLB916</td>
<td>Energy Law I</td>
<td>8</td>
</tr>
<tr>
<td>LLB917</td>
<td>Energy Law II</td>
<td>8</td>
</tr>
<tr>
<td>LLB918</td>
<td>Law of Land &amp; Nature Conservation</td>
<td>8</td>
</tr>
<tr>
<td>LLB919</td>
<td>Water Resources Law</td>
<td>8</td>
</tr>
<tr>
<td>LLB920</td>
<td>Local Government &amp; Natural Resources</td>
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<tr>
<td>STS929*</td>
<td>Studies in Resources and Environmental Policy</td>
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*Options - at least 3 chosen from those offered which may include:*

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<td>Local Government &amp; Natural Resources</td>
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*STS929 is offered by the Department of Science and Technology Studies.

**GRADUATE DIPLOMA IN COMMERCE (MANAGEMENT) and MASTER OF BUSINESS ADMINISTRATION**

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<thead>
<tr>
<th>Number</th>
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<tr>
<td>LAW960</td>
<td>Legal Studies for Professionals</td>
<td>6</td>
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<tr>
<td>LAW961</td>
<td>Selected Legal Topics in Management</td>
<td>6</td>
</tr>
<tr>
<td>LAW969</td>
<td>Occupational Health and Safety Law</td>
<td>6</td>
</tr>
</tbody>
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COURSE REQUIREMENTS

Session of Offer
Subjects for the Graduate Diplomas and Masters courses will be offered, subject to availability of staff, in a mode and session to be determined by the Dean. There may be special requirements in the courses leading to the Graduate Diploma in Law (Court Policy and Administration) and the Graduate Diploma in Natural Resources Law. Please consult the relevant sections below.

Seminars
Generally a three hour weekly seminar is held for each 800 or 900 level subject. Subjects for the Graduate Diploma in Law (Court Policy and Administration) and the Graduate Diploma in Natural Resources Law will be offered on a mixed mode basis with an intensive residential face to face teaching component. Students enrolled in the Graduate Diploma in Law may enrol in subjects at 100 - 300 level, which may require different patterns of attendance.

These subjects are listed in the Undergraduate Calendar.

Assessment
The assessment for 800 or 900 level subjects may be based on seminar contribution, essays and examinations. The subject program for each subject will specify the seminar times and the method of assessment.

Textbooks
There are usually no prescribed textbooks. Reading is required from a wide variety of references, including books and journal articles. Specific recommendations may be obtained from the Faculty of Law.

1. DOCTOR OF PHILOSOPHY
2. HONOURS MASTER OF LAWS BY RESEARCH
3. HONOURS MASTER OF ARTS BY RESEARCH
4. HONOURS MASTER OF COMMERCE BY RESEARCH
5. HONOURS MASTER OF LAWS (NATURAL RESOURCES LAW)
6. HONOURS MASTER OF NATURAL RESOURCES LAW

These courses are designed for students to write a research dissertation in the area of Natural Resources Law and Policy, (in the case of the Honours Master of Laws (Natural Resources Law), the first degree must be a degree in Law). The requirement of the degree is the satisfactory completion of a thesis to the value of 48 credit points (LAW 998 Major Thesis).

7. HONOURS MASTER OF LAWS (COURT MANAGEMENT)
8. HONOURS MASTER OF COURT MANAGEMENT

A thesis on any topic within an area of expertise of the Faculty of Law, including Court Policy and Administration. (In the case of the Honours Master of Laws (Court Management), the first degree must be a degree in Law). Attendance at the residential sessions conducted for the coursework degrees and Graduate Diploma in Law (Court Policy and Administration) is encouraged but completion of those course requirements is not required. The course comprises (LAW998 Major Thesis) 48 credit points.

9. HONOURS MASTER OF ARTS BY COURSEWORK
10. HONOURS MASTER OF COMMERCE BY COURSEWORK

These courses are open to persons who hold a degree including some studies in law or legal studies. The course requirements are: (a) where the candidate has completed a degree with Honours Class II, completion of law subjects at 900 level (other than LAW960, LAW 961 and LAW 969) to the value of 48 credit points; or (b) completion of law subjects at 900 level to the value of 96 credit points

11. MASTER OF LAWS (COURT MANAGEMENT)
12. MASTER OF COURT MANAGEMENT

The Master of Laws (Court Management) is open to candidates who hold a recognised degree in Law, while the Master of Court Management is open to students with a recognised degree in any field, or the Graduate Diploma in Law (Court Policy and Administration) obtained at a satisfactory level. It is anticipated that such graduates would have had experience in court management or judicial/tribunal roles. Both Masters degrees are pursued through coursework and thesis over 3 years part-time. The course requires 5 weeks residential attendance on the Wollongong campus.

All Masters degrees may be completed on a full-time or part-time basis.

Seminars
Each session begins with a residential workshop of 4-5 days during which lectures, workshops and discussions are provided on the subjects to be completed that session. The subjects are completed off campus through reading and assignments.

Assessment
Assessment is based on workshop contribution, essays and other exercises.

Textbooks
Most of the required reading is prepared by the Faculty and made available to the students during the residential at the beginning of each session.

13. MASTER OF LAWS (NATURAL RESOURCES LAW)
14. MASTER OF NATURAL RESOURCES LAW

These courses build on the course for the Graduate Diploma in Natural Resources Law (see below). The course leading to the degree of Master of Laws (Natural Resources Law) is open to candidates who hold a degree in law. Other candidates are eligible for the course leading to the degree of Master of Natural Resources Law. The courses allow further specialisation through the completion of a supervised research paper. To qualify for the degree, a candidate must complete the requirements for the Graduate Diploma in Natural Resources Law and a research paper valued at 24 credit points.

15. GRADUATE DIPLOMA IN LAW

This course is intended for those who wish to study law at a graduate level without embarking on a law degree. Subject to prerequisites, students may choose a course to suit their needs from the range offered by the Faculty. These subjects are listed in the Legal Studies Schedule in the Undergraduate Calendar. A candidate must complete subjects to a value of at least 48 credit points including LAW810 and LAW811.

16. GRADUATE DIPLOMA IN LAW (COURT POLICY AND ADMINISTRATION)

The course is designed for those working in court management, whether in a policy, administrative or judicial capacity. It is a part time course extending over 2 years and requiring 4 weeks residential attendance on the Wollongong Campus. Subjects in the course are from four disciplines - law, accountancy, business systems and management. The 7 law subjects, including 3 skills subjects, are described below. Refer to the relevant section of the Faculty of Commerce section for information on ACCY850 Public Sector Financial Management and Controls, BUS5903 Business Data Processing Systems and MGM7911 Organisational Behaviour.

17. GRADUATE DIPLOMA IN NATURAL RESOURCES LAW

This course (available on both a full-time and part-time basis) is intended both for those who have no prior legal education but want a focused introduction to law through a study of natural resources law, and for those with a prior legal education who wish to specialise in the field of natural resources law. The course is made up of three compulsory subjects (Introduction to Law; Introduction to Natural Resources Law; Resources Decision-Making) and three subjects chosen from a range of options (offered on the basis of demand and teaching
resources). One of the elective subjects (STS929 Studies in Resources and Environmental Policy) is taught by the Department of Science and Technology. Those who have studied law previously may be exempted from some compulsory subjects and allowed to study additional optional subjects.

Subjects will be offered on a mixed mode basis, combining intensive residential schools with directed reading and writing. Assessment may be based on assignments, participation in class discussions, examinations and research essays.

**SUBJECT DESCRIPTIONS**

**LAW801 Court Management I - Principles of Judicial Administration**

_Autumn session; 6 credit points._

Fundamental principles of judicial administration - the role of courts and their relationship with the legislative and executive arms of government. The subject will cover the following matters: the historical development of courts in England and Australia; the nature of the judicial function of government; the distinctions between courts and tribunals; the relationship between the Parliament, the Executive and the Judiciary; accountability for the judicial system in responsible government. Taught in lectures and workshops during residential in February and through supervised research and analytical reading throughout Autumn session.

**LAW802 Court Management II - Processes of Dispute Resolution**

_Spring session; 6 credit points._

Concepts of adjudication, arbitration, conciliation and mediation as dispute resolution procedures; the nature of the litigation process; relationship of arbitration, conciliation and mediation to litigation; international aspects of dispute resolution procedures. Taught during residential in July and through home exercises and assignments between July-November.

**LAW803 Court Management III - Case Management**

_Autumn session; 6 credit points._

Taught during residential in February and through home exercises and assignments between March-June. Examines principles and practical applications of case flow management in reducing delay and providing efficient management of courts. Considers methods of undertaking and evaluating case flow management programs.

**LAW804 Court Management IV - Current Issues in Judicial Administration**

_Double (A) session; 12 credit points._

Research project commenced in Skills II (see below) is continued throughout the year (March-November) to produce a report of 10,000 words on original research into aspects of judicial administration in a court system with which the student is familiar. Topics might include: financing the courts; current relations between the executive and the judiciary in court management; the appointment, removal and conditions of service of judicial officers; the managerialist approach to court and tribunal administration; the effectiveness of case management systems; setting performance standards in a court system. Project supervised by a member of the Faculty or someone selected by the Faculty as suitably qualified to direct the research. The project is to use the techniques learnt in BUSS903.

**Skills I Research Techniques and Critical Analysis**

_Autumn session._ Preparation for LAW 801, LAW 802 and LAW 803. Reading and analysis exercises to assist understanding of legal materials used in other law subjects.

**Skills II Research Methods**

_Spring and Autumn sessions._

Introduction to social research and evaluation techniques as preparation and support for the LAW804 project.

**LAW810 Law in Society**

_Autumn session; 8 credit points._

_Pre-requisite: none._

Assessment: essays, class participation, assignments, examination. An overall perspective on the Australian legal system and its role in the Australian social order; and introduction to the sources of authority of legal rules, the nature of legal institutions and practices, legal materials, reasoning and terminology. Aspects of substantive law will be used to illustrate general principles.

**LAW811 Law of Contracts**

_Spring session; 8 credit points._

_Pre-requisite: LAW810 or LAW 160 or LAW100._

_Assessment: essays, class participation, assignments, examination._

The development of the modern law of contracts illustrating how scholars and lawyers have derived general principles of law from decisions about specific relationships; express and implied contracts; formation of contracts; the doctrine of privity of contract and statutory modifications; contractual terms and conditions; performance and breach; capacity to make contracts.

**LAW812 Law of Property**

_Autumn session; 8 credit points._

_Pre-requisite: LAW100 or LAW160 or LAW810._

Assessment: essays, class participation, assignments, examination. The statutory and common law foundations for property rights. The development of the legal system of property in Australia to its present state. The nature of property ownership. The law and practice of real property. The law and practice of personal property. The nature of intellectual property. The law and practice of intellectual property. The nature of trusts.

**LAW813 Law of Income Tax**

_Autumn session; 6 credit points._

_Pre-requisite: LAW810 or LAW210 or LAW161 or LAW811 if specialising in Commercial Law._

Assessment: 8,000 word dissertation.

**LAW901 Research in Court Management**

_Double session; 12 credit points._

_Pre-requisite: LAW 801, LAW 802._

_Assessment: research paper._

This research paper is to be submitted in the form of either: (a) a management-oriented report detailing methods, findings, and implications; or (b) a paper suitable for journal publication.

**LAW902 Research Project A**

_Autumn, Spring or Summer session; 6 credit points._

_Pre-requisite: LAW100 or LAW160 or LAW810 and LAW210 or LAW161 or LAW811 if specialising in Commercial Law._

Assessment: 8,000 word dissertation.

**LAW903 Research Project B**

_Autumn, Spring or Double (A) session; 12 credit points._

_Pre-requisite: LAW100 or LAW160 or LAW810 and LAW210 or LAW161 or LAW811 if specialising in Commercial Law._

Assessment: 12,000 word dissertation.

**LAW904 Research Project C**

_Autumn or Spring session; 8 credit points._

_Pre-requisite: LAW 100 or LAW160 or LAW810 and LAW210 or LAW161 or LAW811 if specialising in Commercial Law._

Assessment: 10,000 word dissertation.

**LAW905 Research Project D**

_Autumn, Spring or Double (A) session; 8 credit points._

_Pre-requisite: LAW100 or LAW160 or LAW810 and LAW210 or LAW161 or LAW811 if specialising in Commercial Law._

Assessment: 10,000 word dissertation.

**LAW951 Taxation Policy and Practice**

_Session: to be advised; 6 credit points._

 Remark: Not to count with LAW35.

An examination of the revenue laws including income tax, sales tax, property tax, stamp duty and payroll tax.

**LAW953 Studies in Taxation**

_Session: to be advised; 6 credit points._

The statutory and common law foundations of the Federal Income tax system. Common law concepts of income and capital and statutory modifications and interpretations of these concepts. Legal and accounting approaches to taxable income. Tax and estate planning concepts. Tax avoidance and evasion. Tax incidence and equity. An examination of tax policies, provisions and problems relating to special entities - and special provision areas, such as primary producers, mining and petroleum industries, non-residence, foreign-controlled companies and royalty provisions. International aspects of Australian income tax including double tax agreements.

**LAW960 Legal Studies for Professionals**

_Spring session; 6 credit points._

This subject is offered in a series of modules. The first module, lasting for approximately 6 weeks, and completed by all students, introduces the constitutional structure of the Australian federal system, sources of law, the common law system, the hierarchy of the courts, the doctrine of precedent, how to understand case reports, statutory interpretation and how to understand an act of parliament. Other modules have been designed for students enrolled in various postgraduate courses. The Public Health module includes an introduction to the law relating to the regulation of Australian health care, criminal and civil issues in the provision of health care, mental health law,
employment and occupational health and safety obligations of health care institutions. Other modules may be added to cater for the needs of particular courses.

**LAW961 Selected Legal Topics in Management**

**Session:** to be advised; 6 credit points.

Selected legal topics in management. The selection will be made by the Dean, taking into account the expertise of academic staff, including visiting staff and the interest of students.

**LAW963 Jurisprudence**

**Session:** to be advised; 6 credit points.

A study of theories on the nature and purpose of law.

**LAW964 Studies in Business Law**

**Session:** to be advised; 6 credit points.

A detailed examination of the law relating to selected aspects of business organisation, including the law relating to the nature and formation of partnership, mergers and takeovers, insider trading and securities.

**LAW965 Studies in Administrative Law**

**Session:** to be advised; 6 credit points.

A detailed examination of the legal problems raised for individual citizens in the exercise of Governmental or other public powers. Particular topics include delegated legislation, ministerial responsibility, statutory corporations and administrative tribunals. Crown proceedings; and the statutory and common law procedures which may be invoked to counter allegations of maladministration or illegality including the Administrative Appeals Tribunals, judicial review and ombudsmen.

**LAW966 Studies in Industrial Law**

**Session:** to be advised; 6 credit points.

A detailed examination of the law (including some comparative law) relating to selected aspects of employment relationships including industrial accidents, job security, registration and control of trade unions, picketing, the right to work and closed shop agreements, and conciliation and arbitration and collective bargaining.

**LAW967 Studies in Trade Practices and Consumer Law**

**Session:** to be advised; 6 credit points.

A detailed examination of restrictive practices and the development of the law to counter them including the role of the Commonwealth and New South Wales agencies which administer the relevant Acts.

**LAW968 Issues in the Philosophy of Law**

**Spring session:** 6 credit points.

**Pre-requisite:** LAW160 or LAW100.

A critical examination of a selection of the following topics: (i) The nature and purpose of law; (ii) The logic of legal reasoning; law and textual analysis; legal causation, probability, evidence and standards of proof; (iii) The defeasibility of practical reason; causal explanations and reasons explanations; action, intention and will; agency, control and responsibility; the nature of justification and excuse; (iv) The justification of punishment; the moral limits of the criminal law; conscience and the law; morality and defences to murder; contemporary moral issues of legal interest (eg informed consent, reproduction technology, euthanasia); concepts of property. Issues selected will be discussed in the context of particular areas of law. The emphasis will be on philosophical issues in Criminal Law.

**LAW969 Occupational Health and Safety Law**

**Session:** to be advised; 6 credit points.

The subject deals with the interpretation and application of the NSW OHS Act.

**LAW987 Special Topic in Law - A**

**Session:** to be advised; 6 credit points.

**LAW988 Special Topic in Law - B**

**Session:** to be advised; 6 credit points.

A special topic to be selected from any area of commercial law. The selection will be made by the Sub-Dean taking into account the expertise of academic staff, including visiting staff, and the interest of students.

**LAW993 Research Essay**

**Session:** to be advised; 12 credit points.

Information may be obtained from the Sub-Dean regarding the research essay.

**LAW998 Major Thesis**

**Double session (A): 48 credit points (contact as required).**

**Pre-requisite:** permission of the Dean.

**Assessment:** thesis.

Content as arranged.

**LAW999 Special Research Paper in Law**

**Double session (A): 48 credit points (contact as required).**

**Pre-requisite:** Permission of the Dean.

**Assessment:** research essay.

Content as arranged.

**LLB911 Introduction to Natural Resources Law**

**Autumn session:** 8 credit points.

The subject is offered on a mixed mode basis with one week residential face to face teaching component.

**Co-requisite:** LLB910.

**Assessment:** a selection from assignments, class participation, examination and research essay.

Ownership of natural resources; the implications of the Commonwealth/State division of legislative powers for natural resources regulation; the historical development and structure of natural resources law; overlaps between regulatory authorities; forward planning and development control; environmental impact assessment law; the law relating to pollution and waste disposal.

**Textbooks:** Specially prepared course materials.

**Objectives:** The objective of this subject is to introduce you to fundamental concepts and themes within natural resources law, including the building blocks required to pursue more specialised study in law and policy relating to specific natural resources, to be covered in optional subjects. Some issues are common to all areas of natural resources law, although the precise approach taken varies, allowing us to compare across different resources. The issues include questions of ownership, the application of techniques of environmental planning and assessment, the control of pollution and organisational structures for resource exploration and development.

After completing this subject, students will be able to:
- explain the formal constitutional division of power between the Commonwealth and State Parliaments and to contrast this with the division of responsibility in practice;
- understand the extent to which governments benefit from natural resource development through the levying of taxes, royalties and rent;
- to understand the way in which the environmental planning system regulates access to natural resources and interacts with more specific regulatory regimes;
- to read and understand complex environmental planning instruments;
- to explain and critically evaluate the systems of environmental impact assessment applying at Commonwealth and State levels and to explain the interaction between them;
- to critically evaluate the role of diverse forms of regulation of access to and management of natural resources, including regulation through criminal law, fiscal instruments, public participation in environmental decision-making and regulation through civil law;
- to understand the role played by international law in dealing with natural resources.
LLB913 Resources Decision-Making
Autumn session or Double (A) session; 8 credit points.
This subject is offered on a mixed mode basis with a one week residential face to face teaching component.
Co-requisite: LLB910 and LLB911.
Assessment: a selection from assignments, class participation, examination and research essay.
Bureaucratic decision making processes; cost-benefit analysis; risk assessment; environmental impact assessment; public participation in decision-making processes; the role of the courts and adversarial methods of dispute resolution; public inquiries and other alternative forms of dispute resolution; scientific and legal forms of proof.
Textbooks:
Specially prepared course materials.
Objectives:
The objective of this subject is to conduct an in-depth study of:
• methods of decision-making used by government, private firms and others in the area of resource management;
• the ways others, including environmentalists, scientists, economists and consumers, can influence those decisions.
After completing this subject, students will be able to:
• explain and critique various forms of assessment used by governments and firms to evaluate proposed projects in terms of their potential environmental and social impacts;
• critically evaluate the role economics can play in resource decision-making by identifying the underlying assumptions in economic theory and the advantages and limitations to the practical application of that theory to resource decisions;
• to understand the dynamics and nature of environmental controversies and the use of various mechanisms for resolution of such controversies, including public inquiries and dispute resolution;
• to appreciate the importance of scientific uncertainty in resource decision making, particularly in terms of regulation;
• to critically analyse the way that different groups in society, including environmentalists, consumers and technologists contribute to resource decisions.

LLB914 Mining Law
Spring session according to demand; 8 credit points.
This subject is offered on a mixed mode basis with a one week residential face to face teaching component.
Pre-requisite: LLB910 and LLB911.
Assessment: a selection from assignments, class participation, examination and research essay.
Ownership of minerals; the distinction between mining and extractive industry; exploration and mining titles under the mining and coal mining legislation; the relationship between mining legislation and environment planning and assessment legislation; industrial health and safety law and the mining industry.
Textbooks:
Specially prepared course materials.
Objectives:
The objective of this subject is to introduce you to fundamental concepts and themes on mining law. The course covers the following topics: The historical and constitutional aspects of Australian mining legislation; the legal concepts of minerals and mining; issues of ownership of minerals; structuring minerals ownership in Australia; mining tenements; the administrative and judicial role of the Mining Warden; occupational health and safety laws; environmental planning and impact assessment of mining operations; the interaction between planning law and mining law; environmental liability arising from mining operations; the implications of the Mabo decision for mining and petroleum and the international law aspects of seabed mining. After completing this subject, students will be able to:
• comprehend the legal framework for mining operations;
• understand the broad policy issues behind mining legislation;
• relate these policy issues to specific aspects of mining law;
• understand the concept and species of mining tenements under the Mining Act 1992 (NSW);
• understand and evaluate the major environmental law questions that relate to mining operations from the practical and policy perspectives;
• understand the relevant rules of international law dealing with sea-bed mining and the likely implications of seabed mining for land-based mining in Australia.

LLB915 Commercial Aspects of Resources Development
Spring session according to demand; 8 credit points.
This subject is offered on a mixed mode basis with a one week residential face to face teaching component.
Pre-requisite: LLB910 and LLB911.
Assessment: a selection from assignments, class participation, examination and research essay.
Legal structures for resources projects (joint ventures, etc.); financing resources projects (including investment regulation; taxation and stamp duty); legal aspects of resource marketing.
Textbooks:
Specially prepared course materials.

LLB916 Energy Law I
Spring session according to demand; 8 credit points.
This subject is offered on a mixed mode basis with a one week residential face to face teaching component.
Pre-requisite: LLB910 and LLB911.
Assessment: a selection from assignments, class participation, examination and research essay.
The law relating to oil and gas exploration, production and transportation, including onshore and offshore exploration and production titles, royalties, pipelines and oil pollution. The law relating to the mining and use of uranium.
Textbooks:
Specially prepared course materials.

LLB917 Energy Law II
Spring session according to demand; 8 credit points.
This subject is offered on a mixed mode basis with a one week residential face to face teaching component.
Pre-requisite: LLB910 and LLB911.
Assessment: a selection from assignments, class participation, examination and research essay.
The law relating to electricity generation and transmission, including monopolisation and privatisation, the relationship between transmission and supply authorities, pollution control, pricing arrangements and cogeneration. The law relating to renewable energy resources, including rights of access to wind and sun.
Textbooks:
Specially prepared course materials.

LLB918 Law of Land and Nature Conservation
Spring session according to demand; 8 credit points.
This subject is offered on a mixed mode basis with a one week residential face to face teaching component.
Pre-requisite: LLB910 and LLB911.
Assessment: a selection from assignments, class participation, examination and research essay.
The law relating to the use and conservation of native vegetation, including special conservation areas, forestry in State forests and privately owned land, agricultural land clearing, the law relating to the protection and exploitation of native fauna, including habitat conservation, regulation of commercial exploitation and endangered species legislation. The law relating to land degradation.
Textbooks:
Specially prepared course materials.
Objectives:
The objectives of this subject are:
• to provide an introduction to land management and nature conservation law and policy at the International, Australian and State levels;
• to provide an understanding of the principles and theoretical basis of land management and nature conservation;
• to provide a practical understanding of the role of law in the context of land management and nature conservation.
After completing this subject, students will be able to:
• understand Australia’s international legal obligations with respect to nature conservation and evaluate the domestic constitutional problems of implementing these obligations;
• appreciate the role of the Commonwealth in land management and nature conservation;
• critically analyse the various policy approaches available for land management and nature conservation;
• explain and evaluate the legal and policy issues in relation to wildlife management, the conservation of endangered species, the setting aside of specially protected areas and places of world heritage value, and the management of forestry resources;
• understand the concept of biodiversity and critically assess current action at Commonwealth and State levels in conserving biodiversity;
• appreciate the legal and policy issues involved in the conservation management of public and private lands.

LLB919 Water Resources Law
Spring session according to demand; 8 credit points.
This subject is offered on a mixed mode basis
LLB920 Local Government and Natural Resources

Autumn session according to demand: 8 credit points.

This subject is offered on a mixed mode basis with a one week residential face to face teaching component.

Pre-requisite: LLB910 and LLB911.

Assessment: a selection from assignments, class participation, examination and research essay.

The development of local government in Australia. The law relating to the constitution, functions and powers of local government in terms of the ability of local government to control the development and conservation of natural resources. Relations between local and higher levels of Government. The law relating to environmental planning and assessment by local government authorities.

Textbooks:
Specially prepared course materials.

Objectives:
On successfully completing this subject students will be able to:
• demonstrate a critical appreciation of the role of local government in the decision making process concerning the development and conservation of natural resources;
• they will be able to describe and analyse the legal framework in which local government operates throughout Australia;
• they will be able to understand the implications of local government law, administration and practice for natural resources policy.

LLB930 Research Project in Natural Resources Law

Summer, Autumn or Spring session; 24 credit points (contact as required).

Pre-requisite: 24 credit points at 900 level.

Assessment: research essay.

Content as arranged.
FACULTY OF SCIENCE
FACULTY OF SCIENCE

FACULTY OFFICE

Dean: Professor Robert K Norris, BSc, PhD Sydney
Sub Dean: Associate Professor John Ellis
Faculty Office: Ms Pat Macquarie (042) 21 3481
Administrative Assistant: Ms Christine M Peacock (042) 21 3530

MEMBER UNITS

The Faculty of Science is made up of the following Units:

- Department of Biological Sciences
- Department of Chemistry
- School of Geosciences comprising Geography and Geology
- Department of Physics
- Environmental Science Unit

RESEARCH COURSES AVAILABLE

The Faculty offers Honours Master of Science and Doctor of Philosophy degrees by research. In addition, the Honours Master of Arts is offered in the Department of Geography.

POSTGRADUATE PROGRAMS

Postgraduate coursework programs are available in the Faculty in the following areas:

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Professional Officer
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DEPARTMENT OF BIOLOGICAL SCIENCES

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Dr Thomas Jon East, BA (Hons), PhD, Qld, Senior Research Scientist, Bureau of Resource Sciences, Department of Primary Industries.
COURSES OFFERED

The following postgraduate degrees and diplomas are available:

1. Doctor of Philosophy
2. Honours Master of Science by Research
3. Honours Master of Science in Biotechnology
4. Master of Science (Biotechnology)
5. Graduate Diploma in Science (Biological Sciences)

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Doctor of Philosophy and the Honours Master of Science:

**Animal physiology**
- Environmental physiology of higher vertebrates
- Metabolic physiology and thermoregulation
- Thyroid and adrenal function in higher vertebrates
- Ecological energetics
- Evolution of endothermy
- Physiological development in birds and marsupials
- Dietary fats and their effects on body function

**Plant biochemistry**
- Photosynthesis: studies on the carbon fixing enzyme rubisco, and its activation
- Turgor-volume regulation: regulation of glycerol synthesis by osmotic pressure in the salinity-resistant alga Dunaliella
- DNA amplification and analysis: application of molecular biology techniques to species identification in algae
- Bioluminescence: applications to enzyme mechanisms and analysis

**Cell and cancer biology**
- Tissue injury during inflammation
- Cellular responses to oxidative stress
- Monocyte migration into inflammatory foci
- Cancer invasion and metastasis
- Cell-surface and receptor-bound proteases
- Biological roles of plasminogen activator inhibitors
- Mechanisms of chemotherapeutic-induced apoptosis
- Mechanisms of lipid transport at the cell membrane
- Cell surface events in apoptosis

**Immunobiology and vaccine development**
- Mechanism of somatic hypermutation in antibody variable region genes
- Mechanisms of rapid 'directional' molecular evolution
- Mechanism of acquired paternal transmission in mice
- Mechanisms of adjuvant action
- Development of acellular and live oral recombinant vaccines against the whooping cough bacterium, *Bordetella pertussis*
- Molecular and genetic analysis of *Bordetella bronchiseptica*
- Development of recombinant oral and intranasal vaccine delivery systems for the stimulation of immunity against the porcine pathogens *Erysipelothrix rhusopathiae* and *Mycoplasma Hyopneumoniae*
- Development of techniques to enhance the sensitivity of immunoassays

**Ecology and population genetics**
- Matings systems and population genetics of native plants
- Pollination systems of native plants
- Responses of plant and animal populations to bushfires
- Impact of herbivores on plant communities
- Plant succession and recolonization of disturbed land
- Seed and fruit dispersal by animals
- Avian ecology
- Invertebrate biodiversity
- Conservation biology

**Marine ecology and genetics**
- Evolutionary consequences of varying patterns of reproduction and dispersal, self-recognition and aggressive interactions in marine invertebrates
- Conservation of marine ecosystems
- Chemical ecology: the relative importance of natural products as mediators of interactions between organisms, particularly compounds that play a role in preventing fouling of marine invertebrates
- Larval ecology: pelagic and early benthic stages as determinants of subsequent patterns of invertebrate distribution and abundance
SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAMS IN BIOTECHNOLOGY

leading to the Master of Science and the Honours Master of Science.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td><strong>Graduate Diploma in Science (Biological Sciences)</strong>[^1]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leading to the MSc (Biotechnology)</td>
<td></td>
</tr>
<tr>
<td>BIOL320</td>
<td>Molecular Cell Biology</td>
<td>8</td>
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<tr>
<td>BIOL321</td>
<td>Cellular and Molecular Immunology</td>
<td>8</td>
</tr>
<tr>
<td>CHEM320</td>
<td>Biological Chemistry</td>
<td>8</td>
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<tr>
<td>MATH252</td>
<td>Statistics for the Natural Sciences</td>
<td>6</td>
</tr>
<tr>
<td>BIOL303</td>
<td>Biotechnology: Applied Molecular and Cell Biology</td>
<td>8</td>
</tr>
<tr>
<td>MGM308</td>
<td>Introduction to Management for Professionals A</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Honours Master of Science (Biotechnology)</strong>[^1]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Core subjects - Autumn Session</td>
<td></td>
</tr>
<tr>
<td>BIOL920</td>
<td>Biotechnology - Cells, Proteins and Antibodies</td>
<td>12</td>
</tr>
<tr>
<td>BIOL921</td>
<td>Biotechnology - Nucleic Acids</td>
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</tr>
<tr>
<td></td>
<td>Options[^1] - Spring Session</td>
<td></td>
</tr>
<tr>
<td>BIOL910</td>
<td>Advanced Topics in Biology A: Literature Research Project</td>
<td>16</td>
</tr>
<tr>
<td>BIOL916^2</td>
<td>Plant and Agricultural Biotechnology</td>
<td>6</td>
</tr>
<tr>
<td>BIOL917^2</td>
<td>Aquatic and Environmental Biotechnology</td>
<td>6</td>
</tr>
<tr>
<td>BIOL918^2</td>
<td>Diagnostic Biotechnology</td>
<td>8</td>
</tr>
<tr>
<td>BIOL991</td>
<td>Biotechnology Research Project</td>
<td>24</td>
</tr>
</tbody>
</table>

[^1]: Other appropriate subjects from the graduate or 500-level schedule may be taken with the permission of the Departmental Head.

[^2]: Not all of these subjects will necessarily be offered in any one year.

OTHER POSTGRADUATE SUBJECTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL910</td>
<td>Advanced Topics in Biology A</td>
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<tr>
<td>BIOL911</td>
<td>Advanced Topics in Biology B</td>
<td>16</td>
</tr>
<tr>
<td>BIOL999</td>
<td>Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

COURSE REQUIREMENTS

1. **DOCTOR OF PHILOSOPHY**

Candidates for this degree enrol in BIOL999 (Major Thesis) and undertake a research project in one of the areas listed above. Enrolment may be full-time or part-time. Intending students should first contact the Head of the Department of Biological Sciences.

2. **HONOURS MASTER OF SCIENCE**

The objective of this degree is to provide a grounding in experimental biological research. Graduates entering the degree who hold a Bachelor degree with Honours at a standard of Class II, Division 2 or higher are required to complete the 48 credit point BIOL999 Major Thesis. Students entering the degree with qualifications below Honours Class II, Division 2 must complete subjects which aggregate to not less than 96 credit points.

These will consist of at least 48 credit points including, normally, BIOL910 Advanced Topics in Biology A and BIOL911 Advanced Topics in Biology B, plus at least 16 credit points from 300-level Biology subjects specified by the Departmental Head. The remaining 48 credit points will be obtained by completing the subject BIOL999 Major Thesis.

3. **HONOURS MASTER OF SCIENCE (BIOTECHNOLOGY)**

This program will cover the latest theory and procedures in Cellular and Molecular Biology and their application to Biotechnology. A specific research project in some aspect of Biotechnology is required. This degree is recommended for those students who wish to follow a career in research.

Entry into the course normally requires a Bachelors degree with Honours at a standard of Class II, Division 2 or above in an appropriate discipline, or an appropriate Graduate Diploma in Science (Biological Sciences) completed at a satisfactory standard.

4. **MASTER OF SCIENCE (BIOTECHNOLOGY)**

The Master of Science (Biotechnology) will produce graduates with up-to-date knowledge and technological expertise in specific areas of Cell and Molecular Biology, which are the basis for modern biotechnological research and development. Coursework to a value of at least 48 credit points is required.

Entry into the course normally requires a Bachelors degree with Honours at a standard of Class II, Division 2 or above in an appropriate discipline, or an appropriate Graduate Diploma in Science (Biological Sciences) completed at a satisfactory standard.

5. **GRADUATE DIPLOMA IN SCIENCE (BIOLOGICAL SCIENCES)**

The purpose of the Graduate Diploma (Biological Sciences) is to provide graduates who have insufficient background in parts of Biological Sciences with the skills and knowledge necessary to enable them to proceed with further study.
Successful completion of appropriate subjects with a value of at least 48 credit points is required, the subjects being chosen from the undergraduate schedules of subjects as set out in the Undergraduate Calendar. At least 24 credit points must be from 300-level or 400-level Biology subjects.

The selection of subjects will be approved by the Departmental Head. Approved subjects which lead to the Master of Science (Biotechnology) course are listed below.

**SUBJECT DESCRIPTIONS**

**BIOL910 Advanced Topics in Biology A: Literature Research Project**

*Autumn and/or Spring session; 16 credit points (directed reading and analysis of published papers).*

**Assessment:** substantial literature review report and seminar.

Under the supervision of staff nominated by the Head of Department, the student will survey the biological literature and present a written report and a topic on a topic chosen by the supervisory staff. **Co-ordinator:** Associate Professor AJ Hulbert.

**BIOL911 Advanced Topics in Biology B: Laboratory Research Project**

*Autumn and/or Spring session; 16 credit points (directed reading and field or laboratory experimental work).*

**Assessment:** substantial project report and seminar.

Under the supervision of staff nominated by the Departmental Head the student will undertake a laboratory or field-based project and present a written report and a seminar on a topic chosen by the supervising staff. **Co-ordinator:** Associate Professor AJ Hulbert.

**BIOL916 Plant and Agricultural Biotechnology**

*Spring session; 6 credit points (20 hrs of lectures and tutorials plus practical work).*

**Pre-requisites:** BIOL920, 921.

**Assessment:** seminars, project, examination.

Plant tissue culture - protoplast induction and regeneration, callus culture, suspension culture. Clonal propagation. Molecular biology of pathogen-plant interactions; microbial-plant symbiotic interactions; biological control of plant pathogens; detection of pathogens. Genetic engineering of plants. Algal culture and algal manipulation. The subject will provide the scientific background behind the listed topics, relevant practical knowledge and an understanding of their applications in developed and developing countries. **Textbook:** Journal Articles. **Co-ordinator:** Professor R Lilley.

**BIOL917 Aquatic and Environmental Biotechnology**

*Spring session; 6 credit points (20 hrs of lectures and tutorials plus practical work).*

**Pre-requisites:** BIOL920, 921.

**Assessment:** seminars, project, examination.

Aquatic microbiology; Screening for useful chemicals from aquatic organisms; Biological degradation of aquatic pollutants including hydrocarbons and chlorinated compounds; Biological treatment processes to remove heavy metals from effluents and ores; Biodegradation and biodeterioration of organic and inorganic compounds including waste treatment. The subject will provide the scientific background behind the listed topics, relevant practical knowledge and an understanding of their applications in developed and developing countries. **Textbook:** Journal Articles. **Co-ordinator:** to be advised.

**BIOL918 Diagnostic Biotechnology**

*Spring session; 8 credit points (24 hrs of lectures and tutorials plus practical work).*

**Pre-requisites:** BIOL920, 921.

**Assessment:** seminars, project, examination.

Production of diagnostic probes based on DNA and antibody technology for the diagnosis of diseases of humans, plants and animals, including diseases in aquaculture systems. Utilisation of such probes to detect specific pathogens in tissue samples and environmental samples, including soil, water and effluents. Collection and preservation of samples. DNA restriction analysis, oligonucleotide mapping and specific antigen detection in identifying micro-organisms. Basic epidemiology. ELISA and immunodiagnosis. The subject will provide the scientific background behind the listed topics, relevant practical knowledge and an understanding of their applications in developed and developing countries. **Textbook:** Journal Articles. **Co-ordinator:** Dr M J Walker.

**BIOL920: Biotechnology: Cells, Proteins and Antibodies**

*Autumn session; 12 credit points (42 hrs lecture/tutorials plus practical work).*

**Pre-requisites:** appropriate experience, or BIOL 320 and BIOL321.

**Assessment:** major essay, quiz, tutorial papers, poster, seminar, written examination.


**BIOL921: Biotechnology: Nucleic Acids**

*Autumn session; 12 credit points (42 hrs lecture/tutorials plus practical work).*

**Pre-requisites:** appropriate experience, or BIOL 320 and BIOL321.

**Assessment:** major essay, quiz, tutorial paper report, poster, seminar, written examination.


**BIOL991 Biotechnology Research Project**

*Autumn, Spring and Summer sessions; 24 credit points.*

**Pre-requisite:** BIOL920, 921.

**Assessment:** written dissertation, seminar.

The student will undertake a research project on a topic in Biotechnology and present a research report and seminar on a topic chosen by the supervising staff. The research can be undertaken in collaboration with industry or another recognised institution. **Co-ordinator:** Dr MR Wilson.

**BIOL999 Major Thesis**

*48 credit points per year.*

**Assessment:** major thesis.

Thesis research to be chosen from the current research areas within the Department listed above. Topic to be arranged in consultation with relevant staff and approved by Department Head and Graduate Faculty.
COURSES OFFERED

The following postgraduate degrees and diploma are available:

1. Doctor of Philosophy
2. Honours Master of Science by Research
3. Master of Science
4. Graduate Diploma in Science

POSTGRADUATE PROGRAM

Chemistry

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of Science degree by research and the Doctor of Philosophy degree:

- Atmospheric trace gas analysis using Fourier transform infrared spectroscopy
- Atmospheric reaction mechanisms
- Photochemistry caused by ozone depletion
- Environmental chemistry, especially the development of new methods for the analysis and treatment of industrial wastes and trace toxins
- Studies of heavy metal levels in the environment and investigations of the mechanism of toxic action
- Geochemical transport of metals, including uranium and thorium
- Electroanalytical chemistry, especially the development of chemically modified electrodes and electrochemical detectors for liquid chromatography
- Application of electrochemically-produced polymers in corrosion protection, biotechnology, catalysis, and as analytical sensors
- Development of microcomputer controlled on-site analysis systems
- Transport and equilibrium properties of liquids and solutions
- Kinetics of extraction processes involved in the food and beverage industries
- Structural studies of organic, organometallic, and inorganic compounds using EL, CI and FAB mass spectrometry
- Activation of CO and hydrocarbons by metal coordination - synthesis and mechanistic aspects
- Reactions of metal carbonyl clusters and their relation to catalytic processes
- Co-ordination chemistry of ruthenium
- Asymmetric synthesis using organometallic complexes
- Metal-protein and metal-DNA interactions, and model studies
- New methods for organic synthesis and asymmetric synthesis
- Organic synthesis of natural products and their biological chemistry
- Medicinal chemistry involving the design, synthesis and evaluation of new compounds with specific biological activity
- Synthesis and properties of new heterocyclic molecules
- The mechanism of senile cataract formation in man
- Novel methods for peptide synthesis and modification using organometallic reagents
- Protein modification by endogenous chemicals
- Structure/function of proteins and peptides using high-field NMR spectroscopy and other analytical techniques
- Studies on the mass spectrometry of biological molecules such as peptides and nucleic acids
- Design, synthesis and evaluation of DNA-interactive anti-tumour agents

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN CHEMISTRY leading to the Master of Science.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM910</td>
<td>Selected Topics in Chemistry A</td>
<td>16</td>
</tr>
<tr>
<td>CHEM915</td>
<td>Advanced Chemistry Laboratory Project</td>
<td>16</td>
</tr>
<tr>
<td>CHEM918</td>
<td>Chemistry Report</td>
<td>16</td>
</tr>
<tr>
<td>CHEM919</td>
<td>Advanced Topics in Chemistry</td>
<td>16</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.

GRADUATE DIPLOMA IN SCIENCE

Subjects to the value of 48 credit points chosen from the following list in consultation with the Head of the Department of Chemistry. The Departmental Head may also nominate other subject(s) deemed appropriate.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tr>
<td>CHEM215</td>
<td>Food Chemistry</td>
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<tr>
<td>CHEM311</td>
<td>Inorganic Chemistry III</td>
<td>8</td>
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<tr>
<td>CHEM314</td>
<td>Instrumental Analysis</td>
<td>8</td>
</tr>
<tr>
<td>CHEM320</td>
<td>Biological Chemistry</td>
<td>8</td>
</tr>
<tr>
<td>CHEM321</td>
<td>Organic Chemistry III</td>
<td>8</td>
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<tr>
<td>CHEM323</td>
<td>Physical Chemistry III</td>
<td>8</td>
</tr>
<tr>
<td>CHEM327</td>
<td>Environmental Chemistry and Chemical Toxicology</td>
<td>8</td>
</tr>
<tr>
<td>CHEM340</td>
<td>Chemistry Laboratory Project</td>
<td>8</td>
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<td>CHEM910</td>
<td>Selected Topics in Chemistry A</td>
<td>16</td>
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<tr>
<td>CHEM911</td>
<td>Selected Topics in Chemistry B</td>
<td>8</td>
</tr>
<tr>
<td>CHEM918</td>
<td>Chemistry Report</td>
<td>16</td>
</tr>
</tbody>
</table>
COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in CHEM920 and undertake a research project in one of the current research areas listed above.

2. HONOURS MASTER OF SCIENCE

**Introduction and Objectives**

There have been many rapid advances in Chemistry, particularly in chemical instrumentation, over the past decade. Many techniques and applications are now in common use which did not even exist five years ago. There is therefore a need for Chemistry graduates, especially those of the Honours Master of Science, to become aware of, and proficient in, at least some of these new developments. The proposed courses are intended to provide for the specific needs and interests of applicants from both industry and education, as well as for students wishing to obtain experience in a modern research program.

**Structure of the Course**

The course will be made up of subjects selected from those described below, in accordance with the Honours Masters Degree Rules.

There are two paths to the degree:

1. by research only, for students entering with a degree of Honours Class II, Division 2 standard or above. They will do the 48 credit point CHEM920;

2. by a combination of research and coursework, for students entering with a degree below Honours Class II, Division 2 standard. They will do a research project (CHEM920) plus three of the following subjects: CHEM910 Selected Topics in Chemistry, CHEM915 Advanced Chemistry Laboratory Project, CHEM918 Chemistry Report, and CHEM919 Advanced Topics in Chemistry, described below. That is, they will take subjects to a value of 96 credit points.

**Entry to the Course**

Entry is subject to the approval of the Board of Research and Postgraduate Studies on the advice of the Departmental Head.

**Selection of Subjects**

Students must consult the Departmental Head for approval of their proposed choice of subjects.

**Pre-requisites**

The minimum pre-requisite for all subjects is that the student must have graduated with at least 24 credit points of 300-level Chemistry subjects.

3. MASTER OF SCIENCE

**Introduction and Objectives**

The objectives of this course are similar to those of the Honours Master of Science above. It is designed for applicants from industry and education and for students who wish to proceed beyond the 3 year pass degree but for whom the research component of the Honours degree is inappropriate.

**Structure**

This is a 48 credit point coursework degree in which students do three of the following subjects CHEM910, CHEM915, CHEM918 and CHEM919, in accordance with the Pass Master Degree Rules.

**Entry to the Course**

Students must consult the Departmental Head for approval of overall entry and for the choice of subjects in CHEM915, CHEM918 and CHEM919.

**Pre-requisites**

The minimum pre-requisite is that the student must have graduated with at least 24 credit points of 300-level Chemistry subjects.

4. GRADUATE DIPLOMA IN SCIENCE

**Introduction and Objectives**

This one year Graduate Diploma is designed principally as a Masters Qualifying course for students who have an inadequate preparation for direct entry into our MSc degree programs. It will be found useful by international students and by students either without a full major in Chemistry at undergraduate level or who completed their first degree some years ago.

**Entry to the Course**

Students must consult with the Departmental Head for approval of overall entry. The particular combination of subjects to be taken by each student will be decided after discussion with the Head and will take into account the student's specific background and needs.

**SUBJECT DESCRIPTIONS**

**CHEM910 Selected Topics in Chemistry A**

Double session (A); 16 credit points (56 hrs lectures, 56 hrs tutorials). Compulsory for all students undertaking an MSc in Chemistry by coursework, except for students who have passed CHEM411 or completed the subject in a Graduate Diploma in Science (Chemistry). Not to count with CHEM411 or CHEM921. Assessment: written examinations 80%, two essays 20%.

Eight topics (each 7 lectures/7 tutorials) chosen from: Organic and inorganic Geochemistry and their effects on the Environment; Synthesis of Biologically Important Compounds; Plant Secondary Metabolism; The Bioinorganic Chemistry of Iron; Inorganic Reaction Mechanisms; Catalysis with Organometallic Compounds; Physical Mass Spectrometry; Analysis of Atmospheric Particles; Computers in Chemistry; Gas Lasers; Advanced NMR Techniques; and other topics added as required.

Textbooks:

A reading list will be provided at the beginning of the session.

Co-ordinator: Professor J Bremner.

**CHEM911 Selected Topics in Chemistry B**

Autumn or Spring session; 8 credit points (28 hrs lectures, 28 hrs tutorials). Assessment: written examination 90%, essay 10%.

Four topics (each 7 lectures/7 tutorials) chosen from: Organic and inorganic Geochemistry and its effects on the Environment; Synthesis of biologically important compounds; Plant secondary metabolism; The Bioinorganic Chemistry of Iron; Inorganic Reaction Mechanisms; Catalysis with Organometallic Compounds; Physical Mass Spectrometry; Analysis of Atmospheric Particles; Computers in Chemistry; Gas Lasers; Advanced NMR Techniques; and other topics added as required.

Textbooks:

A reading list will be provided at the beginning of the session.

Co-ordinator: Professor J Bremner.

**CHEM915 Advanced Chemistry Laboratory Project**

Autumn and/or Spring session; 16 credit points (168 hrs laboratory work). Assessment: substantial report 90% and seminar 10%.

Under the supervision of staff appointed by the Departmental Head the student will undertake a laboratory project and present a written report and a seminar on a topic chosen by the supervising staff.

Co-ordinator: Professor J Bremner.

**CHEM918 Chemistry Report**

Double session (A); 16 credit points (112 hrs tutorials). Assessment: substantial report 90% and seminar 10%.

Under the supervision of staff appointed by the Departmental Head students will survey the chemical literature and prepare a report on a topic chosen by the supervising staff.

Co-ordinator: Professor J Bremner.

**CHEM919 Advanced Topics in Chemistry**

Double session (A); 16 credit points (56 hrs lectures, 56 hrs tutorials). Assessment: written examinations 90%, essays 10%.

Advanced lecture topics drawn from organic chemistry, inorganic chemistry, physical chemistry and analytical chemistry. The material available in any given year will reflect student interest and the availability of staff.

Co-ordinator: Professor J Bremner.

**CHEM920 Chemistry Research Project**

48 credit points per year. Assessment: major thesis. Topic to be arranged in consultation with the Departmental Head and approved by the Board of Research and Postgraduate Studies.

Co-ordinator: Professor J Bremner.
ENVIRONMENTAL SCIENCE

COURSES OFFERED

The following postgraduate degrees are available:

1. Doctor of Philosophy
2. Honours Master of Environmental Science by Research and Coursework

POSTGRADUATE PROGRAM

Environmental Science

CURRENT RESEARCH AREAS

The following areas of research are available to candidates:

- Responses of plant and animal populations to bushfires
- Plant succession and recolonisation of disturbed land
- Conservation genetics of native plants and animals
- Marine ecology and genetics
- Effects of pollution on aquatic organisms
- Atmospheric reaction mechanisms
- Environmental chemistry, especially the development of new methods for the analysis and treatment of industrial wastes and trace toxins
- Studies of heavy metals levels in the Illawarra region and investigations of the mechanism of toxic action
- Coastal marine pollution
- Soil genesis and management
- Integrated watershed management studies
- Coastal and fluvial geomorphology
- Environmental prehistory
- Environmental impact
- Remote sensing applications
- Biogeography
- Palynology
- Economic and environmental geology
- Sedimentology of terrestrial and shallow marine sequences

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN ENVIRONMENTAL SCIENCE

leading to the Honours Master of Environmental Science.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV1930</td>
<td>Thesis</td>
<td>24</td>
</tr>
<tr>
<td>ENV1920</td>
<td>The Scientific Basis of Environmental Management</td>
<td>8</td>
</tr>
<tr>
<td>ENV1921</td>
<td>Environmental Planning</td>
<td>8</td>
</tr>
<tr>
<td>STS929</td>
<td>Studies in Resource and Environmental Policy</td>
<td>8</td>
</tr>
</tbody>
</table>

Additional subjects for Category (b) candidates only:

At least 24 credit points of

- MGMT310 Introduction to Management for Professionals B 8
- LAW380 Law for Environmental Managers 8
- ENVI385 Environmental Engineering 8
- STS300 The Environmental Context 8

Plus

Two of

- ENV1910 Directed Studies in Pollution Chemistry 12
- ENV1911 Directed Studies in Ecology 12
- ENV1912 Directed Studies in Land Resources 12
- ENV1913 Directed Studies in Earth Sciences 12

For further details, see Course Requirements below.

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

This course is open to students with an honours degree at a minimum standard of Class II, Division 2 in a relevant discipline.

Candidates for this degree enrol in ENV1999.

2. HONOURS MASTER OF ENVIRONMENTAL SCIENCE

This degree combines research and coursework to provide:

- (a) continuing education for Bachelor of Environmental Science graduates;
- (b) Environmental Science education for Science or Engineering graduates or professional employees in the environmental science area, with no undergraduate background in environmental science.

Candidates in category (a) with a strong educational background in environmental science are required to complete 48 credit points comprising a 24 credit point thesis and 24 credit points of coursework which consists of three special single session...
tutorial/seminar subjects on the evaluation and management of a range of environmental problems.

Candidates in category (b) with little formal education in environmental science would be required to complete 96 credit points, i.e. 48 credit points of core subjects and research plus a further 48 credit points of coursework which would be selected with the approval of the Dean of Science from the additional subjects for Category (b) students listed above.

Candidates would normally be advised to select the subjects in which they do not have previous qualifications or experience in order to broaden their understanding of environmental issues.

This course structure facilitates the tailoring of coursework to suit the individual requirements of candidates with differing undergraduate qualifications and employment experience.

Entry Requirements

Admission is subject to the approval of the Dean of the Faculty of Science to candidates who would normally be required to have completed an undergraduate degree in Science or Engineering, or equivalent tertiary qualifications and/or professional experience.

SUBJECT DESCRIPTIONS

ENV910 Directed Studies in Pollution Chemistry

Spring session; 12 credit points (112 hrs comprising 56 hrs lectures/tutorials, 28 hrs practical, 28 hrs case study).
Pre-requisite: 100-level Chemistry and CHEM214 or equivalent. (The subject incorporates CHEM337, which is taken concurrently.)
Assessment: final examination, practicals, essay/essay study report, seminar.
The chemistry of water and air pollution. Toxins in the environment. Sources, sinks and transport processes, methods for quantitative measurement and control.
Co-ordinator: Associate Professor J Ellis.

ENV911 Directed Studies in Ecology

Autumn or Double (A) session; 12 credit points (106 hrs comprising 28 hrs lectures, 28 hrs tutorials, and 2 major case-study projects).
Assessment: tutorial assignments, seminars, final examination, major case study report (can be done in either session).
Textbooks:
Gilberson, DD Kent, M and Pyatt, FB. 
Co-ordinator: Professor R J Whelan.

ENV912 Directed Studies in Land Resources

Double session (A); 12 credit points (56 hrs lectures, 56 hrs seminars/laboratory and field work).
Assessment: examination, two essays, two research projects.
This subject will examine coastal, river, water and soil managements focussing on human induced changes to these natural systems. Emphasis will be given to geomorphological processes, remote sensing of land and biological resources.
Co-ordinator: Associate Professor G Nanson.

ENV913 Directed Studies in Earth Sciences

Double session (A); 12 credit points (up to 42 hrs lectures, seminars, up to 4 days field work, at least 28 hrs seminar).
Assessment: reports, seminars, final examination.
Topics include the relationship of mining operations to communities; downstream pollution problems; mineralogical composition of associated dusts; composition of mine waters and stack emissions, the reclamation of mine sites; effects of mine subsidence; the composition, uses and disposal of waste residues; environmental impact studies. One major project.
Co-ordinator: Dr BE Chenhall.

ENV9190 The Scientific Basis of Environmental Management

Spring session; 9 credit points (28 hrs lectures, 28 hrs seminar, up to four days fieldwork).
Assessment: final examination, 2 essays, 1 research report.
This course covers topics designed to give students a comprehensive overview of the scientific basis of environmental management. The course will adopt a multi-disciplinary approach to the scientific understanding of how major ecosystems work and show how an appreciation of such knowledge leads to the development of appropriate management strategies for these systems. While there will be some emphasis on the Australian situation, much of the material is applicable in any country. The systems to be covered include estuaries, reefs, coastal wetlands, forests (tropical and temperate), large and small catchment areas, semi-arid areas. In addition the science of the management of hazardous wastes (including radioactive materials) will be discussed. Case studies from Australia, South East Asia and the Pacific Islands will be included. As part of the course, students will complete a project carried out in teams to facilitate the development of interdisciplinary skills and an appreciation of the benefits of teamwork in addressing environmental management issues.
Co-ordinator: Dr M Ferland.

ENV921 Environmental Planning

Autumn session; 8 credit points (28 hrs lectures, 28 hrs seminar, up to four days fieldwork).
Assessment: final examination, 2 essays, 1 research report.
This course presents material necessary for a comprehensive overview of the status and development of environmental planning in government and industry. In the course students will be introduced to the principles of environmental planning. This will be followed by presentations from staff from a wide range of organisations involved in environmental planning such that the mechanisms, difficulties and benefits of current planning activities in Australia are explained. While the emphasis is on the Australian situation, reference to activities in other countries will be included, in addition to aspects of the global situation regarding environmental planning.
Co-ordinator: Professor J Morrison.

STS929 Resource and Environmental Policy

Autumn session; 8 credit points (4 hrs lectures/seminars per wk).
Assessment: 1 major research essay of 4000 words, 1 minor essay of 1500 words, seminar performance, plus class exercises.
This subject will provide advanced study of the social, economic and political processes through which environmental policy is negotiated and instituted. The subject will be thematic, choosing one or more particular areas of technological development and its environmental impact as a case study. (The areas will be chosen in any given year on the basis of their contemporary relevance.) Theoretical perspectives which will be developed in this context may include the politics and sociology of scientific controversy, global, national and regional developments in environmental regulation, theories of state regulation and intervention, and the choice and negotiation of different environmental strategies. Students will be expected to read extensively and critically, to engage in coherent and documented argument and to approach the problems considered by utilising insights from a number of different theoretical perspectives.
Textbooks:
The study program will rely on extensive library study in journals and books, supplemented by case study material assembled for the subject.
Co-ordinator: Professor J Falk.

ENV930 Thesis

Double session (A); 24 credit points.
Assessment: written dissertation and seminar presentation.
A research topic in an area of environmental science will be selected by each candidate after consultation with the degree co-ordinator. The thesis will be supervised by staff from the appropriate department or departments.
Co-ordinator: Professor J Morrison.

ENV999 Major Thesis

48 credit points per year.
Assessment: major thesis.
The major thesis takes the form of a supervised research project on a topic approved by the Professor of Environmental Science and the Graduate Faculty. 
Co-ordinator: Professor J Morrison.
GEOGRAPHY

COURSES OFFERED

The following postgraduate degrees and diploma are available:

1. Doctor of Philosophy
2. Honours Master of Science by Research or Coursework
3. Honours Master of Arts by Research or Coursework
4. Master of Science
5. Master of Arts
6. Graduate Diploma in Science

POSTGRADUATE PROGRAMS

Physical Geography and Environments
Human Geography and Environments
and other studies in Geography.

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master degrees by research and the Doctor of Philosophy degree:

Physical Geography
- Quaternary studies
- Australian prehistory
- Coastal geomorphology
- Fluvial geomorphology
- Evolution of landforms
- Environmental impact
- Environmental management
- Remote sensing applications
- Geographical information systems
- Biogeography
- Palynology
- Natural hazards

Human Geography
- Agricultural geography
- Asian Studies
- Environmental management
- Remote sensing applications
- Geographical information systems
- Natural hazards
- Australian prehistory
- Urban studies
- Population studies
- Ageing and the elderly
- Health and welfare
- Food, nutrition and hunger
- Social theory
- Economic restructuring

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN PHYSICAL GEOGRAPHY AND ENVIRONMENTS
leading to the Master of Arts or Master of Science.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>GEOG935</td>
<td>Research Report</td>
<td>8</td>
</tr>
<tr>
<td>GEOG941</td>
<td>Coastal Environments</td>
<td>8</td>
</tr>
<tr>
<td>GEOG942</td>
<td>Geomorphology of Rivers</td>
<td>8</td>
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<tr>
<td>GEOG943</td>
<td>Biogeography</td>
<td>8</td>
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<tr>
<td>GEOG945</td>
<td>Remote Sensing</td>
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</tr>
<tr>
<td>GEOG948</td>
<td>Quaternary Studies</td>
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<tr>
<td>GEOG949</td>
<td>Landscapes and Soils</td>
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</tr>
<tr>
<td>GEOG952</td>
<td>Natural Hazards</td>
<td>8</td>
</tr>
</tbody>
</table>

In consultation with the Head of the School of Geosciences, candidates select subjects which constitute a coherent program to the value of at least 48 credit points. Not all of these subjects will be offered in any year.

For further details, see Course Requirements below.
POSTGRADUATE PROGRAM IN HUMAN GEOGRAPHY AND ENVIRONMENTS

leading to the Master of Arts or Master of Science.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<tr>
<td>GEOG935</td>
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<td>GEOG946</td>
<td>Geographical Information Systems</td>
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<td>GEOG947</td>
<td>Australian Prehistory</td>
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</tr>
<tr>
<td>GEOG951</td>
<td>Environmental Policy and Management</td>
<td>8</td>
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<tr>
<td>GEOG962</td>
<td>Global Economic and Social Change</td>
<td>8</td>
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<tr>
<td>GEOG963</td>
<td>Population Dynamics, Analysis and Policy</td>
<td>8</td>
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<tr>
<td>GEOG964</td>
<td>Food and Development Studies</td>
<td>8</td>
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<tr>
<td>GEOG965</td>
<td>Asian Development</td>
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</tbody>
</table>

In consultation with the Head of the School of Geosciences, candidates select subjects which constitute a coherent program to the value of at least 48 credit points. Not all of these subjects will be offered in any year.

For further details, see Course Requirements below.

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Available to candidates with honours degrees of at least Class II Division 2 standard. Candidates for this degree enrol in GEOG999.

2. HONOURS MASTER OF SCIENCE

3. HONOURS MASTER OF ARTS

The primary aim of the Honours Masters program in Geography is to provide research training at the postgraduate level. Students are required to have at least an Honours Class II, Division 2 degree in an appropriate discipline and will be required to complete a thesis with a value of at least 48 credit points. (GEOG944)

4. MASTER OF SCIENCE

5. MASTER OF ARTS

Geography offers a program of postgraduate level subjects which leads to the degree of Master of Science or Master of Arts. The program has been devised to meet the needs of students who wish to proceed to the postgraduate level, but for whom the research orientation of the Honours Masters degree is not appropriate.

Students with a satisfactory background in Geography will be required to complete subjects with a value of 48 credit points. Other students will be required to complete postgraduate subjects with a value of 72 points. The subjects are grouped in two strands which reflect the major research strengths of the Geography program, each of which provides a structured grouping of subjects relevant to a major vocational focus. Students are encouraged to confine their choice of subjects to one of the strands. Entry to the program and the choice of subjects will be dependent upon approval by the Head of School of Geosciences.

All subjects are worth 8 credit points and will involve 6 contact hours per week.

6. GRADUATE DIPLOMA IN SCIENCE

The Graduate Diploma in Science offers graduates lacking a major strand of Geography in their degree the opportunity to acquire competence in the discipline.

Alternatively, Geography graduates may enrol in the program in order to update, broaden and/or intensify their knowledge, e.g., for teaching, or to equip themselves for work in applied fields such as environmental management, tourism or social planning. In addition to the University's Rules for Graduate Diplomas, candidates for the Graduate Diploma in Science shall:

i) complete Geography subjects to a value of not less than 48 credit points from those listed in the General Schedule, at least 24 credit points being for subjects at the 300-level and the remainder at 200-level, provided that, by approval of the Head of School, up to 12 credit points at 200-level may be obtained for cognate subjects offered by another Department;

ii) not include in the diploma program subjects which, in the opinion of the Head of School, are substantially equivalent in the content to those for which credit has already been obtained towards some other degree or diploma;

iii) have their program approved by the Head of School before enrolment;

iv) successfully complete the graduate diploma program in not more than four academic sessions.

SUBJECT DESCRIPTIONS

GEOG935 Research Report

Autumn or Spring session; 12 credit points (2 hrs workshop per wk).
Assessment: research report.
This subject will allow the student to research in detail a problem identified in another subject within the program. Approval to enrol in this subject will only be granted to students who have demonstrated their capacity to undertake research by their performance in one or more of the other subjects in the strand.
Co-ordinator: Head of School of Geosciences.

GEOG941 Coastal Environments

Autumn or Spring session; 8 credit points (3hrs lecture/seminar; 3hrs practical/tutorial per week, 2-3 days fieldwork).
Assessment: as appropriate from class tests, essays, research project, practical work, final examination.
This subject examines sedimentary and ecological processes on the coast. Coastal management is considered from geomorphological and ecological perspectives. Topics include the morphology and development of coastal landforms, particularly estuaries, deltas, chenier and beach ridge plains, beaches and dunes, and coral reefs. Emphasis is placed on interpreting Holocene morphostratigraphy and morphodynamics, reconstructing sea-level changes and the effect of sea-level changes on coastal environments, and on understanding present ecological and geomorphological processes in relation to their longer term development.
Co-ordinator: Associate Professor CD Woodroffe.

GEOG942 Geomorphology of Rivers

Autumn or Spring session; 8 credit points; (3hrs lecture/seminar; 3hrs Practical/tutorial per week, 2-3 days fieldwork).
Assessment: As appropriate from class tests, essays, research project, practical work, final examination.
Rivers play a dynamic and vital role both in shaping the earth's landforms and affecting human use of the earth's surface. This subject examines processes forming and modifying stream channels and drainage basins. Rivers are studied as natural systems within which variables adjust to each other, to natural external variables, and to human interference. Specific topics include flood hydrology, river floodplains; channel geometry, river platforms, channel erosion, sediment transport, sediment deposition and Quaternary history. Particular attention is given to human modification and management of rivers, with concentration on local urban and rural streams. Techniques include field measurements, sediment analysis and aerial photographic interpretation.

Co-ordinator: Associate Professor G Nanson.

GEOG943 Biogeography

Autumn or Spring session; 8 credit points, (3hrs lecture/seminar; 3hrs practical/tutorial per wk; 2-3 days fieldwork).
Assessment: as appropriate from class tests, essays, research project, practical work, final examination.
Biogeography is the study of the distributions of plants and animals, and their interaction both with each other and with the physical environment. The response of plant communities to variations in climate, soils and other environmental factors is examined with a view to understanding the character and
distribution of vegetation both on a global and a local scale. Plant succession and species diversity are studied in the light of traditional and contemporary theories in these fields, and particular attention is given to the unique characteristics of island communities. Present knowledge of past glacial events, continental drift and the formation of land bridges are used to interpret the distribution of land vertebrates and plants. Field work concentrates on local coastal and rainforest communities.

Co-ordinator: Associate Professor CD Woodroffe.

GEOG945 Remote Sensing

Autumn or Spring session; 8 credit points, (3hrs lecture/seminar; 3hrs practical/tutorial per wk).
Assessment: as appropriate from class tests, essays, research project, practical work, final examination.

This subject introduces the principles and techniques for measuring and interpreting the environment using visible and non-visible wavelengths in the electromagnetic spectrum. It describes the physical aspects of those wavelengths and the reflective and absorptive properties of various materials. Topics include those used in practical exercises. Case studies of a wide range of applications will be used to illustrate the potential of remote sensing. Topics include: the USA operated LANDSAT and NOAA satellites; the French SPOT satellite; the Japanese Marine Observation satellite (MOS); the European Space Agency satellite ERS-1 plus the shuttle imaging RADAR (SIR), will be used in practical exercises. Assessment will be made to the impact of fire and to the extinction of giant marsupials. Emphasis will be placed on the development of techniques used in the environmental impact assessment of major projects, and techniques used for reconstructing Late Quaternary environments. The third main theme of the course is the development and variety of Aboriginal economies, and their impact on the environment; special reference will be made to the impact of fire and to the extinction of giant marsupials. Emphasis will be given to field and laboratory techniques used in the environmental impact assessment of Aboriginal communities, including pollen analysis, sediment stratigraphy and analysis, artefact interpretation and analysis, and archaeological excavation techniques and analysis.

Co-ordinator: Dr L Head.

GEOG948 Quaternary Studies

Autumn or Spring session; 8 credit points; (3hrs lectures/seminar; 3hrs practical/tutorial per wk; 2-3 days fieldwork).
Assessment: as appropriate from class tests, essays, research project, practical work, final examination.

The present environment of Australia is the legacy of interactions between geological, biological and hydrological processes operating at a range of timescales, as well as human impacts within the last hundred thousand years. Understanding the changes of the Quaternary, the last two million years, is now recognised as crucial to the interpretation of our biotic and geomorphic landscapes. This subject equips students with the skills to critically examine and interpret data, and to develop an understanding of the Quaternary record; dating methods; pollen and charcoal analysis; biotic change (including rainforest decline, savannah expansion, megafaunal extinctions and the role of fire) and geomorphic change (including evidence from lakes, rivers, dunes and coasts). While the focus is on Australia, including tropical, temperate and arid examples, a global context to Quaternary change is provided. Attention is given to the implications of a longer time perspective for present-day ecosystem management.

Co-ordinator: Dr L Head.

GEOG949 Landscapes and Soils

Autumn or Spring session; 8 credit points; (3hrs lecture/seminar; 3hrs practical/tutorial per wk; 2-3 days fieldwork).
Assessment: as appropriate from class tests, essays, research project, practical work, final examination.

The interaction of time and place in the transformation of landscapes among these processes is emerging both from natural causes and from societies' impact on their environments. Topics include: the relationship of hazards; survival of ancient landscapes; development of depositional landscapes; variation among landforms-vegetation relationships; the transformation of soil-vegetation-landform assemblages over the last 10,000 years; a critical review of the scientific perception of landscape. Relevant case studies will be drawn mainly from Australia, North America and Eurasia. Practical classes will focus on photographic, cartographic and field techniques of soil surveying, and on the microscopic study of soils and weathering profiles.

Co-ordinator: to be advised.

GEOG951 Environmental Policy and Management

Autumn or Spring session; 8 credit points, (3hrs lecture/seminar; 3hrs practical/tutorial; 2-3 days fieldwork).
Assessment: as appropriate from class tests, essays, research project, practical work, final examination.

This subject examines the political, institutional, economic and geographic factors which influence environmental management. It presents an analysis of these processes, and examines issues from the perspective of a manager. Particular attention is given to examining current approaches to environmental decision-making, assessment and evaluation. Emphasis is placed on the understanding of political philosophies and social value systems, including those of indigenous peoples, on environmental management. Illustrations are drawn from a wide range of environmental issues, mainly from Australia, and commonly from the interface of human and physical geography.

Co-ordinator: Dr J Formby.

GEOG952 Natural Hazards

Autumn or Spring session; 8 credit points, (3hrs lecture/seminar; 3hrs practical/tutorial; 1-2 days fieldwork).
Assessment: as appropriate from class tests, essays, research project, practical work, final examination.

Natural hazards such as tropical cyclones, coastal storms, droughts, earthquakes, volcanoes and tsunami are undergoing extensive research in terms of our understanding about their behaviour and occurrence. The increasing frequency of these events is overwhelming existing global capabilities in mitigating their impacts and responding to their effects. This subject examines recently developed concepts on hazards and assesses changing societal consequences leading into the 21st century.

Co-ordinator: Associate Professor EA Bryan.

GEOG952 Global Economic and Social Change

Autumn or Spring session; 8 credit points, (3hrs lecture/seminar; 3hrs practical/tutorial per wk; 2-3 days fieldwork).
Assessment: as appropriate from class tests, essays, research project, practical work, final examination.

This subject studies the impact of the
processes of global restructuring on the patterns and nature of international trade, labour and service transfers, and the expression of these processes in urban society and space. It is structured in 3 interrelated components focusing on: the geography of international trade, the internationalisation of labour and services, and urban transformations. An understanding of the geography of international trade is achieved. The second component will focus on international transfers of labour and services, a major mechanism in the internationalisation of the global economy. The final component deals with economic change as it is reflected in the built and social morphology of the city.

Co-ordinator: Dr G Waitt

GEOG963 Population Dynamics, Analysis and Policy
Autumn or Spring session; 8 credit points, (3hrs lecture/seminar; 3hrs practical/tutorial per wk)
Assessment: as appropriate from class tests, essays, research project, practical work, final examination.
In all societies questions relating to population size, growth rates, composition, distribution and redistribution are important. This subject attempts to provide a basis for understanding such problems by examining, in their 'developed' and 'less developed' socio-cultural contexts, the processes which contribute to demographic change and compositional variation (fertility, mortality, migration). Attention will also be paid to population regulating policies and programs, to data sources in population studies and to some of the more important techniques used in demographic analysis. Students will receive instruction on statistical and other analytical methods for analysing population dynamics.
Co-ordinator: to be advised.

GEOG964 Food and Development Studies
Autumn or Spring session; 8 credit points, (3hrs lecture/seminar; 3hrs practical/tutorial per wk).
Assessment: as appropriate from class tests, essays, research project, practical work, final examination.
This subject seeks to increase student understanding of the processes operating from the local to international levels that result in inequalities in the distribution of food resources. It aims to introduce key aspects of and explanations for the geography of hunger, including the roles of technology, aid and corporate interests in food resources. Food security issues are analysed through the use of major theories of underdevelopment. Proposals for the alleviation of global hunger are canvassed.
Co-ordinator: to be advised.

GEOG965 Asian Development
Autumn or Spring session; 8 credit points, (3hrs lecture/seminar; 3hrs practical/tutorial per wk).
Assessment: as appropriate from class tests, essays, research project, practical work, final examination.
This subject examines the recent growth in the economies of South East and North Asia. This subject aims to examine the concept of development in Asia by addressing various case studies and theoretical perspectives. The subject not only compares mechanisms and consequences of economic development between Asian countries, but also with other less industrialised countries.
Co-ordinator: Dr G Waitt.

GEOG944 Major Thesis
48 credit points.
The major thesis for the Honours Master degree takes the form of a supervised full-time research project on an approved topic over at least two sessions.

GEOG999 Major Thesis
48 credit points per year.
The major thesis for the Doctor of Philosophy degree takes the form of a supervised research project on an approved topic.
GEOLOGY

COURSES OFFERED

The following postgraduate degrees and diploma are available:

1. Doctor of Philosophy
2. Honours Master of Science
   (a) Coursework
   (b) Coursework and Research
   (c) Research
3. Master of Science
4. Graduate Diploma in Science

POSTGRADUATE PROGRAMS

Fuels - Sedimentology
Resources - Hard Rock Geology

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of Science degree by research and the Doctor of Philosophy degree:

Coal Geology
Sedimentology of coal measure sequences, coalfication, organic petrology, coal macerals and lithotypes, thermal maturation, organic geochemistry, coal quality evaluation, coal reserve estimation, coke and carbonization;

Environmental Geology
Pollution studies of coastal and estuarine depositional systems, palaeoecology of coastal sequences, pollution associated with mining, organic and inorganic geochemistry, isotope studies, land stability, clay mineralogy, hydrogeology, waste disposal, environmental impact studies;

Geophysics
Seismic refraction and reflection studies, structural and stratigraphic interpretation of seismic sections, gravity and magnetic methods, laboratory rock physics including velocity and attenuation in reservoir rocks and coal measures. Collaboration with industry may be arranged for electrical and electromagnetic studies;

Igneous Petrology
Igneous petrology, especially geochemistry of granite and related volcanic rocks, isotope geochemistry, volcanology and the stratigraphy of volcanogenic sequences, mineralogy;

Metamorphic Petrology
Low grade regional metamorphism, prograde and retrograde metamorphism, serpentinites, pressure and temperature studies in metamorphic petrology, mineralogy, geochemistry, skarn deposits;

Ore Geology
Structural and stratigraphic setting of ore deposits, ore petrology, geochemistry, isotope studies, ore reserve estimation and mathematical modelling, ore genesis;

Palaeontology and Stratigraphy
Systematic descriptions of invertebrate fossils, trace fossils and fossil assemblages provide the basis for ecological and biostratigraphic studies (especially of Early and Middle Palaeozoic sequences). Sequence stratigraphic analysis and applied geophysical methods can be used to aid stratigraphic correlation and analysis;

Petroleum Geology and Oil Shales
Aspects of petroleum geology include sequence stratigraphy, sedimentology, diagenesis and porosity relationships in petroleum reservoirs, organic petrology, thermal maturation of organic matter in source and reservoir rocks, organic geochemistry of oil and gas, reserve estimations, applications of geophysical techniques to basin studies, petrography, sedimentology and geochemistry of oil shale;

Sedimentology
The sedimentology of clastic and carbonate depositional systems including sedimentary petrology, palaeocurrent and basin analysis, with special reference to terrestrial and shallow marine facies;

Structural Geology and Tectonics
Structural geology of orogenic belts and sedimentary basins; plate tectonic interpretations of orogenic belts.
SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAMS IN RESOURCES - HARD ROCK GEOLOGY

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tr>
<td>Odd Years</td>
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<tr>
<td>GEOL901</td>
<td>Isotope Geochemistry</td>
<td>6</td>
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<tr>
<td>GEOL904</td>
<td>Ore Genesis</td>
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<tr>
<td>GEOL909</td>
<td>Applied Geophysics</td>
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<tr>
<td>GEOL918</td>
<td>Analytical Methods in Geology</td>
<td>6</td>
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<tr>
<td>GEOL922</td>
<td>Tectonics</td>
<td>6</td>
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| Even Years |
| GEOL906 | Metamorphism                                   | 6             |
| GEOL907 | Seismic Exploration                            | 6             |
| GEOL914 | Volcanology                                    | 6             |
| GEOL918 | Analytical Methods in Geology                  | 6             |
| GEOL923 | Structural Geology                             | 6             |
| GEOL913 | Advanced Topics in Geology D                  | 6             |

For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN FUELS - SEDIMENTOLOGY

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<td>GEOL901</td>
<td>Isotope Geochemistry</td>
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<tr>
<td>GEOL902</td>
<td>Diagenesis</td>
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<tr>
<td>GEOL916</td>
<td>Organic Geochemistry</td>
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<td>GEOL909</td>
<td>Applied Geophysics</td>
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<td>GEOL918</td>
<td>Analytical Methods in Geology</td>
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<tr>
<td>GEOL919</td>
<td>Basin Setting and Analysis</td>
<td>6</td>
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<td>GEOL921</td>
<td>Environmental Geology</td>
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<tr>
<td>GEOL922</td>
<td>Tectonics</td>
<td>6</td>
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</tbody>
</table>

| Even Years |
| GEOL903 | Biotratigraphy                                | 6             |
| GEOL907 | Seismic Exploration                           | 6             |
| GEOL917 | Petroleum Geology                             | 6             |
| GEOL918 | Analytical Methods in Geology                 | 6             |
| GEOL920 | Organic Petrology                             | 6             |
| GEOL923 | Structural Geology                            | 6             |

For further details, see Course Requirements below.

Note: Advanced Topics in Geology (GEOL910-913) in areas of specialisation may be included where appropriate and will be offered in the appropriate session.

A research thesis may be taken in addition to coursework, or in place of a coursework program, as appropriate to the degree course.

GRADUATE DIPLOMA SUBJECTS

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<tr>
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<tr>
<td>GEOL302</td>
<td>Basin analysis and groundwater</td>
<td>8</td>
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<tr>
<td>GEOL303</td>
<td>Lithospheric processes and products</td>
<td>8</td>
</tr>
<tr>
<td>GEOL304</td>
<td>Dynamic Earth</td>
<td>8</td>
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<tr>
<td>GEOL305</td>
<td>Basin resources</td>
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<tr>
<td>GEOL306</td>
<td>Mineral exploration</td>
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</tbody>
</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in GEOL999.

2. HONOURS MASTER OF SCIENCE

Introduction and Objectives

The rapid development of earth sciences has produced a need for postgraduate coursework. The courses offered by the discipline of Geology will provide further training to graduates currently employed in industry or in education. The courses are intended to provide general rather than specialist training. Specialist training is mainly by the preparation of a research thesis, but specialist coursework training is also available.

Structure of the Course

The course will be made up of subjects selected from one of the listed postgraduate programs or a 48 credit point research thesis.

Students entering with a degree in Geology at the level of at least Honours Class II, Division 2 will take subjects to a value of 48 credit points.

Students entering with a pass degree will take subjects to a value of 96 credit points.

Entry to the Course

Entry is subject to the approval of the Head of the School of Geosciences.

Selection of Subjects

Students must consult the Head of the School of Geosciences for approval of their proposed choice of subjects.

Strands

The subject combinations in each program may be varied to take account of the candidates' qualifications, objectives and study plan.
Pre-requisites
The minimum pre-requisite for all subjects is that the student must have graduated with at least 24 credit points of 300-level Geology subjects.

3. MASTER OF SCIENCE

The discipline of Geology offers a program of postgraduate level subjects which leads to the degree of Master of Science. It is designed for applicants from industry and education, and for students who wish to proceed beyond the three year pass degree but for whom the research component of the Honours degree is inappropriate.

Students entering the program with a pass degree in Geology or other approved courses will be required to complete subjects with a value of 48 credit points. For other requirements see the Master degree Rules.

Entry to the course will be subject to the approval of the Head of the School of Geosciences. Students must consult the Head of School for approval of their proposed choice of subjects. Subjects will normally be selected from one of the listed postgraduate programs.

4. GRADUATE DIPLOMA IN SCIENCE

This course will provide:

(1) a mechanism which permits practising geologists within the industry to acquire the knowledge necessary to improve their performance; and

(2) holders of a general geology degree to specialize in an expanding field of employment.

This course can be taken as an inservice part-time course aimed at upgrading and updating professional expertise in areas of rapid development.

Admission Requirements
Applicants for admission are required to:

(1) have a degree with a major in Geology from the University of Wollongong or an approved degree from another tertiary institution; or

(2) have other appropriate qualifications and professional experience.

Course Structure
Students will be required to complete subjects to the value of 48 credit points. Subjects should be selected from one of the listed postgraduate programs, together with one or more appropriate 300-level geology subjects (as set out in the Undergraduate Calendar). The selection of subjects shall be approved by the Head of the School of Geosciences who may also nominate other subject(s) deemed appropriate.

SUBJECT DESCRIPTIONS

GEOL901 Isotope Geochemistry

Autumn session; 6 credit points (up to 42 hrs of lectures/seminars/practicals/tutorials). Assessment: as appropriate from essays, reports, seminars, final examination. Topics include sample preparation; mass spectrometry; applications of both radiogenic and stable isotopic systems; geochronology modelling; petrogenetic modelling. References: Faure, G, Principles of Isotope Geology, Wiley, New York, 1986. Co-ordinator: Dr PF Carr.

GEOL902 Diagenesis

Spring session; 6 credit points (up to 42 hrs of lectures/seminars/practicals/tutorials; up to 4 days field work). Assessment: as appropriate from essays, reports, seminars, final examination. Topics include evolution of diagenetic processes acting on clastic and carbonate sedimentary sequences; interaction between cementation, secondary porosity and permeability in the development of subsurface reservoirs. Laboratory work will include petrology of selected suites of rocks including photomicroscopy, SEM, XRD and assessment of porosity and permeability. References: McDonald, D A and Surdam, R C, Clastic Diagenesis, American Association of Petroleum Geologists Memoir 57. Co-ordinator: Associate Professor BC Jones.

GEOL903 Biostatigraphy

Autumn session; 6 credit points (up to 42 hrs of lectures/seminars/practicals/tutorials; up to 4 days field work). Assessment: as appropriate from essays, reports, seminars, final examination. Topics include principles of and developments in biostatigraphy; zonation, assemblages, correlation; biogeography; importance of various fossil groups; Australian and other case histories in biostatigraphy. Field work will include study and analysis of biostatigraphic aspects of a basin sequence. Co-ordinator: Associate Professor AJ Wright.

GEOL904 Ore Genesis

Spring session; 6 credit points (up to 42 hrs of lectures/seminars/practicals/tutorials; up to 4 days field work). Assessment: as appropriate from essays, reports, seminars, final examination. Topics include principles of ore genesis; spatial and temporal considerations; experimental studies; plate tectonics and ore genesis; hydrothermal fluids, fluid inclusions; genesis of hydrothermal, magmatic, metasomatic, sedimentary and residual deposits. Co-ordinator: Dr AC Hutton.

GEOL906 Metamorphism

Spring session; 6 credit points (up to 42 hrs of lectures/seminars/practicals/tutorials; up to 4 days field work). Assessment: as appropriate from essays, reports, seminars, final examination. Topics include the genesis of metamorphic rocks; contact metamorphic and masomatic phenomena; regional metamorphism at contrasted pressures and temperatures; and the roles of pressure, temperature, time and fluid composition in metamorphism. Co-ordinator: Dr BE Chennall.

GEOL907 Seismic Exploration

Spring session; 6 credit points (up to 42 hrs of lectures/seminars/practicals/tutorials; up to 4 days field work). Assessment: as appropriate from essays, reports, seminars, final examination. Topics include acquisition and processing of seismic data; structural interpretation of seismic sections; seismic stratigraphy; well logging and well ties; seismic modelling and reservoir evaluation; high resolution seismic reflection, in-seam seismic. Laboratory work includes interpretation of seismic data using both conventional paper records and interactive computer displays. Co-ordinator: Dr LEA Jones.

GEOL909 Applied Geophysics

Spring session; 6 credit points (up to 42 hrs of lectures/seminars/practicals/tutorials; up to 4 days field work). Assessment: as appropriate from essays, reports, seminars, final examination. Topics include gravity; magnetics; electrical and electromagnetic methods; well logging methods and interpretation. Laboratory work includes interpretation of synthetic and real data; field work includes use of equipment, data collection and interpretation. Co-ordinator: Dr LEA Jones.

GEOL910 Advanced Topics in Geology A

Double session (A); 12 credit points. Assessment: as appropriate from essays, reports, seminars, final examination. Co-ordinator: to be advised.

GEOL911 Advanced Topics in Geology B

Double session (A); 12 credit points. Assessment: as appropriate from essays, reports, seminars, final examination. Co-ordinator: to be advised.

GEOL912 Advanced Topics in Geology C

Autumn or Spring session; 6 credit points. Assessment: as appropriate from essays, reports, seminars, final examination. Co-ordinator: to be advised.

GEOL913 Advanced Topics in Geology D

Autumn or Spring session; 6 credit points. Assessment: as appropriate from essays, reports, seminars, final examination. Co-ordinator: to be advised.

GEOL914 Volcanology

Autumn session; 6 credit points (up to 42 hrs of lectures/seminars/practicals/tutorials; up to 4 days field work). Assessment: as appropriate from essays, reports, seminars, final examination. Topics include physical aspects of volcanology of both modern and ancient volcanic deposits; tectonic setting of volcanoes and the physical properties of magmas; effects on volcanic processes and deposits. Co-ordinator: Dr PF Carr.

GEOL916 Organic Geochemistry

Autumn session; 6 credit points (up to 42 hrs of lectures/seminars/practicals/tutorials; up to 4 days field work). Assessment: as appropriate from essays, reports, seminars, final examination. Topics include carbon compounds; kerogen and its analysis (elemental analysis (van Krevelen diagrams), pyrolysis (RockEval, pyrolysis-GC), solvent extraction, gas...
chromatography, mass spectrometry); formation and analysis of petroleum, biomarkers; petrology of oil shale and source rocks; source rock and maturation concepts in petroleum geology; reflectance profiles, geothermal gradients and burial history; thermal modelling.

Co-ordinator: Dr AC Hutton.

GEOL917 Petroleum Geology

Spring session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work).
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include definition and prediction of subsurface petroleum reservoirs based on sedimentological and petrological criteria; use of facies models for reservoir prediction and evaluation; reservoir dynamics - fluid migration, entrapment and extraction; drilling and extraction methods, well testing, reservoir and reserve evaluation; Australian and international petroleum reserves.

Laboratory work: evaluation of petroleum reservoirs based on theoretical and real examples.

Reference:
Co-ordinator: Associate Professor BG Jones.

GEOL918 Analytical Methods in Geology

Autumn session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials).
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include an outline of the theory and practice of modern analytical methods in petrology and determinative mineralogy; mineral separation; use of various analytical techniques including XRD, XRF, SEM, ICP and microprobe.

Reference:
Co-ordinator: Dr BE Chenhall.

GEOL919 Basin Setting and Analysis

Autumn session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work).
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include tectonic development of sedimentary basins (coal, petroleum and mineral deposits in sedimentary basins); spatial relationships; analytical aspects of basin analysis including palaecurrent analysis, sedimentary facies relationships within the basin fill, petrological parameters in sedimentary basins and mathematical analysis of basin data; coal forming environments. Field work includes comparison of facies on the cratonic and arc sides of the retroarc Sydney Basin sequence.

Reference:
Co-ordinator: Associate Professor BG Jones.

GEOL920 Organic Petrology

Spring session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work).
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include sample preparation; fluorescence and white light microscopy; macerals, microlithotypes, lithotypes; evolution of flora; formation of peat; coalification; type and rank; heat-affected coals, coke; Gondwana coals; coal petrology and associated stratigraphic, tectonic and palaeogeographic problems; minerals in coal and oil shale. Laboratory exercises include examination of Gondwana and northern hemisphere coals; field work includes examination of seams in outcrop and core.

Co-ordinator: Dr AC Hutton.

GEOL921 Environmental Geology

Spring session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work).
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include the relationship of mining operations to communities; downstream pollution problems; mineralogical composition and types of associated dusts; composition of mine waters and stack emissions; the reclamation of mine sites; effects of mine subsidence; the composition, uses and disposal of waste residues; environmental impact studies; alienation of resources; conflicts of interest in mining operations. Field work includes visits to appropriate and topical field locations, extractive mineral and industrial sites.

Co-ordinator: Dr BE Chenhall.

GEOL922 Tectonics

Autumn session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 5 days field tutorials).
Assessment: as appropriate from essays, reports, seminars, final examination.
The subject provides an overview of the dynamic Earth with analysis of plate tectonics and the tectonic development of ancient rock assemblages and orogenic systems. Aspects of tectonic theory are treated by reference to several examples of Phanerozoic and Precambrian orogenic systems.

Reference:
Co-ordinator: Dr CL Fergusson.

GEOL923 Structural Geology

Autumn session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 5 days field tutorials).
Assessment: as appropriate from essays, reports, seminars, final examination.
The subject provides an overview of deformation of the Earth's crust and modern applied techniques in structural geology. The principles of stress, strain and deformation are taught and applied to the understanding of rock structures.

Reference:
Co-ordinator: Dr CL Fergusson.

GEOL950 Project A
18 credit points.
Assessment: report, seminar and essays and examinations as appropriate.
This project will consist of a field, laboratory and/or library study on some topical aspect of geology equivalent to four months of full-time study.

GEOL999 Major Thesis
48 credit points per year.
COURSES OFFERED

The following postgraduate degrees and diplomas are available:

1. Doctor of Philosophy
2. Honours Master of Science by Research
3. Graduate Diploma in Science

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of Science degree by research and the Doctor of Philosophy degree:

- Astronomy - visible and infrared, planetary surfaces
- Experimental nuclear physics
- Laser spectroscopy
- Medical and Radiation Physics
- Scattering of light by solids
- Solid state spectroscopy of impurities in semi-conductors
- Studies of electronic wave functions in solids

SCHEDULE OF GRADUATE SUBJECTS

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<td>Mathematics IIB for Engineers</td>
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<td>PHYS305</td>
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<td>PHYS315</td>
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<td>PHYS325</td>
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* These subjects are pre and co-requisite of some of the physics subjects.

Honours Master of Science

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<td>Advanced Solid State Physics</td>
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<td>PHYS947</td>
<td>Special Topics in Physics A</td>
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</tr>
<tr>
<td>PHYS948</td>
<td>The Physics of Imaging</td>
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</tr>
<tr>
<td>PHYS960</td>
<td>Advanced Project in Physics B</td>
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<td>PHYS997</td>
<td>Special Topic in Physics B</td>
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<td>PHYS999</td>
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For further details, see Course Requirements below.
COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY
Candidates for this degree enrol in PHYS999.

2. HONOURS MASTER OF SCIENCE
The course will be made up of subjects selected from those described below, in accordance with the Honours Masters Degree Rules together with the following conditions:

(1) entry to the degree program will normally be from an Honours degree in Physics or the Graduate Diploma in Science (Physics) or from a pass degree with an appropriate three year sequence in Physics;

(2) students entering with a degree of Honours Class II, Division 2 or above in an appropriate area, will do the 48 credit point PHYS999 Major Thesis;

(3) students entering with a degree below Honours Class II, Division 2 will do the 48 credit point PHYS999 and a 48 credit point combination of subjects chosen from the remaining Graduate Subjects Schedule. These subjects will normally be chosen in consultation with and approved by the Departmental Head.

3. GRADUATE DIPLOMA IN SCIENCE

Introduction and Objectives
This one year full-time or two year part-time course is designed to provide:

(1) a Masters Qualifying course for students who have inadequate preparation for direct entry into the Honours Masters program;

(2) an opportunity for Science teachers who have a degree but have taken Physics to first or second year level only, to improve their understanding and horizons in Physics;

(3) an opportunity for International students and students without a full major in Physics to update their knowledge of Physics.

Entry to the Course
Students must consult the Departmental Head for admission to the course. The particular combination of subjects to the value of 48 credit points will be chosen in consultation with the Departmental Head.

SUBJECT DESCRIPTIONS

PHYS910 Advanced Project in Physics A
Autumn session; 6 credit points (42 hrs laboratory).
Assessment: satisfactory operation and written descriptions of completed experiments.

PHYS946 Advanced Solid State Physics
Double Session (A); 6 credit points.
Assessment: assigned problems, tests and sessional examinations.

PHYS947 Special Topic in Physics A
Autumn session; 6 credit points (14 hrs seminars and 14 hrs tutorials).
Assessment: project work and seminar.

PHYS948 The Physics of Imaging
Autumn session; 6 credit points (28 contract hrs).
Pre-requisite: Relevant academic or professional background.
Assessment: assignments and end of session paper.

PHYS960 Advanced Project in Physics B
Spring session; 6 credit points (42 hrs laboratory).
Assessment: satisfactory operation and written descriptions of completed experiments.

PHYS977 Special Topic in Physics B
Spring session; 6 credit points (14 hrs seminars and 14 hrs tutorials).
Assessment: as for PHYS947.
A special topic to be selected from any area of physics. The selection to be made by the Departmental Head in consultation with the Departmental Assessment Committee.

Co-ordinator: Associate Professor W Zealey.

PHYS999 Major Thesis
Double session (A); 48 credit points per year.
The major thesis takes the form of a supervised research project on an approved topic.

Co-ordinator: Associate Professor W Zealey.
CROSS FACULTY PROGRAM
POSTGRADUATE PROGRAM

Total Quality Management

Page

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TOTAL QUALITY MANAGEMENT

COURSES OFFERED

The following courses are available:

1. Honours Master of Total Quality Management
2. Graduate Diploma in Total Quality Management
3. Graduate Certificate in Total Quality Management

*PhD in TQM may be available, contact course co-ordinator.

POSTGRADUATE PROGRAM

Total Quality Management

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN TOTAL QUALITY MANAGEMENT

leading to the Honours Master of Total Quality Management, Graduate Diploma in Total Quality Management and Graduate Certificate in Total Quality Management.

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<td>STAT949 Statistical Thinking</td>
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<tr>
<td>or ENGG921 Engineering Data Reduction and Error Analysis</td>
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<td>or MECH961 Quality Improvement Systems and Implementation</td>
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<td>or MGMT906 Managing People at Work</td>
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<td>STAT941 Statistical Quality Control 1</td>
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<tr>
<td>or ENGG922 Statistical Process Control in Manufacturing and Service Industries</td>
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<td>MECH960 Industrial Quality Management</td>
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<td>MGMT915 Management of Change</td>
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<td>TQM912 An Overview of Quality Management</td>
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<td>MECH967 International Quality Techniques</td>
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<td>STAT942 Design and Analysis for Quality Control</td>
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<td>MGMT953 Human Resource Management</td>
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<td>MGMT970 Contemporary Issues in Services Quality</td>
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<td>MECH965 Quality in Engineering Design</td>
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<td>or any other postgraduate subject approved by the Co-ordinator</td>
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<tr>
<td>TQM913 Thesis in Quality Management</td>
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<tr>
<td>or applicants with an outstanding achievement record at Graduate Diploma level may be admitted to: TQM914 Thesis in Quality Management</td>
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COURSE REQUIREMENTS

GENERAL

Students seeking Advanced Standing or Exemption are advised to refer to the University Rules, under the General Information section of the Postgraduate Calendar.

1. HONOURS MASTER OF TOTAL QUALITY MANAGEMENT

This course will be offered on a part-time and full-time basis and will require a minimum study period of one and a half years full-time or three years part-time. Candidates will be required to complete the Graduate Diploma in Total Quality Management and a further 48 credit points. The 48 credit points must include a 24 credit point research thesis and 4 subjects as outlined above. Alternatively applicants with outstanding entry qualifications may complete their Honours Master of TQM by thesis only through enrolling in a 48 credit point thesis (TQM914). The research thesis must be completed with supervision from one of the Faculties of Commerce, Informatics or Engineering. This research project can be industry based and tailored to the candidate's work-place requirements.

Entry Requirements:
A Graduate Diploma in Total Quality Management or an appropriate Graduate Diploma or Honours degree in the University or other approved institution. Prior to the conferring of the degree of Honours Master of Total Quality Management upon a candidate, the candidate must surrender the testamur for the Diploma in Total Quality Management and in doing so will be deemed to have surrendered all rights pertaining to the diploma.

2. GRADUATE DIPLOMA IN TOTAL QUALITY MANAGEMENT

The candidate is required to successfully complete 48 credit points of course work as outlined in the schedule.

Entry Requirements:
Three or four year Bachelor Degree from the University or other approved institution with the qualifications of candidates applying for entrance to be assessed by the course co-ordinator(s).
3. GRADUATE CERTIFICATE IN TOTAL QUALITY MANAGEMENT

The candidate is required to successfully complete 24 credit points of course work as outlined in the schedule.

Entry Requirements:
The University may consider candidates who do not possess formal qualifications but can offer substantial professional experience in the area.

EXTERNAL COURSES
The Graduate Diploma in Total Quality Management and the Graduate Certificate in Total Quality Management are available externally through the Wollongong Graduate Consortium (PACE), Office of Continuing Education and the Sydney Centre.

SUBJECT DESCRIPTIONS

ENGG921 Engineering Data Reduction and Error Analysis
6 credit points (3 hrs per wk).
Assessment: final examination and compulsory assignments.

ENGG922 Statistical Process Control in Manufacturing and Service Industries
6 credit points (3 hrs per wk).
Assessment: final examination and compulsory assignments.

MECH960 Industrial Quality Management
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination, other examinations, projects, tutorials and assignments may be incorporated in the final assessment.

MECH961 Quality Improvement Systems and Implementation
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination, other examinations, projects, tutorials and assignments may be incorporated in the final assessment.

MECH965 Quality in Engineering Design
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination, other examinations, projects, tutorials and assignments may be incorporated in the final assessment.

MECH967 International Quality Techniques
Autumn or Spring session; 6 credit points (28 hrs lectures, 14 hrs tutorials).
Assessment: final examination, other examinations, projects, tutorials and assignments may be incorporated in the final assessment.

Mgmt911 Organisational Behaviour
6 credit points (3 hrs per wk).
Assessment: final examination and satisfactory completion of two assignments.

Mgmt915 Management of Change
6 credit points (3 hrs lectures/seminars per wk).
Assessment: seminars, project and examination.

Mgmt953 Human Resource Management
6 credit points (3 hrs per wk).
Assessment: group presentation(s), written assignment(s), examination(s).

Job Design; Job Analysis and Training; Unionisation; Employee Involvement; Appraisal; Payment & Reward; Health &
248 Cross Faculty Program

Safety/Occupational Health; International HRM; HRM & Total Quality.

Co-ordinator: Dr G Sewell.

MGMT970 Contemporary Issues in Services Quality
6 credit points (3 hrs per wk).
Assessment: critique of academic literature, case presentations, assignments.

This course is designed to follow on from MGMT908 Managing Services Marketing. It will focus on advanced topics in service quality, customer satisfaction with services, and strategic issues relating to the marketing and relationship management in service organisations. Emphasis will be placed on reviewing contemporary readings in the academic and professional literature.

Co-ordinator: Associate Professor P Patterson.

STAT941 Statistical Quality Control I
6 credit points.
Pre-requisite: MATH949.
Assessment: assignments and examinations.


Co-ordinator: Dr C Gulati.

STAT942 Design and Analysis for Quality Control
6 credit points.
Assessment: examination 75%, assignments 25%


Co-ordinator: Dr Y Lin.

STAT949 Statistical Thinking
6 credit points.
Assessment: assignments and examinations.


Co-ordinator: Professor D Griffiths.

TQM911 Introduction to Quality Concepts
6 credit points.
This subject should be taken in the first session of study.
Assessment: one presentation, two major assignments, examination.

An overview of the concept of quality in organisational settings. The concept of a "quality audit" and how to undertake it. Issues and problems in implementing and coordinating total quality techniques in an organisational setting. The concepts and issues of design quality, planning quality and implementation quality. Students will be required to undertake an extensive case study of the success factors and challenge issues of implementing total quality into an organisation, and present a detailed, comprehensive analysis from the selected case study.

Co-ordinator: Professor M Hough.

TQM912 An Overview of Quality Management
24 credit points.
This is a capstone subject and should be taken in the final stages of the course.
Assessment: seminar and project.

Co-ordinator: Dr GJ Montagner.

TQM913 Thesis in Quality Management
48 credit points.
Assessment: presentation of completed thesis.

Each candidate will be required to have a substantive research proposal approved in an aspect of total quality management, undertake a satisfactory research cycle into the approved topic, and submit a thesis of an acceptable format and standard.

Co-ordinator: Dr GJ Montagner.
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