ARMS OF THE UNIVERSITY

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 an open book proper bound gold on a chief wavy of three cinquefoils gules."
The University of Wollongong Calendar

There are 3 volumes of the Calendar:

- The University of Wollongong Calendar 1985 Legislation
  (Not reprinted on an annual basis)
- The University of Wollongong Undergraduate Calendar 1990
- The University of Wollongong Postgraduate Calendar 1990

Editorial and Production:  Academic Services Branch
The University of Wollongong

Typesetting:  Pages 1 - 37
Photoset Computer Services,
195 Elizabeth Street, Sydney
Pages (i) - (vi) and 38 - 303
Kay McKinnon
Lynell Reed

Printing:  Bridge Printery, Rosebery, N.S.W.
QUICK REFERENCE GUIDE

This Calendar has been organised into eight sections - a general section and one section for each of the University's seven Faculties. The first page of each Faculty Section summarizes the major programs available within that Faculty.

For a quick overview of the wide range of postgraduate courses available at the University, reference should be made in the first instance to the following pages:

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACULTY OF ARTS</td>
<td>66</td>
</tr>
<tr>
<td>FACULTY OF COMMERCE</td>
<td>121</td>
</tr>
<tr>
<td>FACULTY OF EDUCATION</td>
<td>166</td>
</tr>
<tr>
<td>FACULTY OF ENGINEERING</td>
<td>195</td>
</tr>
<tr>
<td>FACULTY OF HEALTH AND BEHAVIOURAL SCIENCE</td>
<td>222</td>
</tr>
<tr>
<td>FACULTY OF MATHEMATICAL SCIENCES</td>
<td>256</td>
</tr>
<tr>
<td>FACULTY OF SCIENCE</td>
<td>270</td>
</tr>
</tbody>
</table>
SUBJECT NUMBERS

All subjects offered by the University have a unique subject number consisting of:

(a) three or four alphabetic characters; and
(b) a three digit number.

Part (a) of the number represents the Academic unit offering the subject, as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Department Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA..</td>
<td>School of Creative Arts</td>
</tr>
<tr>
<td>AI..</td>
<td>Department of Information Systems</td>
</tr>
<tr>
<td>ACCY</td>
<td>Department of Accountancy</td>
</tr>
<tr>
<td>BIOL</td>
<td>Department of Biology</td>
</tr>
<tr>
<td>CHEM</td>
<td>Department of Chemistry</td>
</tr>
<tr>
<td>CIVL</td>
<td>Department of Civil Engineering</td>
</tr>
<tr>
<td>CMS</td>
<td>Centre for Multicultural Studies</td>
</tr>
<tr>
<td>CSCI</td>
<td>Department of Computing Science</td>
</tr>
<tr>
<td>ECON</td>
<td>Department of Economics</td>
</tr>
<tr>
<td>ED..</td>
<td>Faculty of Education</td>
</tr>
<tr>
<td>ENGL</td>
<td>Department of English</td>
</tr>
<tr>
<td>ELEC</td>
<td>Department of Electrical &amp; Computer Engineering</td>
</tr>
<tr>
<td>GEOG</td>
<td>Department of Geography</td>
</tr>
<tr>
<td>GEOL</td>
<td>Department of Geology</td>
</tr>
<tr>
<td>HSCH</td>
<td>Department of Public Health &amp; Nutrition</td>
</tr>
<tr>
<td>HSHM</td>
<td>Department of Human Movement Science</td>
</tr>
<tr>
<td>HSNS</td>
<td>Department of Nursing</td>
</tr>
<tr>
<td>HIST</td>
<td>Department of History &amp; Politics</td>
</tr>
<tr>
<td>INTR</td>
<td>Department of History &amp; Politics</td>
</tr>
<tr>
<td>JOUR</td>
<td>Faculty of Arts (Journalism)</td>
</tr>
<tr>
<td>LANG</td>
<td>Department of Languages</td>
</tr>
<tr>
<td>LAW</td>
<td>Department of Legal Studies</td>
</tr>
<tr>
<td>MATH</td>
<td>Department of Mathematics</td>
</tr>
<tr>
<td>MATL</td>
<td>Department of Materials Engineering</td>
</tr>
<tr>
<td>MECH</td>
<td>Department of Mechanical Engineering</td>
</tr>
<tr>
<td>MGMT</td>
<td>Department of Management</td>
</tr>
<tr>
<td>MINE</td>
<td>Department of Civil &amp; Mining Engineering</td>
</tr>
<tr>
<td>PHIL</td>
<td>Department of Philosophy</td>
</tr>
<tr>
<td>PHYS</td>
<td>Department of Physics</td>
</tr>
<tr>
<td>POL</td>
<td>Department of History &amp; Politics</td>
</tr>
<tr>
<td>PSYC</td>
<td>Department of Psychology</td>
</tr>
<tr>
<td>SCIE</td>
<td>Faculty of Science</td>
</tr>
<tr>
<td>SOC</td>
<td>Department of Sociology</td>
</tr>
<tr>
<td>SPS</td>
<td>Department of Sociology</td>
</tr>
<tr>
<td>STS</td>
<td>Department of Science &amp; Technology Studies</td>
</tr>
</tbody>
</table>

The first digit of part (b) of the number represents the level of the subject:

"1" is a 100 level subject
"2" is a 200 level subject
"3" is a 300 level subject
"4" is a 400 level subject
"8" or "9" is a postgraduate level subject.
## THE UNIVERSITY

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<td>66</td>
</tr>
<tr>
<td>English</td>
<td>67</td>
</tr>
<tr>
<td>History</td>
<td>72</td>
</tr>
<tr>
<td>International Relations</td>
<td>77</td>
</tr>
<tr>
<td>Journalism</td>
<td>80</td>
</tr>
<tr>
<td>Languages</td>
<td>84</td>
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<tr>
<td>Multicultural Studies</td>
<td>87</td>
</tr>
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<td>Peace and War Studies</td>
<td>90</td>
</tr>
<tr>
<td>Philosophy</td>
<td>93</td>
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<tr>
<td>Politics</td>
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</tr>
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</tr>
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<td>Legal Studies</td>
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<tr>
<td>Management</td>
<td>149</td>
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## FACULTY OF EDUCATION

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<tbody>
<tr>
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## FACULTY OF ENGINEERING

<table>
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<td>Engineering</td>
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<td>Materials Engineering</td>
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</tr>
<tr>
<td>Mechanical Engineering</td>
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</tr>
<tr>
<td>Mining Engineering</td>
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## FACULTY OF HEALTH AND BEHAVIOURAL SCIENCES

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page</th>
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</thead>
<tbody>
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<td>Human Movement Science</td>
<td>222</td>
</tr>
<tr>
<td>Nursing</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Public Health and Nutrition</td>
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<td>240</td>
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</table>

## FACULTY OF MATHEMATICAL SCIENCES

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page</th>
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</thead>
<tbody>
<tr>
<td>Computing Science</td>
<td>256</td>
</tr>
<tr>
<td>Mathematics</td>
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<td>263</td>
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## FACULTY OF SCIENCE

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page</th>
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</thead>
<tbody>
<tr>
<td>Biology</td>
<td>270</td>
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<td>Chemistry</td>
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</tr>
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<td>Geography</td>
<td>280</td>
</tr>
<tr>
<td>Geology</td>
<td>286</td>
</tr>
<tr>
<td>Physics</td>
<td>291</td>
</tr>
<tr>
<td></td>
<td>300</td>
</tr>
</tbody>
</table>
PREFACE

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 1962 as a College of the University of New South Wales. In 1975, by Act of New South Wales Parliament, it 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 and also dates its foundation back to 1962. The University provides courses and undertakes research and other activities of accepted university standard.

The total student enrolment now exceeds 8,000, which in terms of size places the University of Wollongong in the middle range of Australian Universities; this means that the student body is diverse and stimulating, yet small enough to retain a friendly and relaxed atmosphere.

Details of postgraduate courses are given in this volume. Details of the undergraduate courses are given in the Undergraduate Calendar.

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

CALENDAR OF DATES

SUMMER SESSION
December 11 to December 22
December 25 to January 5
January 8 to February 9
February 12 to February 16

CHRISTMAS RECESS
December 11 to December 22
December 25 to January 5
January 8 to February 9
February 12 to February 16

EXAMINATIONS
Summer Session
Monday 11
Summer Session lectures commence
Tuesday 25
Christmas recess commences
Friday 5
Christmas recess ends
Friday 26
Australia Day holiday
Friday 9
Summer Session lectures finish
Monday 12
Examinations commence
Friday 16
Examinations finish

AUTUMN SESSION
February 26 to April 15
April 16-22
April 23 to June 10
June 11 to June 17
June 18 to July 1
July 2 to July 15

RECESS

STUDY RECESS

EXAMINATIONS

MID-YEAR RECESS

January
Monday 1
New Year's Day holiday
Friday 12
Last day for Undergraduate re-enrolments (postal)
Friday 12
Last day for Postgraduate Enrolments and Re-enrolments (postal)
Friday 12
Last day for External re-enrolments (postal)
Friday 26
Australia Day holiday

February
Tuesday 30,
Wednesday 31,
Thursday 1, Friday 2
Enrolment of new undergraduates
Tuesday 20
Final Enrolment Day — Undergraduate
Friday 23
Last day for Payment of Compulsory Charges of Re-enrolling Students

April
Monday 16
Good Friday
Friday 13
Easter Monday recess begins

May
Sunday 22
April recess ends
Wednesday 25
Anzac Day holiday

June
Sunday 10
Autumn Session lectures finish
<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>Monday 11: Queen's Birthday holiday</td>
</tr>
<tr>
<td></td>
<td>Monday 11: Study recess commences</td>
</tr>
<tr>
<td></td>
<td>Sunday 17: Study recess ends</td>
</tr>
<tr>
<td></td>
<td>Monday 18: Examinations commence</td>
</tr>
<tr>
<td>July</td>
<td>Monday 2: Mid-year recess commences</td>
</tr>
<tr>
<td></td>
<td><strong>SPRING SESSION</strong></td>
</tr>
<tr>
<td></td>
<td>16 July to 23 September</td>
</tr>
<tr>
<td></td>
<td><strong>RECESS</strong></td>
</tr>
<tr>
<td></td>
<td>24 September to 7 October</td>
</tr>
<tr>
<td></td>
<td><strong>STUDY RECESS</strong></td>
</tr>
<tr>
<td>September</td>
<td>October 8 to November 4</td>
</tr>
<tr>
<td></td>
<td><strong>EXAMINATIONS</strong></td>
</tr>
<tr>
<td></td>
<td>5 November to 11 November</td>
</tr>
<tr>
<td></td>
<td><strong>Mid-year recess ends</strong></td>
</tr>
<tr>
<td></td>
<td>15 July: Spring Session lectures commence</td>
</tr>
<tr>
<td></td>
<td>16 July: Recess commences</td>
</tr>
<tr>
<td></td>
<td>24 September: Recess ends</td>
</tr>
<tr>
<td></td>
<td>12 November: Examinations commence</td>
</tr>
<tr>
<td></td>
<td>23 December: Examinations end</td>
</tr>
<tr>
<td>September</td>
<td>1 November: Recess commences</td>
</tr>
<tr>
<td>October</td>
<td>8 November: Study recess ends</td>
</tr>
<tr>
<td>November</td>
<td>15 November: Mid-year recess ends</td>
</tr>
<tr>
<td></td>
<td>4 December: Spring Session lectures finish</td>
</tr>
<tr>
<td>December</td>
<td>5 December: Study recess commences</td>
</tr>
<tr>
<td></td>
<td>12 December: Examinations commence</td>
</tr>
<tr>
<td></td>
<td>25 December: Christmas Day</td>
</tr>
<tr>
<td></td>
<td>26 December: Boxing Day</td>
</tr>
</tbody>
</table>
THE FACULTIES

ARTS

**Member Units**
- Department of English
- Department of History & Politics
- Department of Languages
- Department of Philosophy
- Department of Science and Technology Studies
- Department of Sociology
- School of Creative Arts

**Associate Units**
- Boards of Studies for:
  - Information Technology and Communication
  - Interdisciplinary Studies
  - Political Studies

**School of Creative Arts**

COMMERCE

**Member Units**
- Department of Accountancy
- Department of Economics
- Department of Information Systems
- Department of Legal Studies
- Department of Management

**ECONOMICS**

**Member Units**
- Department of Accountancy
- Department of Economics
- Department of Information Systems
- Department of Legal Studies
- Department of Management

**Associate Units**
- Aboriginal Teacher Education Unit
- Conservatorium of Music

EDUCATION

**Member Units**
- School of Learning Studies
- School of Policy & Technology Studies

**Associate Units**
- Aboriginal Teacher Education Unit
- Conservatorium of Music

ENGINEERING

**Member Units**
- Department of Civil and Mining Engineering
- Department of Electrical and Computer Engineering
- Department of Materials Engineering
- Department of Mechanical Engineering

**Associate Units**
- Centre for Mining Research

HEALTH AND BEHAVIOURAL SCIENCES

**Member Units**
- Human Movement Science
- Nursing
- Psychology
- Public Health and Nutrition
MATHEMATICAL SCIENCES

Member Units
Department of Computing Science
Department of Mathematics

SCIENCE

Member Units
Department of Biology
Department of Chemistry
Department of Geography
Department of Geology
Department of Physics

Associate Units
Board of Studies for Environmental Science
THE UNIVERSITY

THE DEGREES AND DIPLOMAS AWARDED

UNDERGRADUATE

Associate Diplomas in:
ADMINISTRATION
COMPUTER APPLICATIONS

Diplomas in:
TEACHING
NURSING

Bachelor of:
APPLIED SCIENCE
APPLIED SCIENCE (HONOURS)
ARTS
ARTS (HONOURS)
COMMERCE
COMMERCE (HONOURS)
CREATIVE ARTS
EDUCATION
EDUCATION (HONOURS)
ENGINEERING
ENGINEERING (HONOURS)
ENGINEERING/COMMERCE
ENVIRONMENTAL SCIENCE
ENVIRONMENTAL SCIENCE (HONOURS)
INFORMATION TECHNOLOGY AND COMMUNICATION
INFORMATION TECHNOLOGY AND COMMUNICATION (HONOURS)
MATHEMATICS
MATHEMATICS (HONOURS)
MATHEMATICS/ENGINEERING
MATHEMATICS/ENGINEERING (HONOURS)
NURSING
SCIENCE
SCIENCE (HONOURS)
SCIENCE/ENGINEERING
SCIENCE/ENGINEERING (HONOURS)

POSTGRADUATE

Graduate Diplomas in:
ARTS
COMMERCE
COMPUTING SCIENCE
EDUCATION
EDUCATIONAL STUDIES
ENGINEERING
SCIENCE

Master of:
ARTS
BUSINESS
ADMINISTRATION
COMMERCE
CREATIVE ARTS
EDUCATION
POLICY
SCIENCE

Masters (Honours)
ARTS
COMMERCE
EDUCATION
ENGINEERING
SCIENCE

Doctor of:
CREATIVE ARTS
PHILOSOPHY
LETTERS
SCIENCE
THE UNIVERSITY OF WOLLONGONG

Visitor
His Excellency the Governor of New South Wales

Chancellor
The Honourable Mr. Justice Robert Marsden Hope, CMG, LLB Syd.

Deputy Chancellor
Brian Somerville Gillett, BA DipEd

Vice-Chancellor and Principal
Professor Kenneth Richard McKinnon, A.U.A. Adel., BA BEd Q’td, EdD Harv., FACE

Deputy Vice-Chancellor
Professor Ian W. Chubb, MSc DPhil Ox f.

Vice-Principal (Administration)
Kenneth B. Baumber, BSc St. And.

Vice-Principal (Development)
James W. Langridge, BBus NSW Tertiary Ed, NE, MACS.

Pro-Vice Chancellor
Professor J. Lauchlan C. Chipman, MA LLB Melb, BPhil, DPhil Oxf., DipTertiaryEd NE.

MEMBERS OF COUNCIL*

ELECTED BY THE LEGISLATIVE COUNCIL
The Honourable Edward Phillip Pickering, MLC, BSc(Chem. Eng.) NSW

ELECTED BY THE LEGISLATIVE ASSEMBLY
The Honourable Christopher John Downey, M.L.A., BA DipEd., Syd.,

MINISTERIAL NOMINEES
Brian Somerville Gillett, BA DipEd
Susan Louise Chapman, Dip Health Admin Mitchell, BA
Jeremy Kitson Ellis MA Oxf.
Albert Coulston Evans, A.M.
Ronald Griffiths
Harold Hanson, Dip Law (S.A.B.) Syd
Ronald William James, BA, MB, BS Syd., DGO Dublin, FRCOG, FRACOG

EX OFFICIO
The Chancellor: The Honourable Mr. Justice Robert Marsden Hope, CMG, LLB Syd.
The Vice-Chancellor and Principal: Professor Kenneth Richard McKinnon, A.U.A. Adel., BA BEd Q’td, EdD Harv., F.A.C.E.

ELECTED BY THE STUDENTS OF THE UNIVERSITY
Daniel Morrissey, BA
Monique Danielle Licardy
Paul L. Manning, BEd Syd.

ELECTED BY CONVOCATION
Michael Arrighi, BA Hons.
Keith W. Phipps, BA DipEd. MACE

Winifred Joyce Mitchell, MA N.E., PhD N.S.W.
Gary R. Ryan, BCom M.Mgt

ELECTED BY THE FULL-TIME ACADEMIC STAFF OF THE UNIVERSITY

Two Professoral members
Stephen Castles, Vor-Diploma Soc., Fran Am Main, MA, DPhil Sus
Ronald C. King, BCom BEd Melb., PhD Monash, FAPsS

Two Academic Staff Members other than Professors
Maxwell J. Lowrey, ME N.S.W. PhD, ASTC, MIEAust, MACS
John R. Panter, BA Adel, PhD N.S.W.

Two Members elected by the Institute Academic Staff
Edward O. Booth, BEc DipEd, MEd, Syd., Ed.D Hawaii
Arthur Smith, MA Stan, PhD. Ohio

ELECTED BY THE FULL-TIME GENERAL STAFF OF THE UNIVERSITY
Felicity McGregor, BA DipLib N.S.W. ALAA
Ronald B. Parker, BA
Anthony Kent

THE ACADEMIC SENATE*

Chairman of Senate
Professor Ronald C. King

Ex Officio Members
The Honourable Justice Robert M. Hope, Chancellor
Professor Kenneth R. McKinnon, Vice-Chancellor and Principal
Professor Ian W. Chubb, Deputy Vice-Chancellor
Mr. Kenneth E. Baumber, Vice-Principal (Administration)
Professor J. Lauchlan Chipinan, Pro Vice-Chancellor
Mr. John Shipp, University Librarian

Heads Of Departments
Professor Michael J. R. Gaffkin, Department of Accountancy
Professor Helen M. Garnett, Department of Biology
Professor Leon Kane-Maguire, Department of Chemistry
Professor Lewis C. Schmidt, Department of Civil & Mining Engineering
Associate Professor Gregory Doherty, Department of Computing Science
Professor Dudley A. S. Jackson, Department of Economics
Professor Hugh S. Bradlow, Department of Electrical & Computer Engineering
Associate Professor James M. Wieland, Department of Geography
Professor Murray G. A. Wilson, Department of English
Professor Alan C. Cook, Department of Geology
Professor Edward P. Wolters. Department of History and Politics
Professor Anthony W. Parker, Department of Human Movement Science

*Membership at time of printing (Sept., 1989) including known appointments for 1990
Associate Professor Graham K. Winley, Department of Information Systems
Professor Brian Moloney, Department of Languages
Professor Helen Gamble, Department of Legal Studies
Professor Julian F. Lowe, Department of Management
Professor David Griffiths, Department of Mathematics
Professor Peter Arnold, Department of Mechanical Engineering
Professor William J. Plumbridge, Department of Materials Engineering
Professor Sandra C. Speedy, Department of Nursing
Dr. Harry Beran, Department of Philosophy
Professor Peter Fisher, Department of Physics
Professor G. Dennis Calvert, Department of Public Health and Nutrition.
Professor William J. Lovegrove, Department of Psychology
Associate Professor James E. Falk, Department of Science and Technology Studies
Professor Stephen C. Hill, Department of Sociology

Deans Of Faculties
Professor James S. Hagan, Faculty of Arts
Associate Professor John C. Steinke, Faculty of Commerce
Professor Russell D. Linke, Faculty of Education
Associate Professor Noel F. Kennon, Faculty of Engineering
Associate Professor Christine E. Ewan, Faculty of Health and Behavioural Sciences
Associate Professor Martin Bunder, Acting, Faculty of Mathematical Sciences
Associate Professor Peter D. Bolton, Faculty of Science

Dean of Students
Professor Murray G. A. Wilson

Heads Of Schools
Professor Barry Conyngham, School of Creative Arts
Professor Carla Fasano, School of Policy and Technology Studies
Professor Ronald C. King, School of Learning Studies

Heads Of Centres
Professor Stephen Castles, Centre for Multicultural Studies
Professor Ron Johnston, Centre for Technology and Social Change

Professors
Professor G. Arndt, Department of Mechanical Engineering
Professor C. D. Cook, Department of Electrical and Computer Engineering
Professor K. Gannicott, School of Policy and Technology Studies
Professor J. M. Hill, Department of Mathematics
Professor M. Hough, Department of Management

Elected Members
ACADEMIC STAFF ELECTED BY AND FROM THE MEMBERS OF EACH FACULTY
Dr. Evelleen Richards (Faculty of Arts)
Mr. Robert G. Castle (Faculty of Commerce)
Dr. N. Kyle (Faculty of Education)
Dr. Tara Chandra (Faculty of Engineering)
Vacant (Faculty of Health and Behavioural Sciences)
Dr. A. Grahame Morris (Faculty of Mathematical Sciences)
Associate Professor Ross McC. Lilley (Faculty of Science)

STUDENT MEMBERS
Ms B. Baader
Mr. S. I. Mawbey
Mr. D. J. Morrissey
Mr. L. B. Pickering
Mr. A. C. Soper
HONORARY GRADUATES OF THE UNIVERSITY

1976
DSc: Professor Charles A.M. Gray, Hon. JMN, BSc ME Syd., Hon. DSc N.S.W., CEng. FI MechE, MIE, MIE Aust, FIE (Malaysia), Emeritus Professor, University of Malaya.
Professor Rupert H. Myers, CBE, MSc, PhD Melb., Hon. LL.D Strath, FIM, FRACI, FAIM, MAusIMM.
David E. Parry, BE Syd.
Sir Robert Webster, CMG, CBE, MC Hon. DSc N.S.W., FASA (deceased)

1977
DLitt: Edgar Beale (deceased)

1978
DSc: Sir Ian Munro McLennan, KBE, CBE, BEE Melb., Hon. DEng Melb. and N’cle (N.S.W.)

1980
DLitt: Walter Pike, MA DipPA Lond., DipEd Camb., AFAIM, MACE

1981
DLitt: Lindsay Michael Birt, CBE, BAgrSc BSc PhD Melb., DPhil Oxf.

1984
DLitt: Sir Richard Kirby, LLB Syd.

1985
DSc: Thistle Yolette Stead
DLitt: Sir Roden Cutler, VC, KCMG, KCVO, CBE, KSJ, BEc Syd., Hon. LLD Syd., Hon. DSc N.S.W. and N’cle (N.S.W.), Hon. DLitt NE, Hon. FCA

DCA: John Henry Antill, OBE, CMG (deceased)

MA(Hons): Luigi Strano

1988
DSc: Howard Knox Womer, CBE, DSc, DEng, Melb., Hon. DSc, N’cle/NSW, ABSM, CEng, FAA, FTS, MAusIMM, FIE, Aust., FRACI, FAIE, FIM, FIMM, MAIME

1989
DLitt: Brian Somerville Gillett, BA, DipEd.

PhD Allan Roy Sefton (deceased)

EMERITUS PROFESSORS

1978 Austin Keane MSc, Syd., PhD, N.S.W., DSc
1981 Kenneth Alan Blakey, BA NZ, MSc Lond, BCom Melb, DPhil Oxf
1985 Geoffrey Brinson, MSc Melb, PhD Sheff, FIM, MAusIMM, CEng
1986 R. Barry Leal, MA DipEd Syd, PhD Oxf
1988 Brian H. Smith, BE, PhD Adel. MIEE, FIE Aust.
1989 Peter Desmond Roush, BA, BEd Melb PhD Wayne State, FACE, FAIM.

FELLOWS OF THE UNIVERSITY

1985 Francis Neville Arkell
Ethel Hoskins Hayton (deceased)
Lawrence Borthwick Kelly
Mervyn Francis Xavier Nixon

1986 John Forrest Hayman Clark, BMechE, Melb. FIEAust, MAusIMM
Burton Challice Moldrich, BA Ceyl, Dip Tertiary Ed. NE
Robert John Butler Pearson, AM, FIM, AMTC, MAusIMM, FIMMA, FAIM

1988 John Frederick Bell
Gerald Anthony Freed
Winifred Joyce Mitchell, BA, MA, NE, PhD, NSW

1989 John Eveleigh, DipFA Slade Lond. FRSA
FULL TIME STAFF*

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Vice-Principal and Principal
Professor Kenneth R. McKinnon, A.U.A. Adel., BA BEd Qld., EdD Harv., FACE

Deputy Vice-Principal
Professor Ian W. Chubb, MSc DPhil Oxf.

Vice-Principal (Administration)
Kenneth E. Baumber, BSc, St. And.

Vice-Principal (Development)
James W. Langridge, BBus NSWTT, Dip Tertiary Ed NE, MACS.

Pro Vice-Principal
Professor J. Lauchlan C. Chipman, MA LLB Melb., BPhil DPhil Oxf., DipTertiaryEd NE.

University Librarian
John Shipp, BA DipEd Macq, DipArchAdmin NSW, ALAA

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Professor James S. Hagan, BA DipED Syd., PhD ANU

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Professor Russell D. Linke, BSc Flin, PhD Monash

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Associate Professor Christine E. Ewan MB BS PhD MA Syd

Dean of Faculty of Mathematical Sciences
Associate Professor Martin W. Bunder, BSc NSW/MA NE, PhD AmsT.

Dean of Faculty of Science
Associate Professor Peter D. Bolton, BSc Exec., PhD Lond. ARSC, FRACI

Dean of Students
Professor Murray G.A. Wilson, MA N.Z., MA Wis., PhD Melb.

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Warren R. Mahoney, BCom NSW

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Departmental Head and Associate Professor
James M. Wieland, BA W.Aust., MA PhD Qu.

Associate Professor
Dorothy L.M Jones, M.A. N.Z. and Adel., BLitt Oxf.

Senior Lecturers
Desmond Davis, BA Syd.; MA N’cle (NSW)
William D. McGaw, BA Q’d, MA Macq.
Maurice B. Scott, BA N.S.W., MA N’cle (N.S.W.)

Lecturers
Graham C. Barwell, BA Otago, MA Otago, MLitt Lond.
Anne Cranney-Francis, BA Qld, PhD East Anglia.
Richard T. Harland, BA Camb., MA N’cle, PhD N.S.W.
Lalene Jayamanne, BA Ceylon, MA N.Y., PhD N.S.W.

Teaching Fellow
Carmel Pass, BA

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Departmental Head and Professor of Politics
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Professor of History
Professor James S. Hagan, BA DipEd Syd., PhD ANU

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Colm P. Kiernan, MA Camb. and Melb., PhD N.S.W.

Senior Lecturers
Benedict F. Kiernan, BA PhD Monash
Ian M. McLaine, BA Monash, DPhil Oxf.

Lecturers
Melanie Beresford, BA MA Adel, MA Camb
Josephine A. Castle, BA Syd., MA Warwick
Helen Pringle, BA ANU MA, PhD Princeton
Peter M. Sales, MA Monash, PhD LaT
Andrew D. Wells, MA Monash PhD ANU

*Correct at time of printing (September, 1989) including known appointments for 1990.
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Vincent J. Cincotta, BS Fordham, MA Columbia,
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Gary J. Ianziti, BA San Fran., MA PhD Nih. Carol.
Gaetano L. Rando, BA Syd., MA W.Aust.,
DipPerfStor Ling It Rome

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Lettrice M. G. Batzella, Dott. Lett., Cagliari
Geoffrey S. Hull, BA, PhD, Syd.
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Camb, PhD Columbia

Principal Tutor
Henri A.L. Jeanjean, BA Syd., L-es-L Bordeaux,
DipEd

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Senior Lecturers
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Evelleen Richards, BSc Q’ld, PhD N.S.W.,
MAAHPS, MISSS
John A. Schuster, BA Col., MA Camb., MA PhD
Prin., MAAHPSS, MBHS, MHSS (US),
MAHA

Lecturers
Stan B. Aungles, BSc Bath, MA
Brian Martin, BA Rice, PhD Syd.
Stewart Russell, MA, MSc, PhD Aston.

Pam Scott, BPharm Syd., BA, MA, PhD
Terry Stokes, BA Macq., PhD Melb.,
MAAHPS, MISSS

Bachelor of Information Technology
Co-ordinator
Pam Scott, B.Pharm Syd., BA, MA, PhD

Teaching Fellow
Lawrence Stevenson, BA

DEPARTMENT OF SOCIOLOGY
Departmental Head and Professor of Sociology
Stephen C. Hill, BSc Syd., PhD Melb.

Senior Lecturer
Tom Jagtenberg, BE N.S.W., MSc Manc., PhD

Lecturers
Rebecca Albury, BSc MA johns H.
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Michael J. Donaldson, MA Camb.
Stephanie D. Short, BA N.S.W., MSc Lond.
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MSocStud

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Herbert Flugelman
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Nat. Art School, BEd(Art) Alex Mackie, Grad.
DipEdStud (Drama) STC, DCA, MIAEd

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MA
Lindsay J. Duncan, BA, MCA
Andrew Ford, BA Lanc.
Robert T. Harper, BA Ohio Wesleyan, MFA Yale
Richard Hook, BA AIT W.A. PostGradCert in Educ Lond. MFA Tas.
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Lisa Scott-Murphy, BA Macq.
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PhD Qld.
Laurens Tan, BEd Adel. C.A.E.

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CENTRE FOR MULTICULTURAL STUDIES

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Mary Kalantzis, BA DipEd Macq.

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Gary Tibbits, MCom Auck, AASA, ACA(N.Z.), CMANZ, ACIS

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Mary M. Greenwell, BBus (DDIAE), MCom, AASA (Senior), AAIM

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Kathie Cooper, BCom
Warwick N. Funnell, BA DipEd N.S.W., BCom, MCom, AIMM
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Robert P. Shannon, BA Macq. MEC UNE, ACA, ACIS
Herna G. M. Wijewardena, BA Vidyod., MBA New Hampshire, DipCom Ceylon, PhD Sri. J

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Ratnam Alayiah, BCom, MCom Auck
Allan Coote, BCom, AAUQ Qld., MCom N.S.W.
Alessandro Frino, BCom
Chris Patel, BCom, PGCE, S.Pac.

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Raymond Markey, BA DipEd Syd. PhD
John Steinke, MA Calif.

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Jesuthason Thampapillai, BSc (Agri) Ceyl. MEC PhD N.E.

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Charles Harvie, BA Strath, MA Hamilton, PhD Warw
Diana Kelly, BA Macq.
Chris Nyland, BA, PhD Adel.
Dennis T. O’Brien, BSc (Agri) Syd., MSc Manit., PhD Oregon State
Jorge Eduardo, F.Pol, LicEcon, DEcSci Buenos Aires
Edgar J. Wilson, BEc ANU., MEC Monash

Teaching Fellows
Linda Granziera, BCom
Nadia Verrucci, BA
Kui Yin Cheung, L.L.B. Chengchi, MA. Minn, PhD Washington

Professional Officer
Wolfgang Brodesser, BEng, BA

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Departmental Head and Associate Professor
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Senior Lecturers
Steven Little, BSc (Arch), MSc Aston PhD RCA
Bruce Lo, BSc Lond. MEdStud DipCompSci N’c/e N.S.W., PhD Monash MACS, MAIP

Lecturers
Ang Y. Ang, BSc Lond. DipTeach Avondale, GDipEd S.A.
Rodney J. Clarke, BA, GDip Bus Info Sys
Edward Gould, BSc, DipCompSc N.S.W.(N’c/e).
MEngSc Syd.,
Helen Hasan, BSc N.S.W. MSc Macq., DipCompSci
Robert MacGregor, BSc DipEd N.S.W. MACS MUKSS
Michael Ward, MA, M.B.C.S.

MICROCOMPUTER LABORATORIES

Operations Supervisor
Cathy Nicastri
Programmer
Louie Athanasiadis, BMet, BMath

Technical Officer
Matt Holzl

DEPARTMENT OF LEGAL STUDIES

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Helen Gamble LLB, LLM, ANU, Barrister and Solicitor

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Kenneth W. Hale, BA LLB Qld., LLM Syd., Barrister N.S.W. and High Court
James G. Jackson, BCom LLB N.S.W., LLM Syd., Grad.Dip.Ed. DDIAE, Barrister N.S.W. and High Court, AASA
Robert C. Williams, BA LLB Cape T., LLM London, HDipTaxLaw Wtts., Solicitor, Notary and Conveyancer of the Supreme Court of South Africa

Lecturers
Damien Considine, BA LLB N.S.W., LLM Syd., Solicitor & Attorney N.S.W. and High Court
Robin P. Handley, LLB Warwick, LLM ANU, Solicitor England & Wales, Barrister & Solicitor A.C.T. and High Court
John Nothdurft, BA, LLB N.S.W., MA Brunel

Teaching Fellow
Christine Plumbridge, LLB, PGCE Brist.

DEPARTMENT OF MANAGEMENT

Departmental Head and Professor of Management
Julian F. Lowe, BA Wales, MA Manc.

Professor
Michael Hough, R.F.D., E.D., BE N.S.W., BA Macq., GradDiplIndustEng. DiplEd N’cle N.S.W., DipSchoolAdmin ACAE, MEd Admin N.E., EdD Georgia, MACE, FAAIM

Associate Professor
John Mangan, BCom M EconSt Dip. Ed. Q’ld, MA PhD Lanct.

Senior Lecturers
C. Robin Horne, BA Syd., MA N.S.W., MAPsS
Paul Patterson, BBus U.T.S., MCom N.S.W.
Abab B. Sim, BA Malay, MBA Brit. Colin, PhD Calif.
Trevor Williams, BA MA Melb., PhD W.A., FAAIM

Lecturers
A. John Anderson, MCom N.S.W.
Ray Cleary, BA Macq., MEd Admin N.E.
Margaret A. Craig-Lees, BA (Communications) N.S.W.I.T., MA N.S.W., FAMI
John Flanagan, BSc N.S.W.
Muayyad Jabri, BSc Al Hikma Jesuit, MSocSc Birmingham, PhD Manc.
Neil Masters, BA York, MSc
Anthony J. Naughton, MBA Brad., FCCA
Michael Zanko, BA I roads, MBA Brad

Teaching Fellows
Graham Massey BCom
Elias Kyriazis BCom

FACULTY OF EDUCATION

Dean
Professor Russell D. Linke, BSc Flin, PhD Mon ash

Sub-Dean
Peter J. Keeble, TC Bal. TC, BA NE, MEd NSW

Faculty Officer
Rosemary Cullen, BA, ALAA, AIMM

SCHOOL OF LEARNING STUDIES

Head of School and Professor of Education
Ronald C. King, BCom BEd Melb., PhD Mon ash, FAPsS

Professor
Russell D. Linke, BSc Flin, PhD Monash

Associate Professors
Brian Cambourne, BA, LittB N.E., PhD, James Cook
Philip R. de Lacey, BSc N.S.W., MA Auck., PhD N.E., MAPsS
Anthony J. Fielding, BSc N.S.W., MEd EdD N.Y. State, MAIP

Senior Lecturers
Edward O. Booth, BEc, DipEd, MEd Syd., EdD Hawaii
Robert W. Colvin, MA Syd., MEd Stud. Leic. DipPhil, MACE
Peter C. Geckie, BA LittB MA N.E.
Lyn Gow, Dip Teach Alex. Mackie, BA PhD Macq.
Jennifer M. Jones, BEd Q’ld, MA Vic. B.C., PhD Lond.
Peter J. Keeble, TC Balmain TC, BA N.E., MEd N.S.W.
Noeline Kyle, BA PhD N’cle (N.S.W.)
Jan Turbill, BA Macq., MEd, MACE
William N. Winser, MEd Syd., MA Oxf., MACE

Lecturers
Patrick F. Farrar, DipTeach Armidale CAE, BA N.E.
Bevan J. Ferguson, BA N.E., MEd Syd.
Jennifer Hammond, BA DipEd, MA Syd.
Pauline Harris, BEd Syd., MA, EdD Calif Berk
Deslea Konza, BA, DipEd Macq., DipSpecEd Nepean
THE UNIVERSITY

Michael Wilson, BSc St. Andrews, PGCE Hull, DipEd, MA, PhD Lond.
Janice E. Wright, MED Syd.

Principal Tutor
Irene M. Southall, BA Keele, MScStud The Hague, DipEd N.S.W.

Professional Officers
Jan James, BA DipEd, MStudEd,
GradDipEuroStuds.
A. Deborah McGavin, BSc DipLib N.S.W.

SCHOOL OF POLICY AND TECHNOLOGY STUDIES

Head of School and Professor of Education
Carla Fasano, MSc(Phys) Lond., MSc(Astrophys) PhD(Astrophys)

Professor
Ken G. Gannicott, MA Sus, PhD N.S.W.

Associate Professor
David R. Anderson, BA, MEd Syd., DipPhysEd S.T.C., MACE
Malcolm McD. Harris, BA N.E., MSc N.S.W.

Senior Lecturers
John A. Chapple, BSc N.S.W., ASTC Syd. Tech
Raymond J. Crawford, BSc, DipEd, N.E., MSc N.S.W.
Neil Hall, BA Syd., MEd Lond.
Barry Harper, BSc, DipEd N.S.W., PhD
Michael J. Hatton, MEd Syd., MSc Oregon, DipPhysEd S.T.C., F.A.C.H.P.E.R.
William Mowbray, BSc, MEd N.S.W.
John Patterson, MSc Oregon, DipPhysEd S.T.C., MEd Syd. EdD N Colorado
Arthur R. Smith, TC Armidale DipArt(Edu) Syd., MA Stan, PhD Ohio State
Barry C. Watkinson, DipPhysEd, MSc, PhD Oregon

Lecturers
Alison Elliott, BEd CCAE, BEdSt, MEdSt Newcastle DipTeach NRCAE
Tonia L. Gray, BEd Woll., MA Colorado
Yvonne Kerr, MSc Oregon, DipPhysEd CertHealthEd
Patricia A. Rees, DipPhysEd S.T.C.
Sylvia A. Rice, BA N.S.W., PhD Ed(PE) Bedford
Brian Rogers, BA N.E., BEc, DipEd Syd.
Gregg S. Rowland, DipPhys&HlthEd, BA
Jack Scarlett, BA N.S.W., MCom N.S.W.
Robert Smith, DipMusEd N’dle CAE, AMusA
Leo Sturman, NDD Norwich ATC London., MSc (Art Ed) Oregon, MIA Ed
Paul Webb, DipPhysEd, GradDipSpEd Tas. CAE, MH Kinetics Windsor, MSc PhD Oregon
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Ronald Wilcox, MSc DipEd N.S.W.

Professional Officer
Jane Cook, BA, GradDipEdStud

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Sub-Dean
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Faculty Officer
Lynne Shortt, BA Qld

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Professor of Mining Engineering
R. N. Singh
Raghu Nath Singh, BSc Benaras MEng Sheff, PhD Cardiff, M.I.E.C.-I.M.W.A., F.I.M.E., FIE, FIMME

Associate Professors
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Yew-Chay Loo, BScEng Cheng Kung, MEng A.I.T., PhD Dundee, CEng, MICE, FIStructE, FIEAust.
R. William Upfold, BE ME PhD N.S.W., ASTC, CEng, MIEAust, MIMechE, AMAusIMM

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Ernest Y. Baafi, MS Penn State, PhD Arizona, ACMSC CEng, MIMM, MAIME, AMAusIMM, MCIMM
Michael J. Boyd, BSc (Tech) MEngSc PhD N.S.W., MIEAust
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Denis G. Montgomery, BSc (Eng) PhD Belfast, MIEAust
Van Uu Nguyen, BE PhD Auck., MIEAust., MASCE, AMAusIMM

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Richard Kohoutek, ME Prague, PhD Melb., MIEAust., MAMS
Ian Porter, BSc PhD Strath., AMIME
Muttucumaru Sivakumar, BSc (Eng) Ceylon, MEng A.I.T., PhD N’dle., MIEAust, MAWWA
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Yen Wen Wong, BE Tianjin, PhD, MIEAust.

Professional Officer
Marilyn Wood, BE Syd., ME, MIEAust.
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Hugh S. Bradlow, BSc (Eng) Cape T. DPhil Oxon., MIEE, MIEEE, CEng

Professor of Electrical Engineering
Christopher D. Cook, BSc BE Adel., PhD N.S.W., MIE Aust., MARA

Associate Professors
Tung S. Ng, BSc H.K., MEngSc PhD N’cle (N.S.W.), MIEEE, MIEEE
Frank J. Paoloni, BSc PhD Syd., MIEEE, MAPS

Senior Lecturers
Fazel Naghdy, BSc Tehran MSc PhD Brad, CEng IEE (UK) MIEEE
Geoffrey W. Trot, BSc BE Adel., PhD Alta., MIEEE, MACS

Lecturers
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Joe F. Chicharo, BE, MIEEE
Moneeb A. Magdy, BSc MSc Cairo, PhD Prague
Golshah Naghdy, BSc Tehran, MPhil Brad, PhD Portsmouth, MIEEE, CEng IEE (UK)
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Andrew Perkis, ME Trondheim MIEEE
Don Platt, BSc BE N.S.W., PhD, MIEEE

Teaching Fellows
Feroze Coowar, BSc Sth Bank, MIEEE, MIEAust, MIEEE, MSPENG
Hendra Gondokusumo, B Math/BE
Hao Tu, DipEng Montr. MEIC, MIEAust

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N. (Kan) Kandasamy, BSc BE Madr., MIEAust.

Administrative Officer
Maree J. Fryer, BA

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Noel F. Kenny, MSc PhD N.S.W., FRMTC, FIMMA, CEng.
Nicholas Standish, MSc N.S.W., PhD Otago, ASTC, MAusIMM, AIME, ISIJ, FIEAust

Senior Lecturers
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Gordon W. Delamong, BSc PhD Birm. MIMMA, CEng

Lecture
Sharon A. Nightingale, BEng(cer) McM. MIMMA

Professional Officer
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Honorary Professor
Howard K. Worsner CBE, DSc Hon DEng Melb., Hon DSc ‘n’cle(N.S.W.), Hon. DSc, ABSM, CEng, FAA, FTS, MAusIMM, FIEAust, FRACI, FAIE, FIMM, MAIME

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Sunday. Summer session, public holidays and vacation hours are displayed on noticeboards in the Library.

UNIVERSITY UNION

The University Union commenced operations in 1964, and it was created to provide a “community centre” for the University community. The creation of opportunities for social and cultural development of the members is the central role of the Union, with incidental roles being food and beverage services, conference and meeting rooms, medical, dental and optometrical services, child care assistance to affiliated clubs and societies, a range of shops and other miscellaneous services.

Membership and Fees

All students have to pay annual fees to the Union, unless they are Life Members of the Union.

Management

The Union exists under a constitution which vests control of the Union in a Board of 20 persons being:

1 Union Staff Member
2 Co-opted members

Annual elections are usually held in August. All students and staff are eligible to stand for a position on the Board, which has established a number of committees to deal with specific areas of its operations. The Union Secretary Manager is directly responsible to the Board as General Manager of the Union.

In the main Union complex, the following services are housed:

Food and Beverage
- Cafeteria
- Take-Away Bar
- Bistro
- Tavern Bar and Coffee Lounge
- Healthy Lifestyle Self Service Cafeteria
- Asian Kitchen and Take-Away Bar
- Lounge Bar
- University Club Lounge

Retailing
- University Co-operative Bookshop
- Union Mini Market

Financial
- National Australia Bank
- Illawarra Credit Union

General
- Cinema/General Purpose Hall
- Meeting and Conference Rooms

Legal
- E.M. Lynch & Co., Solicitors

Hair Care
- The Cutting Crew

Medical
- General Practitioners
- Optometrist
- Dentist

Student Welfare
- S.R.C. Offices
- Student Services
- Counselling
- Careers Advice
- Accommodation Office

A satellite cafeteria called 'The Greenery' is situated adjacent to the new Administration Building.

The following Clubs and Societies are affiliated to, and supported by, the Union:

- Asosiasi Pelajar Indonesia
- Association of Chinese Students
- Campus East Residents Association
- Catholic Society
- Croatian Society
- Electrical and Computer Engineering Society
- Geological Society
- Gundi Residents Association
- Health and Education Society
- International Chinese Students Association
- International House Residents Association
- International Student Welfare Society
- Italian Circolo Italiano
- Kooloobong Residents Association
- Malaysian Students Association
- Simulation Games Society
- S.T.S. Postgraduates Association
- Student Life
- Weerona Residents Association
The Aboriginal Education Section on campus is one of three organisations that require students to pay automatic membership fees. The Student Representative Council (S.R.C.) is the governing body of the Students' Association.

The S.R.C. looks after the everyday running of the Students' Association services. The S.R.C. is elected by and from students. During April the Students' Association holds its Annual General Elections, where students are elected democratically by the students' body to positions on the S.R.C.

The S.R.C. is the legitimate student voice on campus. It provides essential student services and promotes student welfare, education, interests and social activities. In services, the S.R.C. provides: free professional Legal Service, Clubs & Societies, second hand books, Cinema concession cards, student newspaper - 'Tertangala', student discount booklet, Study Skills Service and Austudy forms and booklets.

The S.R.C. also funds and encourages a Club & Society programme, Some of the S.R.C. Clubs & Societies include:

The S.R.C. is involved in the campaigning for better education and welfare conditions and facilities for students on campus.

The S.R.C. also provides advice and assistance which remains a key function. This includes advice on:- Show Cause, Academic Misconduct, Austudy applications, Postgraduate scholarships, variation of subjects, variation of degree, financial, legal and housing.

'Tertangala', is the University Student Newspaper and is the official publication of the Students' Association. The S.R.C. produces this newspaper monthly. Students are encouraged to participate in and contribute to this paper.

Finally, the S.R.C. maintains liaison and represents students with other bodies ranging from University Administration, other campuses to Government bodies. The S.R.C. belongs to the students; you are encouraged to use its services and advice.

ABORIGINAL EDUCATION UNIT
The Aboriginal Education Unit, established in 1984 as an arm of the University of Wollongong, is especially geared towards catering to the academic and personal needs of all Aboriginal and Torres Strait Islander students enrolled at the University. The Unit has an expanding resource section on Aboriginal issues comprising of books, kits, artefacts and videos and caterers for all students, both on and off campus. All students are welcome to come in and borrow books or even discuss issues relating to Aboriginal Education with the staff. The Aboriginal Education Unit is situated on campus in Building 49. For further information contact the unit on 270 776.

RECREATION AND SPORTS ASSOCIATION
All students pay a compulsory fee which automatically makes them members of the Recreation and Sports Association. Membership entitlements include the use of the recreational facilities provided by the Recreation and Sports Association. Members may also join one or other of the constituent clubs of the Association at a small extra subscription.

The Recreation and Sports Association aims to provide physical recreation facilities of an opportunity-type for individuals or small groups, through casual and class usage as well as intramural and inter-departmental sport. Learn to play activities and beginners coaching courses are held at various times throughout the year to cater for the novice as well as the expert. In addition, it aims to ensure that its constituent clubs are provided with adequate playing surfaces and associated equipment, that adequate funds are available to subsidise travelling, and that both clubs and individuals are encouraged to attain higher sporting standards through competitions, representative matches and championships organised by the Australian Universities Sports Association (A.U.S.A.).

The University Recreation Centre incorporating weights room, administration, sports store, sauna, multipurpose area and squash courts has been provided and improvements to existing playing fields are being undertaken. New in 1990 will be a 50m heated swimming pool which will be the centre of competitive and recreational aquatic activities on campus. All facilities are incorporated in one location. Sports catered for: Basketball, Badminton, Volleyball, Table Tennis, Taekwondo and Indoor Soccer. Artificial Grass Tennis Courts are available night and day. All facilities are available 7 days per week.

The constituent clubs of the Sports Association are as follows. Enquiries in respect of them should be made at the Sports Association Office:
- Athletics
- Badminton
- Basketball
- Cricket
- Hockey
- Netball
- Rugby Union
- Rugby League
- Kendo Fencing
- Scuba Diving
- Sailing & Windsurfing
- Skiing
- Soccer
- Squash
- Table Tennis
- Taekwondo
- Tennis
- Volleyball
CHAPLAINCY SERVICE

A Chaplaincy Service is provided within the University, for the benefit of students and staff. Its office is located near the Counselling Centre. The Service offers fellowship, personal counselling and guidance, and leadership in biblical and doctrinal studies and in worship. The visiting Chaplains maintain close liaison with student religious societies. The visiting Chaplains may be contacted at their private addresses or through the University Secretary.

Anglican: Rev. R. Heslehurst, 4 Moore Street, Gwynneville. 2500. Telephone 288417, 295561 St. John’s Church, Keiraville.

Baptist: Vacant

Congregational: Rev. C.G. Jones, 6 Carter’s Lane, Towradgi. 2518 Telephone 843658

Jewish: Dr. H. Immerman BA, DipEd, Natal, MEd(Admin) UNSW, MA, Brandeis, PhD, UNSW, M.A.C.E. Shalom College, University of New South Wales, P.O. Box 1, Kensington. 2033 Phone: (02) 663-1366

Presbyterian: Rev. D.L. Ferrington, St. Andrew’s Manse, 25 Stanbrook Avenue, Mt. Ousley, 2519 Telephone 261725 (office) 261458 (home)

Roman Catholic: Rev. Father Terry Gleeson, Cathedral Presbytery, 36 Harbour Street, Wollongong. 2500. Telephone 286511.

Uniting: Rev. Tim Kelly, 11 Elizabeth Street, Mangerton. 2500 Telephone 292117 (office) 293448 (home)

COUNSELING SERVICE

Counsellors offer free and confidential counselling to members of the University community who want to talk through and change areas of difficulty, conflict, indecision or crisis in their lives. Some things people often talk to a counsellor about are:

- I'm depressed and anxious about ...
- How can I make new friends? ...
- I want to become more confident and assertive ...
- I can't get started with my essay ...
- I'm bored with my course. What can I do? ...
- I feel miserable now that he/she has gone ...
- My family wants me to ... I want to ...
- I'm not sure what to do with my life ...
- What do I do now I've failed? ...
- We'd like to be getting on better together ...

As well as individual counselling, group programmes, in (e.g.) stress management, assertion training, preparing for university, are also run from time to time.

There are two counsellors ... Greg Hampton and Maxine Lacey. Appointments to see them can be made by telephoning the receptionist, Gayle Ford on 270 445 or by calling in at the Counselling Service which is located in the Union Arcade. The Counselling Service is open during office hours; evening appointments can be arranged.

CAREERS AND APPOINTMENTS SERVICE

Careers Advice

A Careers and Appointments Service is located on the 1st Floor of the Union Arcade. Individual and group advice is given and a Careers Library is maintained.

Campus Interviews

Campus Interview programmes are arranged in April, May and September. This provides the opportunity for employers to interview prospective graduate employees. Students should watch notice boards and make themselves aware of times of visits to the Campus.

Casual/Part-Time Employment

The Careers and Appointments Service operates a Casual Employment Service and assists with Vacation Work. A notice-board outside the Counselling/Careers Reception area on the 1st floor of the Union Arcade, displays job vacancies. Registration for employment can be done through the receptionist and all positions available will be notified where possible. Students who are specially interested in tutoring should register early. Contact Gayle Ford on 270445. The Careers & Appointments Officer is Patricia Webster and any further information can be obtained by phoning 270324.

ACCOMMODATION COLLEGIATE

The Halls

University Halls have traditionally offered students accommodation supportive of the student’s academic goals. The Halls may be thought of as offering accommodation with “extras”. They provide meals and a cleaning service for residents, they have on-site management, and offer students personal and academic support geared towards student independence. The Halls are designed to provide a supportive environment for residents and aim to develop a sense of community among residents.

Breakfast and dinner are provided daily in the dining room of each Hall and on weekdays at breakfast, residents can make a sandwich lunch.
Students must provide their own pillow, sheets and blankets. (These can be loaned to overseas students by the Halls for the first few weeks until the student has time to purchase them locally.) Individual student rooms are cleaned weekly. Laundries with washers, dryers and exterior clothes lines are supplied for students to do their own laundry. Computer Rooms in each house provide a variety of computer hardware for student use. The Residents' Association organizes social activities, maintains student kiosk and games room equipment and provides a selection of daily newspapers. On-site management of the Halls and pastoral care of the residents is provided by a professional staff during business hours, and by postgraduate house tutors after hours. House tutors also help organize Hall study groups and are available for informal academic assistance.

**International House**

Hindmarsh Avenue, North Wollongong, a 20 minute walk from campus, accommodates 200 students in single study/bedrooms. Accommodation is for a 40-week academic year, including recess periods. Accommodation with reduced services is also generally available throughout the December-February recess. This is sometimes an advantage for overseas students who wish to remain in residence during the long summer recess. Fees for 1990 are $3800, due in two equal instalments in February and July.

**Weerona**

12 Macquarie Street, a 20 minute walk from campus, accommodates 92 students; 30 in single study/bedrooms, and 62 in shared rooms (2 students to a room). Shared rooms are cheaper than single rooms.

Accommodation is for the 40 week academic year. Fees for Weerona for 1990 are $3800 for a single room, and $3120 for a shared room. Both are payable in two equal instalments due in February and July.

Beaton Park Leisure Centre — a facility of Wollongong City Council — with a heated swimming pool, tennis and squash courts, basketball stadium and sports medicine clinic, is located next to Weerona.

**Admission to Halls of Residence**

The Halls of Residence are administered separately from non-collegiate accommodation by the Head and Deputy Head of Halls. Students wishing to live in the Halls of Residence as a first preference will ordinarily be interviewed by the Head of Halls, Cynthia Halloran, for International House, and by the Deputy Head of Halls, Jann Counsell, for Weerona. Inquiries about the Halls can be made directly to the Halls (042) 29 9711.

**NON COLLEGIATE**

**Campus East**

Cowper Street, Fairy Meadow, is a 40 minute walk from campus (or one stop on the train and a 15 minute walk). Campus East accommodates 90 students in single study/bedrooms, and meals are served in the dining hall located on site. Students must provide their own pillow, sheets and blankets. Provision is being made for recreation areas. Fees for Campus East for 1989 are $3,840* payable in two equal instalments. Tenancy is for a 40-week period (academic year including recesses).

**Kooloobong**

Northfields Avenue at the western end of the campus accommodates 100 students in 23 furnished houses and apartments. Residents of Kooloobong live independently in individual houses and apartments of 2-5 students, doing their own cooking and cleaning. Desk, bed, wardrobe, bookshelves in study/bedrooms; refrigerator, stove cooktop, microwave oven in the kitchen; washing machines in laundries; and living room and dining room furniture is provided. Residents provide their own bed linen, cooking pots, crockery, cutlery, cleaning equipment and room heaters if required. Tenancy is for a 40-week period (academic year including recesses).

The advantage of living at Kooloobong is that a student can be very independent, and can do his or her own cooking. Since students in these houses have to live together on good terms, acceptance of students for residence at Kooloobong is usually done as a group; five students who are already friends and compatible will ask to share a house together. Residence at Kooloobong is normally not available to first year students. Fees for Kooloobong for 1989 are $2,800* payable in two equal instalments.

**Gundi**

Gipps Street, Wollongong, is a 40 minute walk from campus. The complex accommodates 39 residents, 35 in five 7-bedroom apartments and 4 in two 2-bedroom apartments. These are furnished similarly to Kooloobong. Fees for Gipps Street units for 1989 are $2,640*, payable in two equal instalments. Tenancy is for a 40-week period (academic including recesses).

The University has an Accommodation Officer who not only places students within the University's non-collegiate style accommodation, but assists students wanting to find private accommodation. The Accommodation Officer, Robyn Wilkes can be contacted by telephoning (042) 270351 from 9 am to 1 pm.

**GENERAL**

Private accommodation is readily available in the suburbs around the campus. With rooms costing approximately $50 per week, apartments from $80 per week, while house and condominium style apartments, which can be shared by several students, range between $150 and $250 per week, depending on size, style and location.

**MEDICAL SERVICE**

A comprehensive medical centre, including general practitioners, dentist and optometrist, is located in the Union Arcade. All services are provided by qualified professional staff in modern, air conditioned premises using the latest technology.

*New students will be required to pay for accommodation during their additional introductory week at University.
Both general practitioner and optometrist bulk bill holders of a Medicare Card at the time of service. The dental service, by arrangement with the University Union, offers services at attractive fee scales.

CHILD CARE CENTRE
Kids’ Uni, a University Union facility, is a child care centre on campus which offers child care facilities to both students and staff. The modern centre provides a happy and stimulating atmosphere where children can stay while their parents are at class and/or work.

Fees are calculated on a sliding scale based on family income. Parent involvement in the daily activities is welcomed but not mandatory. The centre is open from 8.15 a.m. to 5.30 p.m. Monday to Friday. Kids’ Uni cares for children in the 0-6 year-old age group. After school care is available for older children and a School Vacation Program is also offered for school aged children. Qualified Early Childhood Education staff are in attendance. Preference for enrolment goes to children who were enrolled at Kids’ Uni in the previous calendar year. Only a limited number of places are available and early application is essential. Permanent bookings must be made to include sessional weeks, mid-session breaks, study breaks and examinations.

For further information contact the Director, Jillian Trezise, C/- The Union or phone Kids’ Uni, 270072. Applications forms and information sheets can be obtained from the centre.

FACILITIES FOR STUDENTS WITH DISABILITIES
The counsellors can provide information on the facilities available at the university for assisting students with disabilities. They can also provide advice on how particular disabilities affect university study.

A range of equipment for helping students with lecture note-taking and assignment writing is available for loan. Portable amplification systems are available for students with hearing impairments to use in lectures. In some circumstances students with hearing impairments or arm injuries can be provided with lecture note-taking assistance. Information on community resources is also available.

Students with disabilities are advised to contact the counsellors before the commence university. The counselling service is located on the second floor of the Union Arcade — phone 270445. Physical access is available through a stair inclinator or lift; please phone for advice on how to gain access.

N.S.W. REQUIREMENTS FOR TEACHERS
Information regarding correct undergraduate degree patterns for the purposes of teaching can be obtained from Jan James, Professional Officer, Faculty of Education, 270078.

THE FRIENDS OF THE UNIVERSITY OF WOLLONGONG LIMITED
The Friends of the University of Wollongong was incorporated on 1st December, 1980.

Broadly the aims and objectives of the Friends are as follows:

1. Assist the Council of the University to preserve, develop and maintain the standard, position and facilities of the University.

2. Create opportunities for the University to attract and retain the continuing interest and financial support of a concerned and interested group of past students, friends, staff and members of the community generally.

3. Solicit donations and gifts to or for the benefit of the University.

4. Attract and encourage bequests, legacies and all forms of deferred gifts to the University or the Company.

5. Make donations to the University of such amounts and at such times as the Company may determine.

Members are drawn from all walks of life including graduates, students, parents, staff, industry, commerce, the unions, local government, the professions, the churches, commerce and industry, primary producers and citizens generally.

Membership is granted to people who express an intention to support the activities of the University or of the Friends. Support can be given in cash, in kind, or in service.

Membership of the Graduates Group within the Friends is $20 per annum or $100 for life membership.

For further information contact the Executive Officer on (042) 270073.

ITC UNIADVICE LIMITED
ITC (Uniadvice) Limited, is the consulting arm of The University of Wollongong and is an Approved Research Institute. Operated on commercial lines, Uniadvice aims to link the needs of the community with the academic skills and research facilities of the University.

Much of the Research and Development work being undertaken at The University of Wollongong is of direct relevance, and in many cases of crucial importance, to industrial and government interests both in Australia and overseas.

Uniadvice offers a blend of experience and expertise, and represents a source of knowledge covering an extraordinarily wide range of skills from scientific, engineering and social science disciplines.

ITC (Uniadvice) Limited aims to facilitate the transfer of technology between the University and industry. One of its divisions organises projects and consultancies on pure and applied science themes. A second division is concerned with arranging conferences, seminars and short courses in the area of Technical and Professional Education. The following Centres are administered by Uniadvice:

- Bulk Materials Handling
- Centre for Applied Biological Research
Centre for Information Technology Research
Centre for Materials
Centre for Technology & Social Change
Centre for Transport Policy Analysis
ITC Computer Training Centre
Microwave Applications Research Centre
Wollongong English Language Centre
Centre for Studies in Literacy
Australian School of Sub-Editing

For further information contact the Managing Director of ITC (Uniadvice) Limited, Mr. Ian Carter, on (042) 270076.

THE ILLAWARRA REGIONAL INFORMATION SERVICE (I.R.I.S.)

The Illawarra Regional Information Service (I.R.I.S.) is located in University premises at 22 Porter Street, North Wollongong. I.R.I.S. is an autonomous body funded by the N.S.W. State Government, Wollongong City Council and the University as major sponsors and by Regional Councils, Commerce and Industry.

I.R.I.S. provides a range of information to assist both the social and economic development of the region.

Students and academics are encouraged to make use of the information available.

I.R.I.S. have completed a number of studies on the region and these, together with our publications, are available for sale or perusal at our offices.

For further information contact Mr. John McKenna, the Executive Director. Telephone 294777 or 270787.

ARMY RESERVE UNIT

The University of Wollongong Company of the University of New South Wales Regiment (UNSWR) is an Army Reserve unit with the primary role of officer training for the Reserve. Enlistment is voluntary, and is open to male or female students. The Regiment parades on a Wednesday evening, and the training schedule is designed to avoid clashes with the study requirements of the academic year. Officer Training provides training in decision making, man management and organisation. Further enquiries should be made to University of Wollongong Coy, UNSWR, Military Road, Port Kembla. Phone 74 1861.
STUDENT CHARGES

According to Government regulations, students, both undergraduate and post-graduate, are required to meet the following charges where applicable:

1. Penalty charges such as late charges, parking fines, etc.
2. Administrative charges such as ‘statement of record’ charges, ‘review of result’ charges, application fee to amend an academic record, or charges for examinations requiring special arrangements.
3. Cost of travel incurred by students attending practical work for courses in social work, teacher training, etc.
4. Cost of travel incurred by external students attending residential schools.
5. Accommodation charges and cost of subsistence on excursions, field work, etc.
6. Charges for special clothing or laundry costs.
7. Purchase of instruments or equipment.
8. Cost of handbooks and notes.
9. Charges associated with the development and operation of unions, student associations, students’ representative councils and other student activities.
10. Deposits and refundable charges.

Compulsory Charges

In 1990 all registered students will be required to pay:

University Union† — entrance charge (at first enrolment) ........................................ $25*
Recreation & Sports Association† — entrance charge (at first enrolment) ..................... $25*
Students’ Representative Council — entrance charge (at first enrolment) .................. $4*

Student Activities charges:

University Union† — annual subscription ....................................................................... $141*
Recreation & Sports Association† — annual subscription .............................................. $62*
Students’ Representative Council — annual subscription.............................................. $29*

Certain categories of students such as international students enrolling on a full fee paying basis and some postgraduate award holders are exempted from the charge. Beneficiaries under the AUSTUDY will be reimbursed through the student allowance arrangements.

Exemption from payment of fees will be granted in certain circumstances:

Exemption from payment of fees for the University Union will be granted to life members of the Union.

Students who have paid fees for six or more years are eligible to apply for life membership of the Union and/or the Recreation & Sports Association.

University Union annual subscription fees External Students:

External Students .......................................................... $34*#

Recreation & Sports Association fee for External Students:

Illawarra Region ................................................................ $31*#
Non-Illawarra Region ....................................................... $15*#

# Teacher Education (Bridging and Conversion Courses)

Other Charges

Application fee to amend academic record ................................................................. $40*
Parking Charges (per Annum)

— Staff ........................................................................ $55
— Student ..................................................................... $20

New Students —

All new students shall be required to attend the enrolment centre and pay all charges on the date shown on their letter of offer.

Re-enrolling Undergraduate and Postgraduate students —

Failure to re-enrol by the prescribed date — Charge .................................................. $20*

Where charges have not been paid prior to the commencement of the relevant Session, the following additional charges will apply:

Charges paid during the first two weeks of session ..................................................... $20*
Charges paid subsequent to the second week of session .......................................... $30*

Note: Payment of charges subsequent to the second week of the relevant session will only be accepted with the express approval of the Vice-Principal (Administration) or the Manager (Student Services) or the Assistant Secretary (Academic Services).

Withdrawal

1. Students withdrawing from a course are required to notify the Vice-Principal (Administration) in writing.

2. Where notice of withdrawal from a course is received by the Vice-Principal (Administration) before the first day of Autumn session a refund of all charges paid will be made.

3. On notice of withdrawal on or after the first day of Autumn session and prior to the end of the fourth week of Autumn session, A FULL REFUND OF STUDENT ACTIVITIES CHARGES, OTHER THAN ENTRANCE CHARGES, WILL BE MADE BUT THEREAFTER NO REFUND WILL BE MADE, EXCEPT AS
PROVIDED FOR IN SECTION 4 BELOW. Student activities charges are listed on the previous page.

4. If a student's initial enrolment in any year is made at the commencement of spring session for spring session only and the student gives notice of withdrawal prior to the end of the fourth week of spring session, a full refund of student activities charges, other than entrance charges will be made but thereafter no refund will be made.

5. Late charges are not refundable.

6. Payments towards the Higher Education Contribution Scheme will only be refunded where a student withdraws prior to the appropriate census date.

Extension of Time
Any student who is unable to pay charges by the due date may apply in writing to the Vice-Principal (Administration) for an extension of time. Such applications must state clearly and fully the reasons why payment cannot be made and the extension sought, and must be lodged before the date on which a late fee becomes payable. Normally the maximum extension of time for payment of charges is until the end of the fourth week of the relevant session.

Assisted Students
IDP & AIDAB Sponsored Students who have not received an enrolment voucher or appropriate letter of authority from their sponsor at the time when they are enrolling should complete their enrolment paying their own charges. A refund of charges will be made when the enrolment voucher or letter of authority is subsequently lodged with the Cashier.

Other sponsored students or scholarship holders must pay charges themselves and make arrangements to have the sponsor reimburse their charges.

Failure to Pay Charges
Any student who is indebted to the University and fails to make a satisfactory settlement of his or her indebtedness upon receipt of due notice ceases to be entitled to membership and privileges of the University. Such a student is not permitted to register for a further session, to attend classes or examinations, or to be granted any official credentials.

In very special cases the Vice-Principal (Administration) may grant exemption from the disqualification referred to above upon receipt of a written statement setting out all relevant circumstances.

Cashier's Hours
The Cashier's office is open for the payment of charges from 9.30 a.m. to 4.30 p.m., Monday to Friday. The Cashier's office may be open for additional periods during enrolment. Details of these additional times may be obtained from notices posted at the Cashier's office.
GENERAL INFORMATION

HIGHER EDUCATION CONTRIBUTION SCHEME (HECS)

Students enrolling at the University will be liable under the Higher Education Contribution Scheme (HECS) unless specifically exempted. Summer session enrolment also incurs a HECS liability. HECS is payable each session and the amount of liability is determined by the load (as a proportion of the standard student load for a full year) in which a student enrols.

Method of Payment

New students will receive a HECS election form at enrolment. This form requires students to nominate whether they wish to pay the HECS liability through the Taxation System when earnings reach the threshold prescribed yearly by the Government or whether they wish to pay the HECS liability to the University "up front" and receive a discount of 15%. If a student elects to pay the liability through the Taxation System he/she will be required to provide either a taxation file number or make an application for a taxation file number. If a student elects to pay the liability "up front" he/she should make payment of the liability as advised at enrolment.

Change of HECS Election

A student's HECS election remains in force for the duration of his/her course unless he/she wishes to change it by lodging another HECS election form. However, students exempt from HECS (refer below) must lodge an election form for each academic year.

Notice of Liability

Students will receive notice of their estimated liability under HECS with the enrolment record notice at the beginning of each session. A statement of the session's final HECS liability as at Census date is sent to students' session addresses after the Census date. Students must keep this as a permanent record of their liability each session.

Amendments to Enrolment

When a student amends his/her enrolment (i.e. by withdrawing from or adding one or more subjects), an amended liability statement will be given. No liability under HECS will be incurred if a student withdraws from one or more subjects prior to the appropriate Census date.

Exemptions

All higher education students will incur the HECS charge but there are a number of exemptions. This means that the HECS charge is paid on the student's behalf by a sponsor or by the Government.

These are:

- students in recognised bridging and supplementary courses;
- overseas students who are already paying the Overseas Student Charge, full fees or who are assisted under foreign aid programs;
- students undertaking industrial experience as part of a course will not be liable for that proportion of their course spent in industry;
- students who receive a postgraduate scholarship, which includes a special allocation of postgraduate scholarships for the professional development of teachers; and
- students enrolled in basic nurse education courses who will be exempt until 1993, when the Commonwealth Government takes over full funding responsibility for these courses (unless State and Territory governments request the Commonwealth to collect the contribution on their behalf before 1993).

Students who fall in the above categories will have no liability under HECS. However, they must still lodge a HECS election form each academic year with appropriate documentation supporting their exemption.
STUDENT PROCEDURES

General Conduct
Acceptance as a member of the University implies an undertaking on the part of the student to observe the regulations, by-laws and other requirements of the University, in accordance with the declaration signed at the time of the enrolment. Smoking is not permitted during lectures, in examination rooms or in the University Library. Gambling is also forbidden.

Members of the academic staff of the University, senior administrative officers, and other persons authorised for the purpose, have authority, and it is their duty to check and report on disorderly or improper conduct or any breach of regulations occurring in the University.

Indebtedness to the University
Any student who is indebted to the University and who fails to make a satisfactory settlement of the indebtedness upon receipt of due notice ceases to be entitled to membership and privileges of the University. Such a student is not permitted to attend classes or examinations, or to be granted any official credentials.

Indebtedness to the University includes the non-payment of charges, late charges, library fines, parking fines, the non-payment of student loans and any arrears in rent or other financial obligations resulting from an accommodation agreement entered into with the University.

In very special cases the Vice-Principal (Administration) may grant exemption from the disqualification referred to in the preceding paragraph upon receipt of a written statement setting out all the relevant circumstances.

Change of Address
Students are requested to notify the Vice-Principal (Administration) in writing of any change in their address as soon as possible. Forms for this purpose are available from the Student Enquiries Office, Ground Floor, Administration Building. Failure to do this could lead to important correspondence (e.g. examination results, etc.) or course information not reaching the student. The University cannot accept responsibility if official communications fail to reach a student who has not notified the Vice-Principal (Administration) of a change of address.

Change of Name by Marriage or Deed Poll
All records held, and statements issued by the University will be in the name given by students at the time of their admission to the University.

Students who change their name by marriage or by Deed Poll and who also wish to change their name on University records should complete a Change of Name form which is available from the Student Enquiries Office, Ground Floor, Administration Building, and present for notation the original Marriage Certificate or Deed Poll document.

Lost Property
Enquiries concerning lost property should be made to the Student Enquiries Office and the Union Office.

Ownership of Students' Work
The University reserves the right to retain at its own discretion the original or one copy of any drawings, models, designs, plans and specifications, essays, theses or other work executed by students as part of their courses, or submitted for any award or competition conducted by the University.

Notices
Official University notices are displayed on the notice boards and students are expected to be acquainted with the contents of those announcements which concern them.

Students' Travelling Concession Passes
The various transport authorities provide fare concessions for certain classes of students.

Application forms for these concessions may be obtained from the Student Enquiries Office, Ground Floor, Administration Building.

Train:
Identification cards issued by the Railways of Australia are available to full-time students to enable them to travel at concession rates on railways within Australia. Application forms are available from the Student Enquiries Office, Ground Floor, Administration Building.

Aircraft:
Concession fares for overseas, inter-state and intra-state are available under the conditions ruling for various operating companies. Appropriate travel cards are available from travel agents.

Student Identification Cards
All students are issued with an Identification Card at the beginning of their first year of enrolment, after payment of compulsory charges. This card must be carried during attendance at the University and shown on request.

The number appearing on the front of the card is the student registration number used in the University's records. This number should be quoted in all correspondence.

The card must be presented when varying enrolment, when attending examinations and collecting examination results, when applying for travel concessions and when notifying a change of address.

Students who lose their identification card must notify the Vice-Principal (Administration) as soon as possible.

All students will be issued with an Identification Card as soon as possible after enrolment. In the meantime, the receipt form issued at the time of enrolment should be carried during attendance at the University and shown on request. If the identification card is not received within six weeks of enrolment the Student Enquiries Office should be advised.
EXAMINATIONS

Formal University examinations may take place at the end of each session. Timetables showing time and place at which individual examinations will be held are posted on notice boards. Mis-reading of the timetable is not an acceptable excuse for failure to attend an examination. Autumn session examination results are posted to the session addresses of students. Spring session and summer session examination results are posted to the home addresses of students. No information concerning examinations or results will be given by telephone.

EXAMINATION AND ASSESSMENT REGULATIONS

PART I - INTERPRETATION

1. In these Regulations, unless the contrary intention appears:
   (a) "assessment work" means all essays, tests, papers, theses, demonstrations, performances and any other work whatsoever whether written or otherwise other than examination papers within the meaning of any degree, diploma or associate diploma Regulation or Schedule;
   (b) "candidate" means any person registered for a degree, diploma, associate diploma or undertaking a miscellaneous programme;
   (c) "examination" means any formally supervised examination in a subject held at a specified time and place;
   (d) "examination question paper" means a paper incorporating questions prepared by the examiner for an examination;
   (e) "examination answer paper" means a paper written or dictated by a candidate in answer to the examination question paper during an examination;
   (f) "examination room" means a designated place where an examination is held;
   (g) "examiner" means a person or persons with responsibility for the assessment of examination papers or assessment work in any subject;
   (h) "subject" is a self-contained unit of study identified by a unique number in a schedule;
   (i) "Examination Supervisor" means a person authorised by the Vice-Principal (Administration) with responsibility for the supervision of a particular examination held by the University.

PART II - CONDUCT AT EXAMINATIONS

2. No candidate shall, during any examination:
   (a) have in his or her possession any material other than material which the examiner for the subject concerned has specified may be taken into an examination room;
   (b) provide assistance to, or communicate with, any other candidate unless expressly approved by the examiner;
   (c) accept assistance from any candidate or other person unless such assistance has been expressly approved by the examiner;
   (d) permit any other candidate to read, copy from, or use his or her examination question or answer paper, unless expressly approved by the examiner;
   (e) use any other material belonging to or written by another candidate or other person unless expressly approved by the examiner;
   (f) by any means whatsoever, except as approved by the examiner, obtain or endeavour to obtain, assistance in his or her work, or give, or endeavour to give, assistance to any other candidate;
   (g) remove from the examination room any examination answer paper or other paper provided for use by the candidate during the course of the examination, or other material which is the property of the University unless permitted by the Examination Supervisor or the examiner to remove it;
   (h) contravene the Rules and Procedures for the Conduct of Examinations;
   (i) cause any disturbance or be guilty of any conduct likely to disturb any other candidate or candidates; or
   (j) be guilty of any other act of misconduct, as defined in Part XII of the University By-Law.

3. Any candidate who wishes to make an enquiry regarding an examination shall direct that enquiry in writing to the Vice-Principal (Administration).

Procedure

4. Should an Examination Supervisor have reason to believe that a candidate has committed, or is attempting to commit, a breach of any provision of clause 2 of these Regulations, the Examination Supervisor shall immediately warn the candidate and shall report the matter in writing to the Vice-Principal (Administration). The candidate normally shall be allowed to complete the examination but in circumstances considered appropriate by the Vice-Principal (Administration) or other person authorised by the Vice-Principal (Administration), the candidate may be excluded from the examination room under the provisions of clause 36(1) of the University By-Law.

5. The Examination Supervisor may take possession of any material brought into an examination room in contravention of clause 2(a) of these Regulations.

6. The Examination Supervisor shall forward the material referred to in clause 5 to the Vice-Principal (Administration) with the report made pursuant to clause 4.

7. A candidate excluded from an examination room under clause 4 may appeal to the Vice-Chancellor under clause 36(3) of the University By-Law.

8. The Vice-Principal (Administration) may refer a report made pursuant to clause 4 to
the Vice-Chancellor, in which event the reference shall be deemed to be a complaint pursuant to clause 36(2) of the University By-Law and the Vice-Chancellor shall either:

(a) refer it to the Investigation Committee for investigation; or

(b) not proceed with it further should the Vice-Chancellor form the opinion that the complaint is unfounded or does not constitute misconduct.

9. The material confiscated pursuant to clause 5 shall be returned to the candidate at the conclusion of all action relating to the alleged breach of Regulations by the Vice-Chancellor, the Investigation Committee and/or the Council Committee of Appeal.

10. Should an allegation be made that a candidate has breached any provision of clause 2 of these Regulations, the candidate's examination result for the subject concerned shall be withheld by the Vice-Principal (Administration) pending proceedings of the Investigation Committee and/or the Council Committee of Appeal.

Penalties

11. Should the Investigation Committee proceed pursuant to clause 8(a) with the report of an alleged breach of any provision of clause 2 and find the candidate guilty of the misconduct alleged against him or her, the Investigation Committee, in addition to recommending penalties set out in Part XII of the University By-Law:

(a) shall recommend to the Vice-Chancellor that the candidate receive a zero mark for the subject and be suspended from the University for at least one (1) academic session should the candidate be found guilty of misconduct under sub-clause 2(a), 2(b), 2(c), 2(d), 2(e), or 2(f);

(b) may recommend to the Vice-Chancellor that the candidate receive a zero mark for the subject concerned, or a reduction in marks as the Investigation Committee considers just in the circumstances of the case, should the candidate be found guilty of misconduct under sub-clause 2(g), 2(h), 2(i) or 2(j);

(c) may recommend that the candidate be given the opportunity to sit a supplementary, special or other examination and to be assessed on that examination paper.

12. A candidate may appeal to the Council Committee of Appeal against a decision of the Investigation Committee made under clause 11.

PART III – ASSESSMENT WORK

13. For any subject for which they are enrolled, candidates are required to submit the prescribed assessment work in accordance with the instructions of the relevant examiner and the University Rules and Regulations.

14. Any assessment work submitted by a candidate must be in accordance with Bachelor

Degree Regulation 11(2) and Diploma and Associate Diploma Regulation 11(2) which require that such work "must be the work of the candidate and not submitted elsewhere unless otherwise permitted by the Head" (of the academic unit); if any material which is not entirely the work of the candidate is used, in whole or in part, fully documented reference to such material must be made.

15. The procedures and penalties set out in clauses 8, 11 and 12, with modifications appropriate to the circumstances, shall apply in relation to an alleged breach of the provisions of Part III of these Regulations by a candidate.

PART IV – RULES AND PROCEDURES FOR THE CONDUCT OF EXAMINATIONS

(a) A candidate must obey any instruction given by an Examination Supervisor for the proper conduct of an examination.

(b) A candidate must produce the student identification card for identification purposes for each examination. Should a candidate fail to do so, the candidate may be refused admission to the examination room. A candidate wearing a veil must remove it for identification purposes; on request by the candidate this may be done in private before a female examination supervisor.

(c) A candidate should be in place in the examination room not less than ten (10) minutes before the time specified for the commencement of the examination.

(d) No candidate shall be admitted to an examination room more than thirty (30) minutes after the commencement of the writing time of the examination.

(e) No candidate shall be permitted to leave the examination room before the expiry of thirty (30) minutes from the commencement of writing time of the examination.

(f) No candidate shall be re-admitted to the examination room after leaving it unless, during the full period of absence, the candidate is under approved supervision.

(g) Following the ten (10) minute warning given by the Examination Supervisor before the end of the examination, all candidates shall remain seated until the examination answer papers have been collected.

(h) Except for candidates who have left the examination room prior to the ten minute warning referred to in sub-clause (g) above, all candidates shall remain seated until all examination answer papers have been collected and the Examination Supervisor permits candidates to leave the examination room.

(i) Smoking is not permitted in the examination room.

(j) All answers must be in English unless otherwise directed. An overseas student with written approval of the Vice-Principal
Identification Cards (Examinations)
Students are required to have their identification cards available for each examination for identification purposes.

Special Examinations
Students who believe that their attendance at or performance in an examination or assignment has been affected by illness or other cause beyond their control are required to make a written statement to the Vice-Principal (Administration). This statement together with any supporting evidence will be considered by the Departmental Head who has the authority to take whatever action is deemed appropriate in determining the students' overall results. Students should refer to the section on Special Consideration on the next page for more details.

PROCEDURE FOR THE USE OF FOREIGN TRANSLATION DICTIONARIES IN EXAMINATIONS
1. Foreign Language Translation Dictionaries may be used only by candidates whose background is non-English speaking.
2. Such dictionaries may be used only by a candidate during the first three sessions after initial registration for a course at this University.
3. Such dictionaries may be used in all subjects, except where otherwise directed to the contrary by the relevant Head of Department.
4. Eligible candidates who wish to use such a dictionary must apply for permission on the application form no later than four weeks prior to the examination period for which approval is sought.
5. Eligible candidates who receive permission will be notified in writing by the University.
6. At the approved examination,
   (i) the written approval to use the dictionary must be shown to the Examination Supervisor prior to entry into the examination room, and then
   (ii) the dictionary must be submitted for inspection by the Examination Officer prior to the commencement of the examination to establish its suitability, and to ensure that it is not marked in any way. The dictionary may be further checked at any time during the examination by staff in the examination room.

AMENDMENTS TO ACADEMIC RECORDS, REASSESSMENT OF GRADES
There are three ways in which you may apply to have your academic record amended.

1. Enrolment Error
If, as a result of an enrolment error, you have either:
   (i) received a 'FAIL' grade for a subject for which you were formally enrolled, but did not attempt; or
   (ii) not received a result for a subject which you attempted, but for which you were not formally enrolled;
you may make application to have the necessary amendment made to your academic record. The University Council has determined that any such application must be accompanied by a charge of $40*.

2. Late Withdrawal
If you withdraw from an autumn session subject or a spring session subject after the eighth week of session or from a double session subject or a triple session subject after the end of the first week of the second session in which the subject is offered or from a summer session subject after the third week of summer session, you will be awarded a grade of 'FAIL'. However, if there are medical, compassionate or other acceptable reasons for the late withdrawal, the degree and diploma regulations allow for you to apply to have the 'FAIL' amended to 'DISCONTINUED'.

3. Reassessment of Grade
If you feel that the grade you have been awarded for a subject is not indicative of your performance or that there may have been an error in determining your grade, you should address the matter.

Applications for such amendments may be made at the Student Enquiries Office and need to be supported by appropriate documentary evidence. No charge is applicable if the application is made prior to the release of examination results; after this time, a $40.00* charge applies.

Applications must be made no later than two weeks after the release of examination results.

*Currently under review.
Dean of the Faculty, setting out the reasons you believe the grade is not correct and advising the Dean of the member(s) of staff with whom you have discussed the matter. The Dean will respond in writing after he/she has taken whatever advice is required.

Applications to the Dean should be made no later than two weeks after the release of the examination results.

Finally, if you believe there has been a lack of due process in the reassessment procedure outlined above, you may appeal, within two weeks of receiving the response from the Dean, to the Academic Review Committee to review the matter. The letter of appeal must state fully the reasons for your appeal and include any relevant documentary evidence to support your appeal. Please note, however, that the Committee's role is to ensure that due process has been followed — the Committee's role is not to re-assess the academic quality of the work.

SPECIAL CONSIDERATION

The following procedures apply to all applications for special consideration within the terms of Regulation 11(6) of the Bachelor Degree Regulations or the Diploma and Associate Diploma Regulations. They also apply to corresponding applications from candidates for all postgraduate coursework degrees and diplomas.

Students who, through serious illness or other circumstances beyond their control, are unable to attend an examination are required to advise the Vice-President (Administration) in writing of the details supported by a medical certificate* or other evidence not later than seven (7) days after the date of examination. However, it is recommended that students attempt the examination if it is at all possible as there is no guarantee that a supplementary examination or other alternative can be arranged; if appropriate the student may then take the action provided for in the next paragraph.

Students who attempt an examination and believe their performance was, or is likely to be, prejudiced by illness on the day of the examination must notify the Vice-President (Administration) or Examination Supervisor before, during or immediately after the examination and may be required to submit a medical certificate or be examined by a medical practitioner nominated by the University.

Students who believe that their performance in a subject has been affected by serious illness or by other circumstances beyond their control during the session(s) of enrolment in the subject, and who desire the circumstances to be taken into consideration in determining their standing are required to advise the Vice-President (Administration) in writing of the details supported by a Medical Certificate* or other evidence not later than seven (7) days after the illness or other circumstances.

When submitting a request for consideration, candidates are required to give details of their student number, address, course specialisation and subject number, title and the date of the examination or the details of the work affected.

It is the responsibility of students to ensure that the University's records of both home and term addresses are up-to-date. This is most important if a student is to be offered the opportunity to sit for a supplementary examination or to do alternative work where performance may have been affected by illness etc.

Circumstances which may be taken into account include such matters as serious illness and bereavement. Normally pressures of employment or studies in other subjects will not be considered; students in these circumstances should withdraw from the subject(s) before the appropriate cut-off date as specified in Regulation 10(2) if they do not expect to be able to complete all necessary work. Students who withdraw for medical or compassionate reasons after the cut-off date may apply for the subject to be recorded as "Discontinued" rather than "Fail" under the terms of Regulation 10(3).

Heads of Units use their discretion as to what action, if any, is appropriate in response to requests for special consideration. They take into account all evidence including the seriousness and extent of illness where applicable and the extent to which the circumstances are likely to have had an adverse effect on the candidate's performance in the relevant examination or other work. Normally the candidate must complete all work required for the subject, although the Head may make allowance for performance in that work. There should not be an expectation on the part of students that there will necessarily be an alteration to marks/grades on the basis of a submission of a medical certificate or other evidence.

TERMINATING PASSES

The award of the grade of terminating pass will prohibit a student progressing to the next subject in a sequence for which the subject in which the terminating pass is awarded, is a pre-requisite. However, students are not prevented from repeating a subject for which a terminating pass has been awarded.

APPLICATION FOR ADMISSION TO A DEGREE OR DIPLOMA

Applications for admission to a degree or diploma must be made on the appropriate form and by the due date for each session. It is the student's responsibility to make an application to have the degree or diploma conferred.

Each student who completes the requirements for the award of a degree or diploma at the time the examination results are published will have that degree or diploma conferred at the next appropriate ceremony unless a specific application is made to the Vice-Principal (Administration) not to have the award conferred.

* The University has introduced a standardised medical certificate form for this purpose. These forms are available from the Student Enquiries Office, Administration Building and should be presented to the doctor to forward to the Vice-President (Administration).
POSTGRADUATE ADMISSION, ENROLMENT AND RE-ENROLMENT

ADMISSION

Application forms for admission are obtainable from the Enquiries Office, Ground Floor, Administration Building.

Applicants seeking admission to any postgraduate course are advised to contact the Head of the appropriate Department/School to discuss research interests, course availability, suitability of qualifications held, the availability of facilities for research in particular areas and the subjects on offer, as appropriate.

Applications for admission close on 31 October. However, late applications will be considered if places are available.

ENROLMENT

No enrolment will be accepted from new students after the end of the second week of Autumn session or the end of the second week of Spring session, except with the express approval of the Vice-Principal (Administration) or the Assistant Secretary (Academic Services) and of the Head of the appropriate Department/School.

RE-ENROLMENT

Re-enrolment forms will be sent to re-enrolling students at the end of the year with instructions concerning the next year’s re-enrolment procedure.

Re-enrolment will not be accepted after the end of the second week of Autumn session, except with the approval of the Head of the appropriate Department/School. Persons re-enrolling after the end of the fourth week of Autumn session can do so only in exceptional circumstances and must have, in addition to the approval of the Head of the appropriate Department/School, the express approval of the Vice-Principal (Administration) or the Assistant Secretary (Academic Services).

Students who have completed the final examinations, but have a thesis or project still outstanding are required to enrol and pay any compulsory charges. However, when the student submits the thesis for examination before the end of the fourth week of Autumn session, he/she will receive a refund of the student charges on the same basis as if he/she had notified the University of withdrawal from the course.

VARIATION OF ENROLMENTS

Students wishing to vary their enrolments must apply on the appropriate form, obtainable from the Enquiries Office. Consultation with the Head of the appropriate Department/School is also required.

Where a variation involving enrolment in a new subject is submitted after the second week of Autumn session (in the case of Autumn session and annual subjects) or after the second week of Spring session (in the case of Spring session subjects) the approval must be obtained from the Head of the Department/School offering the new subject.

To avoid having withdrawn subjects shown on their academic records students intending to withdraw from single session subjects should do so no later than the eighth week from the beginning of the appropriate session, while students intending to withdraw from double session subjects should do so no later than the first week of Spring session.

NON-AWARD SUBJECT ENROLMENTS

A person wishing to enrol in non-award postgraduate (900-level) subjects (i.e. subjects not to be counted towards a degree or diploma) may be considered provided the Head of the appropriate Department/School considers it will be of benefit to the student and there are facilities available.

To be eligible to enrol as non-award students in postgraduate subjects, applicants must meet the entrance requirements for the degrees or diplomas from which the subjects are selected. Applications for non-award subject enrolments are not considered until the enrolments in the relevant postgraduate courses have been finalised. Only in exceptional cases will subjects taken in this way count towards a degree or diploma.

Application forms can be obtained by written application to the Vice-Principal (Administration) or from the Enquiries Office, Ground Floor, Administration Building. Application forms should be received by the Vice-Principal (Administration) by 31 January, in the year in which enrolment is desired.
POSTGRADUATE SCHOLARSHIPS

UNIVERSITY POSTGRADUATE RESEARCH AWARDS

Each year the University provides a number of scholarships for full-time postgraduate study in any approved field of research.

These awards are available to graduates of Australian and overseas universities.

Awards are tenable for one year and, subject to satisfactory progress, may be renewed annually to provide a maximum tenure of two years in the case of a scholar registered for the degree of Honours Masters. In the case of a scholar registered for the degree of Doctor of Philosophy, the award is tenable for up to a maximum of three years, but an extension for six months may be granted if special circumstances apply.

Stipends and allowances for University course and research awards are as for the Australian Postgraduate Research Awards.

The closing date for applications is 31 October.

AUSTRALIAN POSTGRADUATE RESEARCH AWARDS

A number of Australian Government Postgraduate Research Awards are available to students undertaking full-time postgraduate research at the University, leading to the degree of Honours Master and/or PhD.

Persons permanently domiciled in Australia, who are University graduates or will graduate in the current academic year, are eligible for the awards.

Applicants should hold, or expect to obtain, at least an upper division second class honours degree or its equivalent.

Awards are tenable for one year and, subject to satisfactory progress, may be renewed annually to provide a maximum tenure of two years in the case of a scholar registered for the degree of Honours Master. In the case of a scholar registered for the degree of Doctor of Philosophy, the award is tenable for up to a maximum of three years, but an extension for six months may be granted if special circumstances apply.

The stipend for research awards is in the range $12,734 to $16,433 per annum - non taxable. Stipends above the basic level will be awarded on the basis of the University's training priority areas. There is also provision for a relocation allowance and thesis allowance.

The closing date for applications is 31 October.

COMMONWEALTH POSTGRADUATE COURSE AWARDS

A number of awards for full-time postgraduate study leading to the degree of Masters by formal coursework are also made available by the Australian Government.

Persons permanently domiciled in Australia and who are University graduates or will graduate in the current academic year, are eligible for the awards.

Applicants are expected to have an undergraduate record at better than pass level.

The stipend will be approximately $10,415 - taxable, with a dependant's allowance, incendentals allowance, thesis allowance and, in some cases, travel and establishment allowance.

Applications close on 30 September.

APPLICATIONS AND ENQUIRIES

Application forms for postgraduate awards are available from the University and must be lodged with the Vice-Principal (Administration) by the specified date.

Separate application for registration as a higher degree candidate should be made on the appropriate form, in accordance with conditions applying to the particular degree.

Further enquiries may be directed to the Enquiries Office, Ground Floor, Administration Building (telephone (042) 270927).
CONDIDONS OF UNIVERSITY POSTGRADUATE RESEARCH AWARDS

University Postgraduate Awards are tenable at the University for full-time study leading to an Honours Master's degree by research only or a Ph.D.

DURATION OF AWARD

The maximum period for which an award may be held is determined by the degree in which the candidate is enrolled, as follows:

a) A candidate for an Honours Master's degree may hold an award for a period not in excess of two years from the commencement of studies;

b) A Ph.D. candidate may hold an award for three years from commencement of studies. An extension for a further six months may be granted if special circumstances apply;

c) Payments under the award will cease on the date of submission of the thesis.

RENEWAL

Awards are renewable annually. Applications for renewal for a further six months beyond the normal three year tenure (in the case of Ph.D. candidates) will be treated as special cases.

PROGRESS REPORT

Scholars are required to submit a progress report before the end of each calendar year. A form on which the report is to be made is provided to students in September each year.

RECREATION LEAVE

Scholars may be granted recreation leave of up to four weeks annually at the discretion of the University.

LEAVE OF ABSENCE

Scholars are required to pursue their studies on a full-time basis. Absence from studies should be reported by the scholar to the supervisor, as soon as possible, and approval of the Board of Research and Postgraduate Studies sought.

INTERRUPTION

When a scholar's progress is likely to be adversely affected due to absence from studies, the award may be interrupted. During the period of interruption the scholar will not be entitled to receive any benefits from the award. When the student is fit to resume studies he or she may apply for restoration of benefits and may have the period of the interruption added to the normal time for which the award may be held. Interruptions will not in general exceed twelve months.

RESTORATION

Before an award may be restored after a period of interruption the scholar will be required to show that he or she is in a position to resume full-time study. Where the interruption was due to illness a medical certificate must be produced. In all cases the student must satisfy the Vice-Principal (Administration) that he or she is able to resume full-time study.

OVERSEAS STUDY

Where a scholar is required to pursue studies abroad for a limited period in order to advance a research program, he/she may apply for permission to hold the award while overseas. The following requirements must generally be met:-

a) the period abroad will not exceed twelve months;

b) adequate supervision of the scholar's research program abroad has been arranged by the University before departure;

c) the scholar will remain enrolled at the University;

d) the scholar will return to Australia to complete research program immediately following the completion of study abroad; and

e) the period of overseas study will be credited towards the scholar's degree or research program at the University.

A scholar may apply for permission to hold a University Postgraduate Award concurrently with another award for overseas study.

FIELD WORK

Where a scholar is required to undertake field work or research away from the University, but in Australia, he/she should enquire from the supervisor concerning expenses.
EMPLOYMENT

Scholars may, with the approval of their supervisors, engage in a limited amount of paid part-time teaching or demonstrating provided that such employment does not interfere with their study program. Generally the employment should not exceed six hours in any one week, or a total of 180 hours in a year.

TRANSFER

The scholarship is not transferable to another University.

SICK LEAVE

Students who are temporarily unable to continue their studies because of illness should consult Administration to discuss special provisions that apply in certain circumstances.

BENEFITS

Stipend: From 1 January 1990, scholars will receive a stipend in the range $12,734 - $16,433 per annum. Stipends above the basic level of $12,734 will be awarded by the University on the basis of its training priority areas. Payment of stipend will be calculated from the date of commencement of study and will be paid fortnightly.

Relocation Allowance: A relocation allowance of up to a maximum of $1,000 consisting of economy airfares for holder, spouse and dependents and removal expenses of up to $350 per adult and $175 per child, may be paid for a scholar who is obliged to move residence from one Australian city to Wollongong in order to take up the award. The establishment allowance is intended to assist scholars with removal expenses and with the expenses of setting up new quarters.

Overseas students or Australian citizens who are resident overseas at the time of receipt of the award may be paid a travel allowance based on the single economy airfare from Perth to Sydney (up to a maximum of $1,000).

Thesis Allowance: A scholar may claim reimbursement for an amount of up to $700 to assist with costs for a Ph.D. thesis and up to $350 for a Master’s thesis.

RELINQUISHMENT

Scholars are required to give the Vice-Principal (Administration) at least twenty-one days notice of their intention to relinquish their awards (e.g. on completion of studies, discontinuation of research, etc.)

TERMINATION OF AWARDS

Awards may be terminated at the discretion of the University.
1. In the interpretation and implementation of Graduate Degree and Graduate Diploma Regulations Council will normally act on the recommendation of the appropriate bodies of the University.

2. In the Graduate Degree and Graduate Diploma Regulations, unless the contrary appears:

(1) 'Council' is the Council of The University of Wollongong;

(2) 'candidate' is a person registered for a higher degree or graduate diploma;

(3) 'course' is the combination of subjects which a candidate takes for a degree or diploma;

(4) 'program' is the combination of subjects in which a candidate is enrolled in any one session or year;

(5) 'session' is one of the three periods (autumn session, spring session, summer session) within which subjects are offered each year;

(6) 'weeks of session' are the weeks counted from the beginning of a session and not including weeks scheduled as University recess;

(7) 'subject' is a self-contained section of study identified by a unique number in one of the Schedules of Subjects;

(8) 'credit point' is a value attached to a subject as a component of a degree or diploma and for each credit point the implied work load is 28 hours over the duration of the subject;

(9) 'year' or 'academic year' is the period comprising autumn session, the following spring session and the following summer session;

(10) 'sessional subject' is a subject offered during autumn session or spring session or summer session;

(11) 'double session subject' is a subject offered across autumn session and the following spring session, or spring session and the following summer session, or spring session and the following autumn session, or summer session and the following autumn session;

(12) '100 level subject' is a subject at first year level,

'200 level subject' is a subject at second year level,

'300 level subject' is a subject at third year level,

'400 level subject' is a subject a fourth year level,

'800 and 900 level subjects' are subjects at graduate level;

(13) 'pre-requisite subject' is one which must be completed satisfactorily before the subject for which it is prescribed may be taken;

(14) 'co-requisite subject' is one which must be completed satisfactorily before, taken concurrently with, or at the discretion of the Head, attempted before the subject for which it is prescribed;

(15) 'head of the academic unit' means head of the relevant Department, School or Centre;

(16) 'major study' is an approved combination of 300-level subjects with a value of at least 24 credit points;

(17) 'course co-ordinator' is a person appointed by Council to advise coursework candidates on programs and courses of study;

(18) 'supervisor' is a person appointed by Council to supervise the thesis work of a candidate;

(19) 'thesis' and 'minor thesis' include theses which have a value of not less than 24 credit points; the thesis for the Doctor of Creative Arts may take a variety of forms including: photographic records of art portfolios, literary publications, musical compositions or recordings;
(20) 'approved' or 'approval' means approval by Council;

(21) 'advanced standing' is the credit or exemption granted to candidates towards requirements for a degree or diploma;

(22) 'credit' is the number of credit points granted towards a degree or diploma for work satisfactorily completed outside that degree;

(23) 'specified credit' is credit for a specific subject or subjects listed in one of the Schedules and is granted on the basis of satisfactory completion of a substantially corresponding subject or subjects at an approved tertiary institution;

(24) 'unspecified credit' is credit granted on the basis of satisfactory completion at an approved tertiary institution of a subject or subjects not substantially corresponding to subjects listed in the appropriate Schedule;

(25) 'exemption' is the waiving of the requirement that a subject prescribed for a degree be satisfactorily completed and is granted on the basis of the satisfactory completion of an appropriate subject, subjects or other work at an approved tertiary institution or other establishment;

(26) 'leave of absence' is a period of leave from the University for which prior approval has been obtained;

(27) 'full-time candidate' is a candidate who devotes substantially full-time to study for a higher degree or graduate diploma;

(28) 'part-time candidate' is a candidate who devotes substantially less than full-time to study for a higher degree or graduate diploma;

(29) 'external candidate' is a candidate enrolled in a higher degree or graduate diploma which has been approved for offer in an external mode; and

(30) 'study' is the work carried out by research or other means for a doctorate degree other than a doctorate degree by publication.
GRADUATE DIPLOMA REGULATIONS

NOTE: These Regulations should be read in conjunction with the particular requirements specified for each diploma in the "Descriptions of Subjects" sections of this Calendar

PRELIMINARY

1. These Regulations may be cited as the 'Graduate Diploma Regulations'.

2. These Regulations control courses of study leading to the Graduate Diploma (GDip) which shall be available in the specializations:
   - Arts
   - Commerce
   - Computing Science
   - Education
   - Educational Studies
   - Engineering
   - General Practice
   - Law
   - Science

COMMENCEMENT

3. These Regulations came into effect on 1 January 1987.

APPLICATION FOR REGISTRATION

4. An application for registration as a candidate for the Graduate Diploma shall be made on the prescribed form which should be lodged with the Vice-Principal (Administration) by the first working day in November of the year prior to the year in which admission is sought save that the Vice-Principal (Administration) may vary the date as circumstances determine.

QUALIFICATION REQUIREMENTS

5. (1) An applicant for registration for the Graduate Diploma shall have qualified for a degree of the University or possess an equivalent qualification from another approved institution.

   (a) In appropriate circumstances, an applicant who does not qualify for registration under Regulation 5(1) may be permitted to register for the Graduate Diploma provided that the applicant submits evidence of such tertiary academic and professional attainments as may be approved.

   (b) In the case of an applicant for registration for the Graduate Diploma with the specialization in Educational Studies, a three year teaching diploma or an equivalent qualification from an approved institution and at least one year, or the equivalent, of successful professional experience shall be regarded as appropriate tertiary academic and professional attainments for registration purposes.

   (c) In the case of an applicant for registration for the Graduate Diploma in Science with specialisation in Community Health or Mental Health, a recognised three year health profession diploma or an equivalent qualification from an approved institution in addition to at least one year, or the equivalent, of successful professional experience, shall be regarded as appropriate tertiary academic and professional attainments for registration purposes.

   (3) Notwithstanding any other provisions of these conditions, Council may require an applicant to demonstrate fitness for candidature by carrying out such work and satisfactorily completing such examinations as it may determine.

REGISTRATION

6. (1) A person admitted as a candidate for the Graduate Diploma shall register as a:

   (a) full-time candidate; or

   (b) part-time candidate; or

   (c) external candidate.

   (2) The three types of candidature may not be available for all specialisations listed in Regulation 2.
(3) At the end of a session a candidate may apply to Council to transfer registration from one type of candidature to another if available for the specialisation of study.

TIME LIMITS

7. (1) A full-time candidate may not, without approval, continue to be registered for the Graduate Diploma for more than four consecutive sessions, not including summer sessions, from the date of initial registration.

(2) A part-time candidate or external candidate may not, without approval, continue to be registered for the Graduate Diploma for more than eight consecutive sessions, not including summer sessions, from the date of initial registration.

(3) A candidate who changes from one type of candidature to another pursuant to Regulation 6(3) shall be subject to time limits determined by Council.

CONCURRENT STUDIES

8. Except with prior approval, a candidate shall not be registered concurrently for the Graduate Diploma and any other degree, diploma or certificate in the University or other tertiary institution.

CHARGES

9. A candidate shall be required to pay such charges as may be determined from time to time by Council.

COURSE REQUIREMENTS

10. (1) A candidate shall undertake an approved course recommended by the Head of the appropriate academic unit.

(2) The course shall comprise subjects with a value of not less than 48 credit points selected from the Schedule of Graduate Subjects following these Regulations or the Schedules in Attachment E following the Bachelor Degree Regulations.

(3) (a) To qualify for the award of the Graduate Diploma a candidate must accrue the required number of credit points by satisfactory completion of subjects comprising the course referred to in Regulation 10(1).

(b) Except with approval, a candidate may not accrue credit points for a subject which is substantially similar to a subject already counted for another qualification of the University.

(4) Any material presented by a candidate for assessment:

(a) must be the work of the candidate, unless otherwise permitted by the Head of the appropriate academic unit; and

(b) must not have been submitted to meet requirements for any other academic award(s).

VARIATION OF ENROLMENT

10A. (1) After consultation with the Head of the Academic Unit a candidate may withdraw from a subject by notifying the Vice-Principal (Administration).

(2) Where a variation referred to in Regulation 10A(1) is the withdrawal from:

(a) an autumn or spring session subject before the end of the eighth week of the session of offer;

(b) a summer session subject before the end of the third week of the summer session;

(c) from a double session subject before the end of the first week of the second session in which the subject is offered;

the candidate shall be deemed to have not enrolled in that subject and the subject will not appear on the academic record of the candidate.

(3) Where a variation referred to in Regulation 10A(1) is the withdrawal from:
(a) an autumn or spring subject after the end of the eighth week of the session of offer;

(b) a summer session subject after the end of the third week of session; or

(c) a double session subject after the end of the first week of the second session in which the subject is offered;

the candidate shall be deemed to have failed that subject unless withdrawal is for medical, compassionate or other reason acceptable to the Council. In this latter case the candidate will be deemed to have discontinued the subject without penalty for the purposes of Regulation 10B.

(4) After consultation with the Head of the Academic Unit a candidate may apply to the Vice-Principal (Administration) for permission to enrol in an additional subject for a program.

(5) Except with the approval of the Head of the Academic Unit, a candidate may not enrol in:

(a) an autumn or spring session subject after the expiration of the first two weeks in the session of offer;

(b) a summer session subject after the expiration of the first week of the summer session; or

(c) in a double session subject after the expiration of the first two weeks of the first session in which the subject is offered.

MINIMUM RATE OF PROGRESS

10B.(1) Candidates are required, in the academic year including the preceding summer session, to accrue credit for at least one half of the credit points attached to the sessional and double session subjects completed in the program for the year.

(2) Except with the approval of Council, a candidate who fails to meet the requirement set out in 10B(1) may not enrol in the programme.

LEAVE OF ABSENCE

11. Subject to these Regulations, a candidate may be granted leave of absence for up to one year by the Vice-Principal (Administration) on receipt of a written application; applications for leave of absence for more than one year shall be determined by Council.

AWARD OF GRADUATE DIPLOMA

12. The Graduate Diploma as prescribed in Regulation 2 may be awarded by Council upon a candidate who has complied with these Regulations.

MISCELLANEOUS

13. General Saving Clause

Notwithstanding anything to the contrary herein contained, Council may dispense with or suspend any requirement of, or prescription by, these Regulations.

14. Application for Amending Regulations

If an amendment relating to courses that may be taken for the Graduate Diploma is made to these Regulations after implementation of them, the amendment shall not apply to a candidate who, before the making of the amendment, satisfactorily completed subjects having a value of 12 credit points unless:

(a) the candidate accepts the application of the amendment and submits to Council proposed course alterations that are deemed by Council to be in accordance with the Regulations; or

(b) Council determines otherwise.

15. Appeal

A candidate may appeal against any decision made under the Regulations; such appeal should be lodged with the Vice-Principal (Administration) within two weeks of notification to the candidate of the decision referred to in this Regulation.
GRADUATE DEGREE AND DIPLOMA REGULATIONS

MASTERS DEGREE REGULATIONS

NOTE: These Regulations should be read in conjunction with the particular requirements specified for each degree in the “Descriptions of Subjects” sections of this Calendar

PRELIMINARY

1. These Regulations may be cited as the ‘Masters Degree Regulations’.

2. These Regulations control courses of study leading to the Master degree of:

   Master of Arts (MA)
   Master of Business Administration (MBA)
   Master of Commerce (MCom)
   Master of Creative Arts (MCA)
   Master of Education (MED)
   Master of Policy (MPol)
   Master of Science (MSc)

COMMENCEMENT

3. These Regulations came into effect on 1 January, 1987.

APPLICATION FOR REGISTRATION

4. An application for registration as a candidate for a degree of Master shall be made on the prescribed form which should be lodged with the Vice-Principal (Administration) by the first working day in November of the year prior to the year in which admission is sought save that the Vice-Principal (Administration) may vary the date as circumstances determine.

QUALIFICATION REQUIREMENTS

5. (1) An applicant for registration for a degree of Master shall have qualified for a degree of the University or possess an equivalent qualification from another approved institution.

   (2) In appropriate circumstances, an applicant who does not qualify for registration under Regulation 5(1) may be permitted to register for a degree of Master provided that the applicant submits evidence of such tertiary academic and professional attainments as may be approved.

   (3) Notwithstanding any other provisions of these conditions, Council may require an applicant to demonstrate fitness for candidature by carrying out such work and satisfactorily completing such examinations as it may determine.

REGISTRATION

6. (1) A person admitted as a candidate for a degree of Master shall register as a:

   (a) full-time candidate; or

   (b) part-time candidate.

   (2) The two types of candidature may not be available for all degrees in Regulation 2.

   (3) At the end of a session a candidate may apply to Council to transfer registration from one type of candidature to the other if available for the specialization of study.

TIME LIMITS

7. (1) A candidate admitted under Regulation 10(2) and:

   (a) registered as a full-time candidate may not, without approval, continue to be registered for a degree of Master for more than four consecutive sessions, not including summer sessions, from the date of initial registration; or

   (b) registered as a part-time candidate may not, without approval, continue to be registered for a degree of Master for more than eight consecutive sessions, not including summer sessions, from the date of initial registration.

   (2) A candidate admitted under Regulations 10(3) or 10(5) and:

   (a) registered as a full-time candidate may not, without approval, continue to be registered for a degree of Master for more than six consecutive sessions, not
including summer sessions, from the date of initial registration; or

(b) registered as a part-time candidate may not, without approval, continue to be registered for a degree of Master for more than twelve consecutive sessions, not including summer sessions, from the date of initial registration.

(3) A candidate admitted under Regulation 10(4), or who changes from one type of candidature to the other pursuant to Regulation 6(3), shall be subject to time limits determined by Council.

CONCURRENT STUDIES

8. Except with prior approval, a candidate shall not be registered concurrently for a degree of a Master and any other degree, diploma or certificate in the University or other tertiary institution.

CHARGES

9. A candidate shall be required to pay such charges as may be determined from time to time by Council.

COURSE REQUIREMENTS

10. (1) A candidate for a degree of Master shall undertake an approved course recommended by the Head of the relevant academic unit.

(2) For a candidate who has completed a relevant major study or approved work equivalent to a relevant major study, either as part of a completed degree of bachelor or in addition to a completed degree of bachelor, the course shall comprise subjects having a value of at least 48 credit points selected from the Schedule of Graduate Subjects following these Regulations.

For a candidate who has completed a degree of bachelor, or approved equivalent qualification, which does not include a relevant major study or the equivalent thereof, the course shall comprise subjects having a value of at least 72 credit points of which:

(a) subjects having a value of at least 48 credit points shall be selected from the Schedule of Graduate Subjects following these Regulations, and

(b) subjects having a value of no more than 24 credit points shall be 300-level or 400-level subjects listed in one or more of the Schedules in Attachment E following the Bachelor Degree Regulations.

(4) A candidate referred to in Regulation 10(3) who has, in addition, completed approved work equivalent to a relevant major study may be granted up to 24 credit points of advanced standing in respect of the subjects referred to in Regulation 10(3)(b).

(5) For a candidate for the degrees of MBA and MSc (Science Administration) the course shall comprise subjects having a value of at least 96 credit points and listed in the Schedule of Graduate Subjects following these Regulations.

(6) (a) To qualify for a degree of Master a candidate must accrue the required number of credit points by satisfactory completion of subjects comprising the course referred to in Regulation 10(1).

(b) Except with approval, a candidate may not accrue credit points for a subject which is substantially similar to a subject already counted for another qualification of the University.

(7) Any material presented by a candidate for assessment:

(a) must be the work of the candidate, unless otherwise permitted by the Head of the appropriate academic unit; and

(b) must not have been submitted to meet
requirements for any other academic award(s).

VARIATION OF ENROLMENT

10A. (1) After consultation with the Head of the Academic Unit a candidate may withdraw from a subject by notifying the Vice-Principal (Administration).

(2) Where a variation referred to in Regulation 10A(1) is the withdrawal from:

(a) an autumn or spring session subject before the end of the eighth week of the session of offer;

(b) a summer session subject before the end of the third week of the summer session; or

(c) from a double session subject before the end of the first week of the second session in which the subject is offered;

the candidate shall be deemed to have not enrolled in that subject and the subject will not appear on the academic record of the candidate.

(3) Where a variation referred to in Regulation 10A(1) is the withdrawal from:

(a) an autumn or spring subject after the end of the eighth week of the session of offer;

(b) a summer session subject after the end of the third week of session; or

(c) a double session subject after the end of the first week of the second session in which the subject is offered;

the candidate shall be deemed to have failed that subject unless withdrawal is for medical, compassionate or other reason acceptable to the Council. In this latter case the candidate will be deemed to have discontinued the subject without penalty for the purposes of Regulation 10B.

(4) After consultation with the Head of the Academic Unit a candidate may apply to the Vice-Principal (Administration) for permission to enrol in an additional subject for a program.

(5) Except with the approval of the Head of the Academic Unit, a candidate may not enrol in

(a) an autumn or spring session subject after the expiration of the first two weeks in the session of offer;

(b) a summer session subject after the expiration of the first week of the summer session; or

(c) in a double session subject after the expiration of the first two weeks of the first session in which the subject is offered.

MINIMUM RATE OF PROGRESS

10B. (1) Candidates are required, in the academic year including the preceding summer session, to accrue credit for at least one hall of the credit points attached to the sessional subjects, and double session subjects completed in the program for the year.

(2) Except with the approval of Council, a candidate who fails to meet the requirement set out in 10B(1) may not enrol in the program.

LEAVE OF ABSENCE

11. Subject to these Regulations a candidate may be granted leave of absence for up to one year by the Vice-Principal (Administration) on receipt of a written application; applications for leave of absence for more than one year shall be determined by Council.

CONFERRING OF DEGREES

12. (1) A degree of Master as prescribed in Regulation 2 may be conferred by Council upon a candidate who has complied with these Regulations.

(2) Prior to the conferring of a degree of Master upon a candidate who holds a Graduate Diploma of this University in the same discipline as the degree of Master, the candidate shall, except for the
case that the course of study for the Graduate Diploma is not a component of the degree of Master, surrender the testamur for that Graduate Diploma and in doing so shall be deemed to have surrendered all rights pertaining to that Graduate Diploma.

(3) Prior to the conferring of the degree of MBA upon a candidate who holds a degree of MMgt of this University, the candidate shall surrender the testamur for the MMgt degree and in doing so shall be deemed to have surrendered all rights pertaining to that degree.

MISCELLANEOUS

13. General Saving Clause

Notwithstanding anything to the contrary herein contained, Council may dispense with or suspend any requirement of, or prescription by, these Regulations.

14. Application for Amending Regulations

If an amendment relating to courses that may be taken for the degree of Master is made to these Regulations after implementation of them, the amendment shall not apply to a candidate who, before the making of the amendment, satisfactorily completed subjects having a value of 12 credit points, unless:

(a) the candidate accepts the application of the amendment and submits to Council proposed course alterations that are deemed by Council to be in accordance with the Regulations; or

(b) Council determines otherwise.

15. Appeal

A candidate may appeal against any decision made under the Regulations; such appeal should be lodged with the Vice-Principal (Administration) within two weeks of notification to the candidate of the decision referred to in this Regulation.
HONOURS MASTER DEGREE REGULATIONS

NOTE: These Regulations should be read in conjunction with the particular requirements specified for each degree in the "Descriptions of Subjects" sections of this Calendar.

PRELIMINARY

1. These Regulations may be cited as the 'Honours Master Degree Regulations'.

2. These Regulations control courses leading to the honours Master degrees of:
   - Honours Master of Arts (MA(Hons))
   - Honours Master of Commerce (MCom(Hons))
   - Honours Master of Education (MEd(Hons))
   - Honours Master of Engineering (ME(Hons))
   - Honours Master of Science (MSc(Hons))

   These degrees may be undertaken by thesis, by coursework or by coursework and thesis or minor thesis.

COMMENCEMENT

3. These Regulations come into effect on 1 January, 1987.

APPLICATION FOR REGISTRATION

4. (1) An application for registration as a candidate for a degree of Honours Master by thesis shall be made on the prescribed form which should be lodged with the Vice-Principal (Administration) at least one calendar month before the commencement of the session in which the candidate intends to register.

   (2) An application for registration as a candidate for a degree of Honours Master by coursework or by coursework and thesis or minor thesis shall be made on the prescribed form which should be lodged with the Vice-Principal (Administration) by the first working day in November of the year prior to the year in which admission is sought save that the Vice-Principal (Administration) may vary the date as circumstances determine.

QUALIFICATION REQUIREMENTS

5. (1) An applicant for registration as a candidate for a degree of Honours Master shall have qualified for a degree of Bachelor in the same discipline as the proposed degree, or an appropriate discipline of the University or possess an equivalent qualification from an approved institution.

   (2) In appropriate circumstances, an applicant who does not qualify for registration under Regulation 5(1) may be permitted to register as a candidate for a degree of Honours Master provided that the applicant submits evidence of such tertiary academic and professional attainment as may be approved.

   (3) Notwithstanding any other provisions of these Regulations, Council may require an applicant to demonstrate fitness for candidature by carrying out such work and satisfactorily completing such examinations as it may determine.

REGISTRATION

6. (1) A person admitted as a candidate for a degree of Honours Master shall register as a:

   (a) full-time candidate; or
   (b) part-time candidate.

   (2) A candidate may apply to Council at the end of a session to transfer registration from one type of candidature to the other.

   (3) At any time prior to the submission of a thesis, a candidate may apply to Council for registration to be changed from degree of Honours Master to degree of Doctor of Philosophy.

TIME LIMITS

7. (1) A candidate admitted under Regulation 10(2) and:
registered as a full-time candidate shall complete the course referred to in Regulation 10 in not less than two consecutive sessions, not including summer sessions, and not more than four consecutive sessions, not including summer sessions, from the date of registration; or

(b) registered as a part-time candidate shall complete the course referred to in Regulation 10 in not less than three consecutive sessions, not including summer sessions, and not more than eight consecutive sessions, not including summer sessions, from the date of registration.

(2) A candidate admitted under Regulation 10(3) and:

(a) registered as a full-time candidate shall complete the course referred to in Regulation 10 in not less than three consecutive sessions, not including summer sessions, and not more than six consecutive sessions, not including summer sessions, from the date of registration; or

(b) registered as a part-time candidate shall complete the course referred to in Regulation 10 in not less than five consecutive sessions, not including summer sessions, and not more than twelve consecutive sessions, not including summer sessions, from the date of registration.

(3) A candidate admitted under Regulation 10(4), or who changes from one type of candidature to the other pursuant to Regulation 6(3), shall be subject to time limits determined by Council.

(4) Notwithstanding any other provisions of these Regulations Council may, in exceptional circumstances, alter the time limits referred to in Regulation 7(1), (2) or (3).

CONCURRENT STUDIES OR OUTSIDE WORK

8. (1) Except with prior approval, a candidate shall not be registered concurrently for a degree of Honours Master and any other degree, diploma or certificate in the University or other tertiary institution.

(2) A full-time candidate may be permitted by Council to undertake a limited amount of teaching in the University or outside work which, in the judgement of Council, will not interfere with the continuous pursuit of the course.

CHARGES

9. A candidate shall be required to pay such charges as may be determined from time to time by Council.

COURSE REQUIREMENTS

10.(1) A candidate for a degree of Honours Master shall undertake an approved course recommended by the Head of the relevant academic unit, together with such examinations and other work as may be prescribed by Council.

(2) For a candidate who has completed a degree of Bachelor at a standard below Honours Class II Division 2 or approved equivalent qualification, the course shall comprise subjects having a value of at least 96 credit points of which:

(3) For a candidate who has completed a degree of Bachelor at a standard below Honours Class II Division 2 or approved equivalent qualification, the course shall comprise subjects having a value of at least 96 credit points of which:
(a) subjects having a value of at least 48 credit points shall be from the Schedule of Graduate Subjects following these Regulations; and

(b) subjects having a value of at most 48 credit points shall be from the Schedule of Graduate Subjects or from one or more of the Schedules in Attachment E following the Bachelor Degree Regulations save that, other than in exceptional approved circumstances, no credit points shall be for 100-level or 200-level subjects and at most 24 credit points shall be for 300-level subjects.

(4) A candidate referred to in Regulation 10(3) who has, in addition, completed other relevant qualifications may be granted up to 48 credit points of advanced standing in respect of the subjects referred to in Regulation 10(3)(b).

(5) (a) To qualify for the award of the degree of Honours Master a candidate must accrue the required number of credit points by satisfactory completion of subjects comprising the course referred to in Regulation 10(1).

(b) Except with approval, a candidate may not accrue credit points for a subject which is substantially similar to a subject already counted for another qualification of the University.

VARIATION OF ENROLMENT

10A.(1) After consultation with the Head of the Academic Unit a candidate may withdraw from a subject by notifying the Vice-Principal (Administration).

(2) Where a variation referred to in Regulation 10A(1) is the withdrawal from:

(a) an autumn or spring session subject before the end of the eighth week of the session of offer;

(b) a summer session subject before the end of the third week of the summer session; or

(c) from a double session subject before the end of the first week of the second session in which the subject is offered;

the candidate shall be deemed to have not enrolled in that subject and the subject will not appear on the academic record of the candidate.

(3) Where a variation referred to in Regulation 10A(1) is the withdrawal from:

(a) an autumn or spring subject after the end of the eighth week of the session of offer;

(b) a summer session subject after the end of the third week of session; or

(c) a double session subject after the end of the first week of the second session in which the subject is offered;

the candidate shall be deemed to have failed that subject unless withdrawal is for medical, compassionate or other reason acceptable to the Council. In this latter case the candidate will be deemed to have discontinued the subject without penalty for the purposes of Regulation 10B.

(4) After consultation with the Head of the Academic Unit a candidate may apply to the Vice-Principal (Administration) for permission to enrol in an additional subject for a program.

(5) Except with the approval of the Head of the Academic Unit, a candidate may not enrol in:

(a) an autumn or spring session subject after the expiration of the first two weeks in the session of offer;
(b) a summer session subject after the expiration of the first week of the summer session; or

(c) in a double session subject after the expiration of the first two weeks of the first session in which the subject is offered.

MINIMUM RATE OF PROGRESS

10B.(1) Candidates are required, in the academic year including the preceding summer session, to accrue credit for at least one half of the credit points attached to the sessional subjects and double session subjects completed in the program for the year.

(2) Except with the approval of Council, a candidate who fails to meet the requirement set out in 10B(1) may not enrol in the program.

SUPERVISION

11. (1) (a) A candidate for a degree of Honours Master by thesis or by coursework and thesis or minor thesis shall carry out the thesis work under the direction of a supervisor or supervisors, of whom at least one shall be a full-time member of the academic staff, appointed by Council under such conditions as it may determine;

(b) should the supervisor be absent from the University for a period exceeding six weeks, that supervisor shall make alternative supervision arrangements which shall be subject to the approval of the Head of the relevant academic unit and subject to the endorsement of Council.

(2) The work, other than field work, shall be carried out in an academic unit of the University save that in special cases Council may permit a candidate to conduct work at other places where suitable facilities are available.

(3) Council may, on written application from a candidate, approve a change of supervisors after consultation with the Head of the relevant academic unit.

(4) In every case, before approving the registration of an applicant as a candidate, Council shall be satisfied that adequate supervision and facilities for the proposed work are available.

THESIS

12. (1) For a candidate for a degree of Honours Master by thesis or by coursework and thesis or minor thesis, the course shall contain an appropriate thesis or minor thesis subject selected from the Schedule of Graduate Subjects following these Regulations.

(2) A candidate for a degree of Honours Master by thesis or by coursework and thesis or minor thesis shall, not later than one session after registration, submit the title of the thesis through the Head of the relevant academic unit for approval; after the title has been approved, it may not be changed except with further approval.

(3) A candidate for a degree of Honours Master by thesis or by coursework and thesis or minor thesis:

(a) shall give the Head of the academic unit two months written notice of intention to submit the thesis which shall embody the results of a study prescribed by the thesis subject referred to in Regulation 12(1);

(b) shall submit four copies of the thesis to be retained by the University;

(c) shall present the thesis in a form which complies with the requirements of the University for the preparation and submission of higher degree theses;

(d) shall include in the thesis a certificate indicating the extent to which the
work has been performed by the candidate;

(e) may submit for consideration any work that has been published;

(f) may not submit as the main content of the thesis any work or material which has previously been submitted for a degree of the University or other similar award of another tertiary institution except for the case of a thesis submitted for the degree of Doctor of Philosophy of the University and the examiners of that thesis have recommended that it be submitted for the degree of honours Master.

ANNUAL REPORT

13. A candidate for a degree of Honours Master by thesis shall be required to submit annually to Council, through the Head of the academic unit, a report on progress.

APPOINTMENT OF EXAMINERS

14. (1) For a candidate required to submit a thesis or minor thesis Council shall appoint at least two examiners, at least one of whom shall be an external examiner.

(2) The supervisor of a candidate may not act as an examiner of the candidate's thesis.

THESIS EXAMINATION

15. (1) The supervisor of a candidate who has submitted a thesis or minor thesis for examination shall provide a certificate indicating:

(a) whether the supervisor is in agreement with the statement submitted by the candidate in accordance with Regulation 12(3)(d); and

(b) whether, in the opinion of the supervisor, the thesis is presented in a form that complies with the requirements for the preparation and submission of theses and is prima facie worthy of examination.

(2) The examiner of a thesis or minor thesis will be asked to report on the following matters:

(a) whether the thesis demonstrates that the candidate has an adequate understanding of the field under research;

(b) whether the thesis demonstrates that the candidate has designed, undertaken and reported on an investigation in the nominated field of research to a satisfactory level;

(c) whether the candidate has presented the thesis in a manner and level appropriate to the field under research;

(d) whether the literary presentation of the thesis is adequate.

(3) After examining the thesis or minor thesis, an examiner may recommend:

(a) that the candidate be awarded the degree without further examination; or

(b) that the candidate be awarded the degree subject to minor revisions or corrections to the thesis; or

(c) that the candidate be required to resubmit the thesis in revised form for examination after a specified period of study and/or research; or

(d) in exceptional cases the candidate may be required to attend an oral examination to determine whether the candidate has attained a satisfactory standard; or

(e) that the candidate not be awarded the degree.
LEAVE OF ABSENCE

16. Subject to these Regulations a candidate may be granted leave of absence for up to one year by the Vice-Principal (Administration) on receipt of a written application; applications for leave of absence for more than one year shall be determined by Council.

CONFERRING A DEGREE

17. A degree of Honours Master prescribed in Regulation 2 may be conferred by Council upon a candidate who has complied with these Regulations.

MISCELLANEOUS

18. General Saving Clause

Notwithstanding anything to the contrary herein contained, Council may dispense with or suspend any requirement of, or prescription by, these Regulations.

19. Application for Amending Regulations

If an amendment relating to courses that may be taken for the degrees of Honours Master is made to these Regulations after implementation of them, the amendment shall not apply to a candidate who, before the making of the amendment, satisfactorily completed subjects having a value of 12 credit points, unless:

(a) the candidate accepts the application of the amendment and submits to Council proposed course alterations that are deemed by Council to be in accordance with the Regulations; or

(b) Council determines otherwise.

20. Appeal

A candidate may appeal against any decision made under the Regulations; such appeal should be lodged with the Vice-Principal (Administration) within two weeks of notification to the candidate of the decision referred to in this Regulation.
DOCTORAL DEGREE REGULATIONS

PART I

PRELIMINARY

1. These Regulations may be cited as the 'Doctoral Degree Regulations'.

2. These Regulations control the degrees of Doctor as follows:

- Doctor of Letters (DLitt)
- Doctor of Science (DSc)
- Doctor of Philosophy (PhD)
- Doctor of Creative Arts (DCA)

COMMENCEMENT

3. These Regulations come into effect on 1 January, 1987.

PARTS

4. These Regulations comprise the following parts:

- Part I - Preliminary Regulations 1 - 4
- Part II - Relating to the degrees of PhD and DCA by study Regulations 5 - 17
- Part III - Relating to the degree of PhD by publication Regulations 18 - 28
- Part IV - Relating to the degrees of DLitt and DSc Regulations 29 - 35
- Part V - Relating to all Doctoral degrees Regulations 36 - 38

QUALIFICATION REQUIREMENTS

6. (1) An applicant for registration as a candidate for a degree of Doctor shall have qualified for a degree of Bachelor with Honours Class II, Division 2 or higher of the University or possess an approved equivalent qualification from another institution.

(2) In appropriate circumstances, an applicant who does not qualify for registration under Regulation 6(1) may be permitted to register as a candidate for a degree of Doctor provided that the applicant submits evidence of such academic and professional attainments as may be approved.

(3) Notwithstanding any other provisions of these Regulations, Council may require an applicant to demonstrate fitness for candidature by carrying out such work and satisfactorily completing such examinations as it may determine.

REGISTRATION

7. A candidate shall register as a full-time candidate for a degree of Doctor except that:

(1) a member of the full-time staff of the University may be accepted as a part-time candidate for the degree, in which case Council shall prescribe a minimum period for the duration of study.

(2) Council may accept as a part-time candidate for the degree a person who is not a member of the full-time staff of the University, but who, in the opinion of Council, is engaged in an occupation which
provides the candidate with the opportunity to pursue study in an academic unit of the University.

(3) At the end of a session a candidate may apply to Council to transfer registration from one type of candidature to the other.

TIME LIMITS

8. (1) Subsequent to registration a full-time candidate shall pursue the study for at least four consecutive sessions not including Summer Sessions, and a part-time candidate shall pursue the study for at least six consecutive sessions not including Summer Sessions save that:

(a) a full-time candidate who, before registration, was engaged upon study to the satisfaction of Council may be exempted from not more than two sessions;

(b) in special circumstances, Council may permit a candidate to spend not more than one calendar year studying at another institution provided that the work can be supervised in a manner acceptable to Council;

(c) in exceptional cases, a candidate can apply to be exempted by Council from not more than two sessions stipulated in Regulation 8(1).

(2) The thesis referred to in Regulation 13 shall be submitted

(a) by a full-time candidate, no later than eight consecutive sessions, not including Summer Sessions, after registration; or

(b) by a part-time candidate, no later than twelve consecutive sessions not including Summer Sessions after registration;

save that in either case an extension of the time limit may be approved.

CONCURRENT STUDIES OR OUTSIDE WORK

9. (1) Except with prior approval, a candidate shall not be registered concurrently for a degree of Doctor and any other degree, diploma or certificate in the University or other tertiary institutions.

(2) Council may permit a candidate to undertake a limited amount of University teaching or outside work which in its judgement will not interfere with the continuous pursuit of the proposed course of advanced study and research.

CHARGES

10. A candidate shall be required to pay such charges as may be determined from time to time by Council.

STUDY

11. A candidate for a degree of Doctor shall undertake an approved study which may include specified course and/or practical work and/or performance as recommended by the Head of the relevant academic unit.

SUPERVISION

12. (1) A candidate for a degree of Doctor shall carry out the study under the direction of a supervisor or supervisors, of whom at least one shall be a full-time member of the academic staff, appointed by Council under such conditions as it may determine.

(2) Should the supervisor be absent from the University for any period exceeding six weeks, that supervisor shall make alternative supervision arrangements which shall be subject to the approval of the Head of the relevant academic unit and subject to the endorsement of Council.

(3) The study, other than field work, shall be carried out in an academic unit of the University save that in special cases Council may permit a candidate to conduct study at other places where facilities not available at the University may be available; such permission will be granted only if the direction of
the work remains wholly under the control of the supervisor appointed pursuant to Regulation 12(1).

(4) Council may, on written application from a candidate, approve a change of supervisor or supervisors after consultation with the Head of the academic unit.

(5) In every case, before approving the registration of an applicant as a candidate, Council shall be satisfied that adequate supervision and facilities for the proposed study are available.

THESIS

13. (1) A candidate shall, not later than one session after registration, submit the title of the thesis through the Head of the academic unit for approval; after the title has been approved it may not be changed except with further approval.

(2) A candidate shall give to the Head of the academic unit two months written notice of intention to submit the thesis.

(3) On completion of the study a candidate shall submit a thesis embodying the results of the study.

(4) The thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of higher degree theses.

(5) A candidate submitting a thesis pursuant to Regulation 13(3) must comply with the requirements that:

(a) the majority of the work described shall have been completed subsequent to registration for the degree;
(b) the work shall comprise an original and significant contribution to the knowledge of the subject;
(c) the thesis must present an account by the candidate of the study;
(d) in special cases study carried out jointly with other persons may be accepted, provided Council is satisfied of the part of the candidate in the joint study.
(e) a candidate may not submit as the major part of the thesis any work or materials previously submitted for a degree of this University or similar award from another institution;
(f) the thesis may include for consideration any work that has been published;
(g) the thesis shall include a certificate indicating the extent to which the work has been performed by the candidate.

(6) A candidate shall submit four copies of the thesis to be retained by the University.

ANNUAL REPORT

14. A candidate for a degree of Doctor shall be required to submit annually to Council, through the Head of the academic unit, a report of progress.

APPOINTMENT OF EXAMINERS

15. Council shall appoint at least two external examiners of the thesis.

THESIS EXAMINATION

16. (1) The supervisor of a candidate who has submitted a thesis for examination shall provide a certificate indicating:

(a) whether the supervisor is in agreement with the statement submitted by the candidate in accordance with Regulation 13(5)(g);
(b) whether, in the opinion of the supervisor, the thesis is presented in a form that complies with the requirements for the preparation and submission of thesis and is prima facie worthy of examination.
The examiner of a thesis will be asked to report on the following matters:

(a) whether the thesis affords evidence of originality by the discovery of new facts;

(b) whether the thesis affords evidence of originality by the exercising of independent critical ability;

(c) whether the thesis represents a significant contribution to the knowledge of the subject concerned;

(d) whether the thesis reveals a broad undertaking of the discipline within which the work was done;

(e) whether the thesis contains material suitable for publication;

(f) whether the candidate has presented the thesis in a manner and level appropriate to the field under research;

(g) whether the literary presentation of the thesis is adequate.

After examining the thesis, an examiner may recommend:

(a) that the candidate be awarded the degree without further examination; or

(b) that the candidate be awarded the degree subject to minor revisions or corrections to the thesis; or

(c) that the candidate be required to resubmit the thesis in revised form for examination after a specified period of study and/or research; or

(d) in exceptional cases the candidate may be required to attend an oral examination to determine whether the candidate has attained a satisfactory standard; or

(e) that the candidate not be awarded the degree; or

(f) that the candidate be allowed to submit the thesis for a degree of Honours Master.

LEAVE OF ABSENCE

17. Leave of absence, normally for periods of not longer than two years, may be granted by the Council on receipt of an application in writing.

PART III

18. A candidate wishing to proceed to the degree of Doctor of Philosophy under Part III of these Regulations shall be required to give proof of a significant contribution to scholarship.

(1) Except as provided in Regulation 18(2), any person who is a graduate of the University or of the University of New South Wales may apply for admission as a candidate for the degree, having completed the requirements for the degree at Wollongong University College, and who either:

(a) is of not less than eight years' standing from admission to his/her first degree of the University, or

(b) is of not less than two years' standing from admission to a Master degree of the University provided that he/she is of not less than eight years' standing from admission to his/her first degree of some other University.

(2) A person who is not a graduate of the University but who is a member of the full-time academic staff of the University of at least five years' standing from admission to his/her first degree of some other University, may be a candidate for the degree.

19. A candidate for admission to the degree under these Regulations shall make
application in writing to the Vice-Principal (Administration) stating the academic unit with which he/she considers the subject of his/her contribution to scholarship is closely connected, and specifying the published work or works on which the claim for the degree is based. He/she shall, at the same time, send the Vice-Principal (Administration) five copies of each of the published works specified in the application, and five copies of a list of these works.

20. A candidate shall also be required to declare whether or not any of the published works referred to in Regulation 19 have been submitted for a degree or diploma or other qualification at any other tertiary institution. All the works submitted, apart from quotations, shall be written in or translated into English, unless otherwise approved by Council.

21. If Council shall be of the opinion that the published work or works submitted constitute prima facie a qualification for the degree, they shall appoint and refer the application to not less than three examiners, at least two of whom shall be external to the University.

22. The examination for the degree under these Regulations shall consist of the submission of published work, and of an oral examination on the work submitted and on the general field of knowledge within which it falls.

23. Each examiner shall make an independent report on the published work or works before the oral examination and shall present questions to be asked at the oral examination.

24. If the examiners are not satisfied with the candidate’s performance in the oral examination, Council may allow the candidate to present him/herself for that examination on one more occasion at a time to be appointed by the examiners.

25. If the examiners do not agree in their recommendations or if for any other reason Council needs a further opinion or opinions on the merit of the work submitted, Council may appoint an additional examiner or additional examiners. Any additional examiner or examiners thus appointed shall make an independent report on the work submitted by the candidate and may, at the discretion of such examiner or examiners, conduct an oral or written examination on that work and on the general field of knowledge within which it falls.

26. At the conclusion of the examination, the examiners will submit to Council a concise report on the merits of the published work and on the examination results and Council shall determine whether or not the candidate may be admitted to the degree.

27. If the application for the degree fails, the candidate may re-apply on one occasion only, after a period of not less than three years from the date of the original application.

28. No candidate for the degree shall be present at the deliberation of Council in respect of his/her own candidature.

PART IV

29. A candidate for the degree of Doctor of Letters or Doctor of Science under Part IV of these Regulations shall hold a degree of the University of Wollongong, or shall have been a full-time member of the academic staff of the University for a period of at least three years, or shall have been admitted to the status of a degree of the University, save that on the recommendation of the Academic Senate, Council may vary this requirement to include former staff or students of the Wollongong University College. No candidate shall make application for the degree of Doctor of Letters or Doctor of Science until eight years after the award of his/her first degree.

30. A candidate for the degree shall forward to the Vice-Principal (Administration) an application accompanied by the prescribed compulsory charge. With such application the candidate shall forward five copies (wherever possible) of the published work which he/she wishes to have examined. The publications shall be a record of original research or critical inquiry undertaken by the candidate, who shall state the sources from which the information was derived, and the extent to which he/she has availed him/herself of the work of others.

31. If the publication submitted, whether published in the candidate’s sole name or under joint authorship, record work carried out conjointly, the candidate shall state the extent to which he/she was responsible for the initiation, conduct or direction of such joint research or inquiry, however published.
32. Where the principle publications, as distinct from supporting papers, incorporate work previously submitted for a degree or award, the candidate shall clearly indicate which proportion of the publications was so submitted.

33. A candidate may submit additional work, published or unpublished, in support of the application.

34. When Council is satisfied that the published work is prima facie worthy of examination for the degree, Council may appoint at least three examiners, of whom at least one shall normally be a member of the academic unit concerned and at least two shall be external examiners.

35. The candidate may be required to answer orally or in writing any questions concerning the work.

PART V

MISCELLANEOUS

36. General Saving Clause

Notwithstanding anything to the contrary herein contained Council may dispense with or suspend any requirement of, or prescription by, these Regulations.

37. Application for Amending Regulations

If an amendment relating to courses that may be taken for the degrees is made to these Regulations, after implementation of them, the amendment shall not apply to a candidate who, before the making of the amendment, was registered for a period of not less than 2 sessions, unless:

(1) the candidate accepts the application of the amendment and submits to Council proposed course alterations that are deemed by the Council to be in accordance with the Regulations; or

(2) Council determines otherwise.

38. Appeal

A candidate may appeal against any decision made under the Regulations; such appeal should be lodged with the Vice-Principal (Administration) within six weeks of notification to the candidate of the decision referred to in this Regulation.
1. Every candidate required to submit a thesis for the Honours Master degree or the degree of Doctor of Philosophy shall submit to the Vice-Principal (Administration) at least four copies of the thesis and supporting work, at least two of which shall be bound according to the specifications set out below, together with a certificate from the supervisor to the effect that the thesis is in a form suitable for submission to the examiner. All copies of the thesis shall include a summary of approximately 200 words and a certificate signed by the candidate to the effect that the work has not been submitted for a degree to any other university or institution.

2. The copies of the thesis and other relevant work may be submitted for examination to the Vice-Principal (Administration) at any time provided the candidate has completed the minimum period of registration.

3. The specifications currently approved for higher degree theses are as follows and any variation must be approved by the Academic Senate in consultation with the supervisor.

(1) The text of the thesis, normally in English, shall be in double-spaced typescript.

(2) The size of the paper shall approximate International Standards Organisation paper size A4 (297 mm x 210 mm) except for illustrative material such as drawings, photographs, printouts and sleeves for audio records, on which no restriction is placed. The paper used in all copies shall be white opaque paper of good quality.

(3) The margins on each sheet shall be not less than 40 mm on the bound side, 20 mm on the unbound side, 30 mm at the top and 20 mm at the bottom.

(4) There shall be a title sheet set out in accordance with the style sheet attached.

4. Following award of the degree the unbound copies of the thesis shall be returned to the candidate. The candidate shall undertake necessary corrections and present to the Vice-Principal (Administration) two properly bound copies of the thesis. The thesis shall be presented in the following manner:

(1) The thesis shall be bound in boards, covered with buckram.

(2) The lettering on the spine binding will be:

(a) 15 mm from the bottom and across - UW;

(b) 70 mm from the bottom and across - the degree and, underneath, the year of submission of the thesis, for example:

PhD
1987

(c) evenly spaced between the degree and the top, reading upwards, the name of the author, initials first and surname or family name.

(3) No further lettering or decoration is required on the spine or elsewhere on the binding.

(4) In the binding of a thesis which includes mounted photographs, graphs, etc., or contains a back pocket, packing shall be inserted at the spine to ensure even thickness of the volume.

(5) A completed and signed "Declaration Relating to Disposition of Thesis" form (see Section 7 below) shall be pasted to the inside of the front cover of every copy submitted for examination. The form may be obtained from the office of the Vice Principal (Administration).

(6) The thesis shall be presented in a permanent and legible form, original typescript, offset printing or Xerographic copy, using dry plain paper copying technique.

5. The degree will not be conferred until the two bound copies, where appropriate accompanied by a letter from the Head of academic unit certifying that corrections
have been satisfactorily completed, are lodged with the Vice-Principal (Administration) following award of the degree.

6. Presently, the University holds that no thesis submitted for a higher degree should be retained in the Library for record purposes only, but within copyright privileges of the author, should be public property and accessible for consultation at the discretion of the Librarian.

7. In order to ascertain the wishes of a candidate for a higher degree regarding the use to which the thesis may be put, the candidate is required to complete a declaration (obtainable from the Vice-Principal (Administration)) which would

(1) grant the University Librarian permission to publish or to authorise the publication of the thesis or grant access to it (Form 1);

(2) withhold the right of the University Librarian to publish the thesis (Form 2);

(3) allow the University Librarian to publish the thesis under certain conditions (Form 3); or

(4) withhold the right of the University Librarian to grant access, without written consent of the author, to the thesis for up to three years (Form 4).

8. The abstract submitted with the thesis will be forwarded by the Librarian to University Microfilms for inclusion in Dissertation Abstracts Information Service.

**IMPORTANT NOTE:**

**Intellectual Property**

Students submitting theses should also make themselves aware of the University's "Policy on Consultancies and Intellectual Property", copies of which are available in the Management Handbook held by Heads of academic units.
FACULTY OF ARTS

PRINCIPAL OFFICERS

Dean: Professor James Hagan
Sub Dean: Ms Josie Castle
Faculty Officer: Mr Warren Mahoney

MEMBERSHIP

The Faculty of Arts is made up of the following Departments and Schools:

- Creative Arts
- English
- History and Politics
- Languages
- Philosophy
- Science and Technology Studies
- Sociology

COURSES

All Units offer Honours Master of Arts & Doctor of Philosophy degrees by research.

Major coursework programs are available in the Faculty in the following areas:

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Application forms may be obtained from the Student Enquiry Office on the Ground Floor of the Administration Building or by writing to the Vice-Principal (Administration), The University of Wollongong, P.O. Box 1144, Wollongong, NSW, 2500, Australia.
CREATIVE ARTS

INTRODUCTION

The following postgraduate degrees are available:

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

SCHEDULE OF GRADUATE SUBJECTS

MASTER OF CREATIVE ARTS

Number | Subject | Credit Points
---|---|---
AAMM910 | Musical Analysis | 12
AAMM911 | Studies in Technique | 12
AAVA910 | Visual Arts Theory | 12
AAVA911 | Studio Analysis | 12
AATM910 | Theatre Analysis | 12
AATM911 | Advanced Techniques in Theatre | 12
AACW910 | Analysis of Texts | 12
AACW911 | Literary Composition | 12
AACA913 | Major Presentation | 24

HONOURS MASTER OF ARTS

AACA901 | Thesis Creative Arts | 48
AACA905 | Advanced Topics in Creative Arts | 48

COURSE DESCRIPTIONS

1. 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 courses in related, practical and theoretical studies.

Applicants for registration for the degree of Master of Creative Arts shall have qualified for a degree of the University or possess an equivalent qualification from another approved institution (5(i)). Under Regulation 5(2) an applicant who does not hold a degree or its equivalent may be permitted to register provided that the applicant submits evidence of such tertiary, academic and professional attainment as may be approved. Evidence of artistic attainment submitted by applicants for the degree of Master of Creative Arts should include:

(i) the submission by the candidate of three (3) testimonials from recognised professional artists or academics in a tertiary institution; and

(ii) audition before a selection committee headed by the Head of School; and

(iii) the submission by the candidate of evidence of a minimum of 5 years successful professional experience in his/her field (exhibitions, awards, scholarships, etc.).
Candidates are required to complete subjects making up 48 credit points from the following:

1. 2 units of coursework, each of 12 credit points
2. Major presentation 24 credit points.

2. HONOURS MASTER OF ARTS

Candidates for this degree undertake study in Music, Visual Arts, Theatre or Writing. Candidates may undertake a study which deals with the relationships between specific areas of arts practice.

Candidates with Honours Class II Division 2 degree or higher or its equivalent, enrol in AACA901, Thesis Creative Arts. Other candidates will be required to also enrol in AACA903 Advanced Topics in Creative Arts.

3. 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:

Under Regulation 6(1) an applicant for registration as a candidate for the Doctor of Creative Arts shall have qualified for a degree of Bachelor with Honours Class II, Division 2 or higher. If this degree or equivalent is not in creative arts practice, the applicant must also submit evidence of artistic attainment to an approved standard.

Under Regulation 6(2), an applicant who has not qualified under 6(1) may be permitted to register in the degree of Doctor of Creative Arts provided that the applicant submits evidence of such artistic professional and academic attainments as may be approved.

The degree of Doctor of Creative Arts will be offered in the following areas:

Music: Music Composition, Music Performance
Theatre: Directing, Theatre Performance, Theatre Technology/Design
Visual Arts: Ceramics, Drawing, Painting, Printmaking, Sculpture, Textiles
Writing: Poetry, Prose Fiction, Script Writing

Candidates may undertake work which combines more than one of these areas.

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, sound and video recordings, etc.

4. DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy is offered in the following areas:

Music: Music Composition, Music Performance, Musicology
Theatre: Directing, Theatre Performance, Theatre Technology/Design
Visual Arts: Ceramics, Drawing, Painting, Printmaking, Sculpture, Textiles, Visual Arts Theory
Writing: Poetry, Prose Fiction, Script Writing

Candidates may undertake a study of the relationships of more than one of these areas.

Candidates for the PhD. in Creative Arts shall normally submit by written thesis. However, with the approval of the Head of School 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.

SUBJECT DESCRIPTIONS

AACA901 THESIS CREATIVE ARTS

Double Session (A); 48 credit points
Pre-requisite: Nil
Assessment: Examination of the subject will be by thesis, or by thesis and presentation or performance of creative work.

For the DCA, examination will be by presentation or performance of creative work with appropriate analytical documentation.

This subject may be taken in the following areas:
Music: Music Composition  
Music Performance  
Musicology  

Theatre:  
Directing  
Theatre Performance  
Theatre Technology/Design  

Visual Arts:  
Ceramics  
Drawing  
Painting  
Printmaking  
Sculpture  
Textiles  
Visual Arts Theory  

Writing:  
Poetry  
Prose Fiction  
Script Writing  

Textbooks  
Reference list supplied by School.  

Subject Co-ordinator: Dr A Schultz  

AACA905 ADVANCED TOPICS IN CREATIVE ARTS  
Double session (A); 48 credit points  
Pre-requisite: Nil  
Assessment: Examination of the subject will be by some combination of essays, thesis, and presentation or performance of creative work.  

The following course work areas are available for advanced study (research and/or analysis):  

Music:  
Composition Studies  
Musicology and Musical Analysis  
Studies in Performance  

Theatre:  
Directing  
Theatre Performance  
Theatre Technology/Design  

Visual Arts:  
Ceramics  
Drawing  
Painting  
Printmaking  
Sculpture  
Textiles  
Visual Arts Theory  

Writing:  
Poetry  
Prose Fiction  
Script Writing  

Candidates may undertake a study of the relationships of more than one of these areas.  

Assessment: Assessment is 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 presentations.  

Textbooks  
Reference list supplied by School.  

Subject Co-ordinator: Dr A Schultz  

AACW910 ANALYSIS OF TEXT  
Autumn and/or spring; 12 credit points  
Pre-requisite: Nil  
Assessment: Two seminar papers of 5000 words, based on close textual 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 School.  

Subject Co-ordinator: Mr R Pretty  

AACW911 LITERARY COMPOSITION  
Autumn and/or spring; 12 credit points  
Pre-requisite: Nil  
Assessment: Assessment will be 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 outline the effects they are seeking in their writing, and to describe and evaluate the techniques they are using to achieve those effects.
CREATIVE ARTS

Textbooks
Reference list supplied by School.

Subject Coordinator: Mr R Pretty

AAMM910 MUSICAL ANALYSIS
Autumn and/or spring; 12 credit points
Pre-requisite: Nil
Assessment: MCA students will submit a 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). Attendance at Musical Analysis 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 School.

Subject Coordinator: Mr R Pretty

AAMM911 STUDIES IN TECHNIQUE
Autumn and/or spring; 12 credit points
Pre-requisite: Nil
Assessment: Assessment in this subject will be by the 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 School.

Subject Coordinator: Dr A Schultz

AATM910 THEATRE ANALYSIS
Autumn and/or spring; 12 credit points
Pre-requisite: Nil
Assessment: Two seminar papers, each of 5000 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 research might 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 higher research.

Textbooks
Reference list supplied by School.

Subject Coordinator: Mr J Kevin

AATM911 ADVANCED TECHNIQUES IN THEATRE
Autumn and/or spring; 12 credit points
Pre-requisite: Nil
Assessment: Written evaluations of the techniques explored. Two 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 them.

Textbooks
Reference list supplied by School.

Subject Coordinator: Mr J Kevin

AAVA910 VISUAL ARTS THEORY
Autumn and/or spring; 12 credit points
Pre-requisite: Nil
Assessment: One seminar paper of 3000 words on issues arising out of the candidate's studio practice.

Content: 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 School.

Subject Coordinator: Ms S Rowley

AAVA911 STUDIO ANALYSIS
Autumn and/or spring; 12 credit points
Pre-requisite: Nil
Assessment: Two seminar papers each of 5000 words, or equivalent.

Candidates will be expected to work at an advanced level and with a high degree of independence in their chosen studio discipline. The final exhibition/presentation 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 twice a session before a panel of staff and invited students.

_textbooks
Reference list supplied by School.

Subject Co-ordinator. Consult School.
ENGLISH

INTRODUCTION

The following postgraduate degrees are available:

1. **Honours Master of Arts by coursework** (Post-Colonial Literatures)
2. **Honours Master of Arts by Research**
3. **Doctor of Philosophy**

The schedule of subjects available for the Masters degree is set out below.

For the Doctor of Philosophy and Honours Master of Arts, candidates enrol in ENGL999.

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 coursework MA are italicised.

Alternative and community theatre/drama
Art, literature and industry in the eighteenth and nineteenth centuries
Aboriginal writing
Australasian theatre
Australian literature
Canadian literature
Caribbean literature

SCHEDULE OF GRADUATE SUBJECTS

HONOURS MASTER OF ARTS (POST COLONIAL LITERATURES)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>ENGL902</td>
<td>Dissertation (20,000 words)</td>
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<tr>
<td>ENGL903</td>
<td>Post-colonial literary issues</td>
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<td>ENGL907</td>
<td>Literature from colonising societies</td>
<td>8</td>
</tr>
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<td>ENGL908</td>
<td>Literature from colonised societies</td>
<td>8</td>
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<tr>
<td>ENGL904</td>
<td>Critical theory A</td>
<td>8</td>
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<tr>
<td>ENGL905</td>
<td>Critical theory B</td>
<td>8</td>
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<tr>
<td>ENGL906</td>
<td>Twentieth century post-colonial poets</td>
<td>8</td>
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<tr>
<td>ENGL909</td>
<td>Australian literature since 1920</td>
<td>8</td>
</tr>
<tr>
<td>ENGL910</td>
<td>Twentieth century women writers</td>
<td>8</td>
</tr>
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<td>ENGL911</td>
<td>Comparative Australian-Canadian writing</td>
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<tr>
<td>ENGL912</td>
<td>Cross-cultural Perspectives. Experiences of Asia</td>
<td>8</td>
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<tr>
<td>ENGL914</td>
<td>Contemporary Writing</td>
<td>8</td>
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<tr>
<td>ENGL915</td>
<td>Drama &amp; Arts Theatre in other Cultures</td>
<td>8</td>
</tr>
<tr>
<td>ENGL916</td>
<td>Nineteenth century American literature</td>
<td>8</td>
</tr>
</tbody>
</table>

HONOURS MASTERS OF ARTS

| ENGL999 | Major thesis | 48 |

Children's literature
Contemporary Screen Theory
Cross cultural literature
Cultural theory and literature
Dramaturgy
Early seventeenth-century literature and culture
Early Tudor literature
Eighteenth-century literature
Elizabethan literature
Fantasy and Utopian writing
Gender and genre
Indian writing in English
Lexicography
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
Old English language and literature
Old Icelandic language and literature
Pacific literature
Place names
Popular media and popular culture
Popular literature
Radical, alternative and independent cinema
Screen theory, practice and criticism
Shakespeare
Sixteenth century lexicography
Text-to-performance studies in theatre
Textual criticism and computer-generated editions
Theories of the modern stage
COURSE DESCRIPTION

HONOURS MASTER OF ARTS BY COURSEWORK

Pass degree entry
A 96 credit point Master of Arts by coursework is available to students with the degree of Bachelor of Arts with a major in English at credit average or better. The degree will run over a two-year period for full-time students, three years for part-time candidates as set out above.

Honours entry
Students with an Honours degree of at least II.2 standard or its equivalent may enter the coursework M.A. with an accreditation of 48 points. Such a degree will run over one year full-time, or two years part-time. Their course will consist of the dissertation and at least one of the prescribed topics, with the balance of a 48-point total determined after consultation with the Head of Department.

Description
The area of focus for studies will be critical approaches to the New Literatures in English. These comprise 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 - V.S. 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 aesthetics common to the whole field and particular to each of its regions.

SUBJECT DESCRIPTIONS

ENGL903 POST-COLONIAL LITERARY ISSUES
Autumn session; 8 credit points, (three hours per week, seminar)
Assessment: 4 written assignments (25% 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
Achebe, C. Things Fall Apart, Heinemann
Buchan, J. Prester John, Penguin

ENGL904 CRITICAL THEORY
Autumn session; 8 credit points (3 hours per week, seminar)
Assessment: 4 written assignments (25% each)
An historical study of major modern critical theories.

Textbooks
A reading list will be provided.

Subject Co-ordinator: Mr William McGaw

ENGL905 CONTEMPORARY CRITICAL THEORIES
Spring session; 8 credit points (3 hours per week, seminar)
Assessment: 4 written assignments (25% each)
A study of selected contemporary critical theories.

Textbooks
Belsey, C. Critical Practice, Methuen, 1980
Rimmon-Kenan, S. Narrative Fiction: Contemporary Poetics, Methuen
Selden, R. A Reader's Guide to Contemporary Critical Theory, Harvester
Harland, R. Superstructuralism, Methuen

Subject Co-ordinator: Dr Richard Harland and Dr Anne Cranny-Francis

ENGL906 TWENTIETH CENTURY POST-COLONIAL WRITERS
Autumn session; 8 credit points (3 hours per week, seminar)
Assessment: 4 written assignments (25% each)
A Study of the poetry of a group of modern writers.

Textbooks
Ezekiel, N. Selected Poems, O.U.P.
This course examines and contrasts literary texts from three settler societies: Canada, New Zealand and Australia. Attention will be given to such topics as the construction of landscape, myths of place and national identity, texts written about and by indigenous peoples, and the significance of gender relationships. Students will also be asked to consider texts such as memoirs and autobiographies which are not automatically included in the literary canon and discuss their contribution to shaping a literary culture.

**Textbooks**

Canada:
- Atwood, M. *The Journals of Susannah Moodie*, OUP
- Moodie, S. *Roughing it in the Bush*, Virago
- Slater, Van Herk & Wiebe, *West of Fiction*, NeWest
- Watson, S. *The Double Hook*, McLelland & Stewart

New Zealand:
- Frame, J. *To the Is-land*, The Women's Press
- Hulme, K. *The Bone People*, Hodder & Stoughton
- Kidman, F. *The Book of Secrets*, Picador
- McLeod, M. & W. Manhire, *Some other Country, New Zealand's best Short Stories*, Unwin
- Morrieson, R.H. *The Scarecrow*, Penguin

Australia:
- Johnson, C. *Dalwurra*, Centre for Studies in Australian Literature
- Longford, R. *Don't take your Love to Town*, Penguin

Malouf, D. 12 Edmonstone Street, Penguin
Stow, R. *Tourmaline*, Angus & Robertson
Webby, E. *Colonial Voices*, UQP

**Subject Co-ordinator:** Dr Paul Sharrad
**Lecturer:** Associate Professor Dorothy Jones

**ENGL 908 LITERATURE FROM COLONISED SOCIETIES**

**Autumn session:** 8 credit points, (three hours per week, seminar)
**Assessment:** 4 written assignments (25% each)

The course 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**
- deboissiere, R. *Crown Jewel*, Picador
- Grace, P. *Poirot*, Penguin, NZ
- Harrex & O’Sullivan (eds) *Kamala Das*, CRNLE
- Maniam, K.S. *The Return*, Heinemann
- Naipaul, V.S. *A House for Mr. Biswas*, Penguin
- Ogali, O. *Veronica my Daughter*, Three Continents
- Puig, M. *Betrayed by Rita Hayworth*, Arrow
- Rive, R. *District Six*, Heinemann
- Rushdie, S. *Shame*, Picador
- Soyinka, W. *Aké*, Arrow
- Wendt, A. (ed) *Lali, a Pacific Anthology*, Longman

**Subject Co-ordinator:** Dr Paul Sharrad
**Lecturers:** Dr Paul Sharrad, Associate Professor James Wieland

**ENGL 909 AUSTRALIAN LITERATURE SINCE 1920**

**Spring session:** 8 credit points (3 hours per week, seminar)
**Assessment:** 4 written assignments (25% each)

A study of several works of Australian prose fiction and poetry in the light of key cultural and literary shifts in the twentieth century.

**Textbooks**
- Preliminary Reading

**Textbooks**
ENGLISH 75

Dark, E. *The Timeless Land*, Collins
Goldsworthy, K. (ed) *Australian Short Stories*, Dent. 1984
Johnston, G. *My Brother Jack*, Penguin
Malouf, D. *An Imaginary Life*, Picador
Moorhouse, F. *Forty-Seven*, Penguin, 1988
Slessor, D. *Poems*, Angus & Robertson, Sydney, 1976
White, P. *The Tree of Man*, Penguin

**Subject Co-ordinator:** Associate Professor James Wieland

**Lecturer:** Associate Professor James Wieland

**ENGL910 TWENTIETH CENTURY WOMEN WRITERS**

**Autumn session; 8 credit points, (3 hours per week, seminar)**

**Assessment:** 4 written assignments (25% each)

This course examines poetry, short stories and novels by a number of twentieth century women writers from a variety of countries, Australia, U.S.A., Southern Africa, New Zealand, Canada, and gives particular emphasis to the theme of the woman as artist.

**Textbooks**
- Atwood, M. *Bodily Harm*, London: Virago, 1983
- Morgan, S. *My Place*, Fremantle Arts Centre Press, 1987

**Subject Co-ordinator:** Associate Professor Dorothy Jones

**Lecturer:** Associate Professor Dorothy Jones

**ENGL911 COMPARATIVE AUSTRALIAN/CANADIAN WRITING**

**Spring session; 8 credit points (3 hours per week, seminar)**

**Assessment:** 4 written assignments (25% each)

A comparative study of a number of novels by Australian and Canadian writers. Students will be asked to consider these in the context of post-colonialism. They will also be required to relate them when appropriate to such developments in contemporary fiction as post structuralism and magic realism, as well as considering issues of gender.

**Textbooks**
- Anderson, J. *Tirra Lirra by the River*, Penguin
- Bail, M. *Homesickness*, Penguin
- Engel, M. *Bear*, Panodora
- Jolley, E. *Milk and Honey*, Fremantle Arts Centre Press
- Kroetsch, R. *Alibi*, McLelland & Stewart
- Lawrence, M. *The Stone Angel*, Barton
- Grenville, K. *Lillian's Story*, U.Q.P.,
- van Herk, A. *No Fixed Address*, Virago

**Subject Co-ordinator:** Dr Paul Sharrad

**Lecturer:** Dr Paul Sharrad

**ENGL914 CONTEMPORARY WRITING**

**Spring session; 8 credit points, (3 hours per week, lecture & seminar)**

**Assessment:** 4 written assignments (25% each)

This course looks at what has happened in the literature of the last thirty years. Individual texts are used to exemplify larger general trends. The focus is upon America, England and Ireland, but with a background awareness of international developments. Chronologically,
this course follows on from ENGL 253 and runs parallel with ENGL 345.

Textbooks
Beckett, S. *Endgame*, Faber
Calvino, I. *Invisible Cities*, Picador
Coover, R. *Pricksongs and Descants*, New American Library
García Márquez, G. *Chronicle of a Death Foretold*, Picador
Heaney, S. *Selected Poems*, Faber
Kinsell, G. *Selected Poems*, Houghton Mifflin
O’Brien, F. *At Swim-Two-Birds*, Penguin
Rushdie, S. *Midnight’s Children*, Picador
Shaffer, P. *Amadeus*, Penguin

Subject Co-ordinator: Dr Richard Harland
Lecturer: Dr Richard Harland

ENGL915 DRAMA AND THEATRE IN OTHER CULTURES

Autumn session; 8 credit points (3 hours per week, seminar/workshop)
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; Kathakali Dance Drama of India; Chinese Opera - Beijing, Guangzhou or Shanghai forms).
- Folk Theatre of Eastern Europe (Polish Folk Theatre, Macedonian Historical Pageant, etc.).
- 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. E.g., in 1990, the emphasis will be on aspects of Asian Theatre and on Post-Colonial “indigenous” drama in Commonwealth counties.)

Textbooks
Cao, Z. *The Dream of the Red Chamber*, (Chinese Opera on Film).
Davis, J. *No Sugar* and *Barungin*, (Publication Details of Text t.b.a.)
Gilbert, K. *The Cherry Pickers*, (Publication details of Text t.b.a.).
Hereniko, V. *Two Plays*, (Mana Fiji, 1987)
Maza, Bob, *Merekí*, (Publication Details of Text t.b.a.)
Merritt, R. *The Cake Man*, (Publication Details of Text t.b.a.)
Ngema, M. *Woza Albert*, (Film)
Waley, A. *The Noh Theatre of Japan*, (Tuttle, 1976)
Walcott, D. *The Joker of Seville* and *O’Babylon*, (Johnathan Cape, 1978)

Subject Co-ordinator: Mr Maurie Scott
Lecturer: Mr Maurie Scott

ENGL916 NINETEENTH-CENTURY AMERICAN LITERATURE

8 credit points (4 hours per week, 2 lectures, seminar)
Assessment: 4 written assignments (25% each)

This course includes the study of a range of nineteenth-century American literature and cultural expression at functions of American societal, philosophical and political identity.

Textbooks
Hawthorne, N. *Twice-Told Tales*, Penguin, 1982
Melville, H. *Moby-Dick*, Penguin
Poe, E.A. *Tales of Mystery and Imagination*, Pan, 1982
Twain, M. *Huckleberry Finn*, Signet, 1980.

* Not on offer in 1990.
HISTORY

INTRODUCTION

The following postgraduate degrees are available:

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

The schedule of subjects available for the Master degree is set out below.

For the Honours Master of Arts degree and the Doctor of Philosophy degree candidates enrol in the subject HIST973 Major Thesis.

The specific requirements for each degree and the descriptions of the subjects available are set below.

SCHEDULE OF GRADUATE SUBJECTS

MASTER OF ARTS

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<tr>
<th>Number</th>
<th>Subject</th>
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<td>Australian Economic History 1860-1945*</td>
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<td>HIST912</td>
<td>Australian Labour Historiography</td>
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<td>HIST913</td>
<td>The Making of Modern Australian Women</td>
<td>12</td>
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<tr>
<td>HIST921</td>
<td>Britain and Total War: 1939-1945</td>
<td>12</td>
</tr>
<tr>
<td>HIST931</td>
<td>Labour and Industry in Southeast Asia Since 1945</td>
<td>12</td>
</tr>
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<td>HIST932</td>
<td>The Vietnam Wars 1920-1985</td>
<td>12</td>
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<tr>
<td>HIST951</td>
<td>Philosophy of History</td>
<td>12</td>
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</tbody>
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HONOURS MASTER OF ARTS

HIST973 Major Thesis

COURSE DESCRIPTION

1. MASTER OF ARTS

The Department of History and Politics offers a program of postgraduate level subjects leading to the degree of Master of Arts (History). This program has been devised to meet the needs of students who wish to proceed beyond the three year pass degree but for whom the research component of the honours degree and the scale of the honours Master of Arts degree are inappropriate.

Students entering the program will normally be required to have a pass degree with a major in History (that is, 52 credit points, or equivalent, in a sequence of History courses from 100 to 300 level). In special cases the departmental head may vary the entry requirements, if satisfied that an applicant's qualifications have prepared him or her for advanced historical study.

All those entering the program must complete subjects with a total value of 48 credit points, to be chosen from the schedule of subjects.

All courses will be taught on the basis of one 2 hour seminar per week, with individual tutorial consultation. Subjects on offer will vary from year to year according to the availability of specialist staff.

SUBJECT DESCRIPTIONS

HIST911 AUSTRALIAN ECONOMIC HISTORY, 1860-1945*

* Autumn session; 12 credit points (one hour lecture; two hours tutorial)
* Assessment: 9,000 words in essays/tutorial papers

This subject surveys the development of the Australian economy from about the time of

* Not on offer in 1990
the official discovery of gold until the onset of the Great Depression. It pays particular attention to the contribution of the various industries to the domestic product, and the variation in contribution between the sectors; overseas trade and borrowing; the role of the State; immigration and the composition of the workforce; the distribution of wealth and income; compulsory arbitration; the activities of trade unions and employers' associations; and the ideologies of the major political factions and parties.

Textbook

HIST912 AUSTRALIAN LABOUR HISTORIOGRAPHY
Spring session; 12 credit points (3 hours of lectures/tutorials)
Assessment: 9,000 words in essays/tutorial papers

This subject will acquaint students with the sources, the writings and the criticisms of Australian Labour Historiography. Topics include the growth of the labour movement and its characteristic institutions (Trade Unions and Parties), studies of the labour process, management strategies and the role of government in shaping the industrial and political environment faced by the labour movement. The subject will also consider labour performed outside the market, so-called domestic labour, and the tactics and ideologies of the labour movement.

The subject will also critically evaluate the intellectual sources of Australian labour historiography. These sources include: Labour and Social History; Industrial Relations; the Sociology of the Labour Process and Management; Marxist and non-Marxist class theories; Feminist writings on domestic labour and paid female labour and radical Nationalism and Populism. Not all these topics will be addressed in any one year.

Textbook(s)
To be advised.

HIST913 THE MAKING OF MODERN AUSTRALIAN WOMEN
Autumn session; 12 credit points (one 2 hr seminar per week)
Assessment: 9,000 words in essays/tutorial papers

This course will look 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 will cover the demographic transition and migration patterns, economic changes, political changes, ideologies of population and consumerism and the rise of professionals as social managers.

Preliminary Reading

HIST921 BRITAIN AND TOTAL WAR, 1939-1945
Spring session; 12 credit points (3 hours of lectures/tutorials)
Assessment: 9,000 words in essays/tutorial papers

This subject raises the general question of how a highly industrialised representative democracy responded to the demands and exigencies of a war in which all the resources of the nation were harnessed and in which all civilians were regarded by the enemy as legitimate objects of destruction. In addition to an examination of British society and politics during the Second World War, the subject calls for an analysis of the effects on Britain of her wartime alliances and of her military reverses and successes in Europe, North Africa and the Far East. Where appropriate, comparisons will be drawn with the experience of other nations involved in the war, for example, the mobilisation of women and responses to terror bombing. Of major interest are the following: the reasons for Britain's participation in the European and Pacific wars; the loss of the Far Eastern empire; the strains and achievements of coalition government; civilian morale and official propaganda; perceptions of the enemy; British war aims; 'fair shares for all' and wartime socialism; the Beveridge Report and the welfare state; rationing and compulsory war work; evacuation of children; British and European Jewry; Churchill as dictator; the Labour victory of 1945; the Blitz and the V-weapons; the 'area bombing' policy and Germany. In written work students are expected to consult primary material held in the Library, for example, The Times, Punch, the Listener, Home Intelligence Reports on Civilian
Morale, the Mass-Observation Archives, and the Economist.

Textbook


HIST931 LABOUR AND INDUSTRY IN SOUTHEAST ASIA

Autumn session; 12 credit points (3 hours of lectures/seminars)

Assessment: 9,000 words in essays/tutorial papers

This subject provides students with an opportunity to study Southeast Asian post-war economic history at an advanced level. It covers some major issues of economic development faced by the countries of the region from the end of the colonial period to the present day, comparing industrialisation strategies, the role of the state in economic life and the emergence of new social classes and movements under capitalist and socialist systems. There will be some scope for students to specialise in an area of particular interest to them.

Textbooks


HIST932 THE VIETNAM WARS

Spring session; 12 credit points (3 hours of lectures/seminars)

Assessment: 9,000 words in essays/tutorial papers

The French conquest of Vietnam in the late nineteenth century and Vietnamese responses, the economic changes wrought by colonialism up to 1940 and the accompanying cultural reappraisals in Vietnamese intellectual circles, establish the background to the First, Second and Third Indochina Wars, 1945-1985. The Japanese occupation, the 1945 August Revolution, the French attempt to recolonise Vietnam and the similarly-fated US intervention of 1955-1975 are studied closely, along with internal Vietnamese society and politics since 1945 and foreign relations with neighbouring states such as China and Kampuchea as well as with ASEAN countries and the USSR.

Textbooks


HIST931 PHILOSOPHY OF HISTORY

Autumn session; 12 credit points (one 2 hour seminar per week)

Assessment: 9,000 words in essays/tutorials

This course 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


Carr, E.H. What is History? London, 1967


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 hours, 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 M.A. Honours shall give at least two, and candidates for doctoral degrees shall give three, work-in-progress seminars over the course of their candidature.
INTRODUCTION

The following postgraduate degree is available in 1990:

1. Master of Arts

The schedule of subjects available at Masters level is set out below.

SCHEDULE OF GRADUATE SUBJECTS

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<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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<tr>
<td>INTR901</td>
<td>Practical Diplomacy</td>
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<tr>
<td>INTR910</td>
<td>Politics of International Relations</td>
<td>8</td>
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<tr>
<td>INTR911</td>
<td>Politics in the South Pacific</td>
<td>8</td>
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<tr>
<td>INTR912</td>
<td>Pacific Rim and Pacific Basin</td>
<td>8</td>
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<tr>
<td>INTR920</td>
<td>Advanced International Economic Relations</td>
<td>8</td>
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<tr>
<td>INTR921</td>
<td>Advanced International Economics</td>
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<td>INTR922</td>
<td>Advanced Topics in Economics</td>
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<tr>
<td>INTR930</td>
<td>Organizational Behaviour</td>
<td>6</td>
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<tr>
<td>INTR931</td>
<td>Strategic Planning and Policy</td>
<td>6</td>
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<tr>
<td>INTR932</td>
<td>Selected Topics in Management</td>
<td>6</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>
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<tr>
<td>INTR950</td>
<td>Australia: Making of a Nation</td>
<td>8</td>
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<tr>
<td>INTR957</td>
<td>Post-war Economic and Social Development of Southeast Asia</td>
<td>8</td>
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<tr>
<td>INTR958</td>
<td>Selected Topics on Post-war Developments in Southeast Asia</td>
<td>8</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTION

1. MASTER OF ARTS (INTERNATIONAL RELATIONS)

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 programme is expected to be especially useful to students with relevant prior, professional experience or ambitions, including diplomats, other government officials, business persons, journalists, etc.

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

In addition to formal course requirements, students take part in regular simulations and professional seminars, as well as special classes in relevant computing and (where appropriate) English language, study and analytical skills. A special centre (with computing, video and short-wave radio facilities, plus a range of pertinent periodicals) has been set aside - at 55 Northfields Avenue, opposite the University Union - for use by students in the program.

Course Requirements

48 credit points gained from subjects in the INTR schedule of postgraduate subjects. Except with the permission of the Head of Department, students are required to complete the following four subjects in order to graduate in the programme:

- INTR900 International Law and Diplomacy
- INTR910 Politics of International Relations
- INTR920 Advanced International Economic Relations
- INTR930 Organizational Behaviour

The specific requirements for Master of Arts (International Relations) degree and the descriptions of the subjects available are set out below.

CURRENT RESEARCH AREAS

Research can be supervised in 1990 in aspects of International Relations.
other subjects available:

INTR901 Practical Diplomacy
INTR911 Politics in the South Pacific
INTR912 Pacific Rim and Pacific Basin
INTR921 Advanced International Economics
INTR922 Advanced Topics in Economics
INTR931 Strategic Planning and Policy
INTR932 Selected Topics in Management
INTR940 Case Study in International Politics A
INTR941 Case Study in International Politics B
INTR950 Australia: Making of a Nation
INTR957 Post-war Economic and Social Development of Southeast Asia
INTR958 Selected Topics on Post-war Developments in Southeast Asia

SUBJECT DESCRIPTIONS

INTR900 INTERNATIONAL LAW AND DIPLOMACY
Autumn session; 8 credit points (3 hours per week of lectures, seminars and tutorials)
Assessment: 7,500 words of essays and tutorial papers

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 exchange 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; summity; and developments in bilateral, regional and wider forms of technical, functional, economic and other co-operation, including areas such as the Law of the Sea.

Textbooks
Others to be advised.

INTR901 PRACTICAL DIPLOMACY
Spring session; 8 credit points (3 hours per week lectures, seminars and tutorials)
Assessment: 7,500 words in essays and class papers

Case-studies, simulations, workshops and interactions with practitioners. Negotiation. Preparation and use of diplomatic instruments.

Textbooks To be advised.

INTR910 POLITICS OF INTERNATIONAL RELATIONS
Spring session; 8 credit points (3 hours per week of lectures, seminars and tutorials)
Assessment: 7,500 words of essays and tutorial papers

Theories and concepts of international relations: utopian, legal, realist, Marxist, Neo-Marxist, etc. Approaches to and methods of study. 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 organizations. 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.

Textbooks To be advised.

INTR911 POLITICS IN THE SOUTH PACIFIC
Autumn session; 8 credit points (3 hours per week 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 co-operation. Relations with external actors, including governments, international organisations and multi-national corporations. Class work and assignments will provide occasions for detailed examination of particular case studies.

Textbooks To be advised.

INTR912 PACIFIC RIM AND PACIFIC BASIN
Spring session; 8 credit points (3 hours per week 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 will be paid to the foreign relations, including relations with advanced industrial and industrialising countries, and regional as well as inter-regional co-operation, of countries in Southeast Asia and the South Pacific. The subject addresses significant issues in defence, aid, trade, investment and other kinds of international flows and co-operation (including the non-alignment, the Group of 77,
communications, fisheries, and the law of the sea). Particular attention will be paid to nuclear and environmental issues; the security and vulnerability of small-island states; colonialism and self-determination; proposals for a New International Economic Order; the prospects for Pacific Basin co-operation; and other questions of particular concern to countries on the Pacific Rim and in the Pacific Basin.

Textbooks To be advised.

INTR931 STRATEGIC PLANNING AND POLICY
Spring session; 6 credit points (2 hours lectures per week)
Assessment: examination and essays

The subject will use case studies as a key teaching vehicle and will examine strategy in the context of, for profit and not for profit 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.

Textbooks To be advised.

INTR920 ADVANCED INTERNATIONAL ECONOMIC RELATIONS
Spring session; 8 credit points (3 hours per week, lectures and tutorials)
Assessment: essays, seminars and assignments

The subject will examine policy issues in the international economy especially as they affect the Asian-Pacific region. The role of international economic organizations such as the IMF, World Bank and GATT will be 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 will be explored.

Textbooks

INTR921 ADVANCED INTERNATIONAL ECONOMICS
Spring session; 8 credit points (3 hours per week 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.

INTR922 ADVANCED TOPICS IN ECONOMICS
Autumn or spring session, depending on the topics covered; 8 credit points (3 hours per week 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.

INTR930 ORGANISATIONAL BEHAVIOUR
Autumn session; 6 credit points (2 hours lectures per week)
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.

Textbooks To be advised.

INTR932 SELECTED TOPICS IN MANAGEMENT A
Autumn or spring session; 6 credit points (2 hours lectures per week)
Assessment: assignments, seminars, examinations

A special topic selected from any area of management. (N.B. The selection would be made by the Heads of the Department concerned, taking into account the expertise of academic staff, including visiting staff, and the interests of students.)

Textbooks To be advised.

INTR940 CASE STUDY IN INTERNATIONAL POLITICS A
Spring session; 8 credit points (minimum one hour/week 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 Head of Department. 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 will require the approval of the Head of Department, and may be determined by the availability of suitably qualified staff.

**Textbooks** To be advised.

**INTR941 CASE STUDY IN INTERNATIONAL POLITICS B**  
*Spring session; 8 credit points (minimum one hour/week 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 Head of Department. 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 will require the approval of the Head of Department, and may be determined by the availability of suitably qualified staff.

**Textbooks** To be advised.

**INTR950 AUSTRALIA: MAKING OF A NATION**  
*Spring session; 8 credit points (3 hours of lectures/seminars)*  
*Assessment: 7,500 words in essays/seminar papers*

This subject is intended to provide students with the opportunity for in-depth study of a particular aspect of Southeast Asian history since World War II. The focus will be on the study of the relationship between domestic, political and social change and the shaping of international relations of Southeast Asian countries. Some choice of area of specialisation will be possible, subject to the availability of suitably qualified staff.

**Textbooks** To be advised.
The following postgraduate degree is available:

1. Master of Arts

The schedule of subjects for the Masters degree is set out below.

**SCHEDULE OF GRADUATE SUBJECTS**

**MASTER OF ARTS**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>JOUR901</td>
<td>News Writing I</td>
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<tr>
<td>JOUR902</td>
<td>News Writing II</td>
<td>6</td>
</tr>
<tr>
<td>JOUR911</td>
<td>Introduction to News Gathering</td>
<td>6</td>
</tr>
<tr>
<td>JOUR912</td>
<td>Electronic Media Performance</td>
<td>6</td>
</tr>
<tr>
<td>JOUR921</td>
<td>Journalism, The Law and Ethics</td>
<td>6</td>
</tr>
<tr>
<td>JOUR981</td>
<td>Journalism in Australian Society</td>
<td>6</td>
</tr>
<tr>
<td>JOUR991</td>
<td>News and Media in Australia</td>
<td>6</td>
</tr>
</tbody>
</table>

**Content Electives:** see below.

**Media Electives:** see below.

**Major Presentation:** see below.

**COURSE DESCRIPTION**

1. **MASTER OF ARTS**

1. The purposes of the Master of Arts in Journalism are:

(a) to allow pass graduates to proceed to higher studies in journalism;

(b) to provide the same opportunity for those whose professional experience is judged as an equivalent in attainment to a pass degree;

(c) to facilitate for both categories of students changes in emphasis within their career in journalism;

(d) to promote a critical and scholarly evaluation of the profession through teaching and research.

2. Students shall be admitted under the regulations 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 take into account professional experience and recommend an advanced standing;

(b) Students are required to complete successfully a program of studies approved of by the Professor of Journalism which must total 96 credit points. Of that total, subjects to the value of 24 credit points must be successfully completed from each of the following course divisions: core; content elective; media elective; presentation. In addition, students must participate in such field work as the Professor of Journalism prescribes.

(c) Students shall discuss their proposed program with an academic adviser from the School of Journalism prior to enrolment.

(d) The Master of Arts in Journalism shall be available both as a full-time and part-time program. Full-
time students are expected to complete the degree in four academic sessions, and part-time students in eight.

**ELECTIVES**

Elective subjects will be developed from the following list of topics and offered from 1991 onwards.

**Content Electives**

In consultation with the Professor of Journalism, or the Professor's nominee, students must choose subjects in two of the following areas, to a total of 24 credit points. Subjects are worth 6 credit points each.

The Economy and Business
Science, Health and the Environment
Sport
Industrial Relations
The Law
The Arts
Australian Politics
International Relations
Southeast Asian Politics
Asian Languages
Ethnic Affairs
Aboriginal Affairs
Education
Australian Studies
Technology

**Media Electives**

Two of these subjects will be chosen in consultation with the Professor of Journalism, or the Professor's nominee; each will be rated at six credit points each.

Radio News Reporting and Writing
Television News Reporting and Writing
Advanced Newspaper and Magazine Feature Writing
Advanced Newspaper and Magazine Feature Production and Layout
Television Documentary Production
Radio Documentary Production

In addition, students must participate in radio, television or print workshop production as agreed upon by the Professor of Journalism or nominee. The workshop will involve the students in the actual production of a newspaper, or radio or television news or feature series. The workshop subject will be rated at 12 credit points.

**Major Presentation**

The topic for a major presentation must be approved by the Professor of Journalism or the Professor's nominee. Its supervision and assessment will involve staff who teach both content and media electives. The length of the presentation should be 15-20,000 words, or its equivalent, and the candidate may submit taped or filmed 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 rated at 24 credit points.

**SUBJECT DESCRIPTIONS**

**JOUR901 NEWS WRITING I**

*Autumn or spring session; 6 credit points (6 hours newsroom work per week)*

**Assessment:** written assignments and practical exercises

This subject develops skills in writing to strict deadlines, writing to strict space or time limitations, and writing to be edited by others. There will be an emphasis on the highest standards in grammar and syntax, correct word usage, and spelling. Students will be introduced to the use of sources and authorities on language use. This subject also introduces students to the differences involved in writing for different target audiences of readers, and writing to be read aloud by others (as in radio and TV bulletins).

**JOUR902 NEWS WRITING II**

*Autumn or spring session; 6 credit points (an average of 6 hours newsroom work per week, plus field work)*

**Assessment:** written assignments and practical exercises

The aim of this subject is to develop advanced skills in information retrieval for journalists, and in the speedy interpretation and accurate simplification and presentation of complex or technical data. Special skills and techniques relevant to writing features, as well as news reporting, will be introduced. Assessing major data bases, methods of conducting library and archive searches (computer assisted and manual) and the use of specialist works of reference will be emphasised. The use of graphics in print and TV news and feature presentation will be introduced.

**JOUR911 INTRODUCTION TO NEWS GATHERING**

*Autumn or spring session; 6 credit points (6 hours per week on average in newsroom work, studio work, and field work)*

**Assessment:** written assignments and practical exercises

This subject introduces students to the management of a news assignment, including skills in following up leads, conducting
personal inquiries, seeking interviews, working from the telephone and working on a "face to face" basis, interview techniques (for print and broadcast), determining the news value of what is obtained, and writing the story. It will include a critical appreciation of the nature of evidence, and introduce students to methods of survey construction and techniques used for data generation.

JOUR912 ELECTRONIC MEDIA
PERFORMANCE
Autumn or spring session; 6 credit points (an average of 6 hours studio work per week)
Assessment: by recordings and practical exercises

This subject introduces students to the performance skills required in radio and television journalism by the on-air presenter.

This subject will introduce students to effective oral communication techniques via the electronic media, including diction, pronunciation, voice production and microphone usage. Skills in news reading, especially of copy prepared by others, and sight reading skills will be developed. Students will also be introduced to general radio and TV announcing skills, to operating a radio studio panel, and in working to a TV camera lens.

JOUR921 JOURNALISM, THE LAW AND ETHICS
Autumn or spring session; 6 credit points (2 hours lectures, 1 hour tutorial)
Assessment: written assignments and practical exercises

A critical examination of the legal framework within which Australian journalists must operate, with selected international comparisons (e.g. USA) and of the professional responsibilities and ethical codes adopted by journalists. Legal topics include defamation, privilege, contempt, copyright, Freedom of Information legislation, and radio and television performance standards for news in relation to licencing conditions.

Textbooks
Doogue, J., The Law and the Writer (Geelong: Deakin University Production Unit, 1982).

JOUR981 JOURNALISM IN AUSTRALIAN SOCIETY
Autumn or spring session; 6 credit points (2 hours lectures, 1 hour tutorial)
Assessment: written assignments and practical exercises

An introduction to Australian Society with special reference to its legal structure, social patterns, demography, and recent history. The purpose is to provide Journalism students who have little prior experience of Australian society with sufficient background to enable them to conduct further research themselves, and to begin practical reporting work.

JOUR991 NEWS AND MEDIA IN AUSTRALIA
Autumn or spring session; 6 credit points (2 hours lectures, 1 hour tutorial)
Assessment: written assignments and practical exercises

An introduction to organisations dealing with the gathering and distribution of news in Australia. Their role and influence will be critically examined in relation to their economic structure (including ownership and control) and recent history, and the legislative framework within which news gathering, dissemination and publication operates, in a changing communication technology.
LANGUAGES

INTRODUCTION

The following postgraduate degrees and diplomas are available:

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

For the Graduate Diploma, subjects are selected from the undergraduate schedules of subjects set out in the Undergraduate Calendar. Please refer to the information about this diploma on the following pages.

The schedule of subjects available for the Masters degrees is set out below.

For the Doctor of Philosophy degree candidates enrol in the subject LANG903 Thesis.

The specific requirements for each degree and diploma and the descriptions of the subjects available are set out in the pages following the schedule of subjects.

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 and 20th Century French novel
Linguistics applied to the teaching of French as a second language
Intonation analysis
Language teaching methodology
18th Century history of ideas
20th Century novel and civilization
Federico De Roberto and 'The "Seondo Ottocento"
The Italian "Melodramma"
Methods and materials for teaching Italian at the secondary and tertiary level
Italian-Australian literature
Multilingual broadcasting in Australia
Italian lexicography
Contrastive linguistics: English-Italian

SCHEDULE OF GRADUATE SUBJECTS

MASTER OF ARTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>LANG913</td>
<td>Advanced Topics in French</td>
<td>48</td>
</tr>
<tr>
<td>LANG923</td>
<td>Advanced Topics in French and Italian</td>
<td>48</td>
</tr>
<tr>
<td>LANG953</td>
<td>Advanced Topics in Italian</td>
<td>48</td>
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</tbody>
</table>

HONOURS MASTER OF ARTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>LANG903</td>
<td>Major Thesis</td>
<td>48</td>
</tr>
<tr>
<td>LANG913</td>
<td>Advanced Topics in French</td>
<td>48</td>
</tr>
<tr>
<td>LANG923</td>
<td>Advanced Topics in French and Italian</td>
<td>48</td>
</tr>
<tr>
<td>LANG953</td>
<td>Advanced Topics in Italian</td>
<td>48</td>
</tr>
</tbody>
</table>

Subjects previously prefixed EURO are not to count with subjects with the same numerals now prefixed as LANG.

COURSE DESCRIPTIONS

1. GRADUATE DIPLOMA IN ARTS (EUROPEAN STUDIES)

The purpose of the Graduate Diploma in Arts (European Studies) is to provide in a recognized 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. The Graduate Diploma shall be subject to the University regulations for the award of Graduate Diplomas together with the following conditions:

(1) Candidates are required to complete subjects totalling 48 credit points, of which at least 28 are to be from those listed in the Arts Schedule under Languages. Subjects up to a total of 20 credit points may be chosen from subjects listed by other departments in the Arts Schedule provided that, in the view of the Head of the Department of Languages, these relate to European studies.
(2) Of the required 48 credit points at least 24 must be from 200 or 300 level courses.

(3) 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.

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

(5) A full-time candidate shall normally complete the Graduate Diploma in one academic year, a part-time candidate in no less than 2 and no more than 3 academic years.

(6) Admission to candidature for the Graduate Diploma is on the recommendation of the Head of the Department of Languages who shall assess the applicant's aptitude for the course.

2. MASTER OF ARTS

A. FRENCH

(1) An applicant for registration for the degree shall have qualified for:

   (a) a degree of bachelor in the University which includes at least 24 credit points at 300-level in French; OR

   (b) a degree of bachelor in the University together with at least 24 credit points at 300-level in Italian; OR

   (c) an equivalent qualification from another tertiary institution.

(2) A candidate may be considered for the award of the degree after successfully completing two academic sessions of full-time study (or its equivalent) of subject number LANG913: Advanced Topics in French.

(3) For details refer to the regulations for the Master degree.

B. ITALIAN

(1) An applicant for registration for the degree shall have qualified for:

   (a) a degree of bachelor in the University which includes at least 24 credit points at 300-level in Italian; OR

   (b) a degree of bachelor in the University together with at least 24 credit points at 300-level in Italian; OR

   (c) an equivalent qualification from another tertiary institution.

(2) A candidate may be considered for the award of the degree after successfully completing two academic sessions of full-time study (or its equivalent) of subject number LANG953: Advanced Topics in Italian.

(3) For details refer to the regulations for the Master degree.

C. FRENCH AND ITALIAN

(1) An applicant for registration for the degree shall have qualified for:

   (a) a degree of bachelor in the University which includes at least 24 credit points at 300-level in French and Italian; OR

   (b) a degree of bachelor in the University together with at least 24 credit points at 300-level in French and Italian; OR

   (c) an equivalent qualification from another tertiary institution.

(2) A candidate may be considered for the award of the degree after successfully completing two academic sessions of full-time study (or its equivalent) of subject number LANG923: Advanced Topics in French and Italian.

(3) For further details refer to the regulations for the Master degree.

3. HONOURS MASTER OF ARTS

Structure
Students entering the program with a degree in French and/or Italian at a standard below Honours Class II, Division 2 will be required to complete one of the following subjects:

LANG913 Advanced Topics in French
LANG923 Advanced Topics in French and Italian
LANG953 Advanced Topics in Italian

They then proceed to:
LANG903 Major thesis

Students entering the program with an honours degree at a standard of at least Class II, Division 2 will be required to complete LANG903 Major thesis only.

SUBJECT DESCRIPTIONS

The advanced topics will be selected from the area of French or Italian studies, and will relate to the areas of language and society and culture and society. The selection will be made by the Head of the Department taking into account the expertise of academic staff and the interests and backgrounds of students.

Assessment: 2 essays per session and seminar contributions.

LANG903 MAJOR THESIS
48 credit points.

LANG913 ADVANCED TOPICS IN FRENCH
48 credit points.

LANG923 ADVANCED TOPICS IN FRENCH AND ITALIAN
48 credit points.

LANG953 ADVANCED TOPICS IN ITALIAN
48 credit points.
MULTICULTURAL STUDIES

INTRODUCTION

The following postgraduate degrees are available:

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

The schedule of subjects available for the Masters degrees is set out below.

For the Honours Masters of Arts by Research and the Doctor of Philosophy degrees candidates enrol in the subject CMS999 Thesis.

The specific requirements for the Masters degrees and the descriptions of the subjects available are set out below.

SCHEDULE OF GRADUATE SUBJECTS

MASTER OF ARTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS901</td>
<td>Issues in Multicultural Research</td>
<td>12</td>
</tr>
<tr>
<td>CMS902</td>
<td>Migration and Australia</td>
<td>12</td>
</tr>
<tr>
<td>CMS903</td>
<td>Social Policy in a Multicultural Society</td>
<td>8</td>
</tr>
<tr>
<td>CMS904</td>
<td>The Family and the Education System</td>
<td>12</td>
</tr>
</tbody>
</table>

HONOURS MASTER OF ARTS

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<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS999</td>
<td>Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTION

1. MASTER OF ARTS (MULTICULTURAL STUDIES)

This program has been developed to provide the student with the understanding and skills to work within a multicultural context. Through lectures, student-led seminars and practical projects, the opportunity is provided to develop a critical awareness of the context of the migration process in relation to Australian society. The program is based on components which allow for reflection on, and engagement in, innovation and social change in intercultural contexts. The Master of Arts is a four session part-time course, comprising 48 credit points, in the following subjects.

SUBJECT DESCRIPTIONS

CMS901 ISSUES IN MULTICULTURAL RESEARCH

Double session subject; 12 credit points (4 contact hours per week: seminars)

Assessment: Seminar Papers

Designed to sensitise students to contemporary issues in carrying out research in the area of multicultural studies, including problems of funding and social relevance. Methodology and research practice will be studied through an examination of a variety of multicultural research projects and their reports and outcomes. Students may prepare a research submission as part of the subject and appropriate pilot studies may be undertaken.

Lecturers: Professor S. Castles, Mr M. Morrissey, Mr W. Cope.
CMS902 MIGRATION AND AUSTRALIA
Double session subject; 12 credit points (4 contact hours per week: seminars)
Assessment: Essay, Research Project and Seminar Papers.

A detailed history of migration to Australia in the modern era with major historical emphasis on the great postwar immigration. The major theoretical emphasis of this subject will be to assess how the Australian experience has shaped present-day usages of the concept of race and ethnicity and to relate these concepts to questions of social class and gender. The political economy of labour migration will be examined in relation to Australia’s social and economic structures. A further theme will be the socio-economic situation and the social mobility of first and second generation migrants. Major theories of ethnicity and stratification will be examined.

Lecturer: Professor S. Castles

CMS903 SOCIAL POLICY IN A MULTICULTURAL SOCIETY
Double session subject; 8 credit points (4 contact hours per week: seminars)
Assessment: Essay, Research Project and Seminar Papers.

Charts the historical development of migrants as a welfare/social policy category from the postwar "assimilationist" policies of the Menzies era, through the development of "integrationism" in the late 1960s and "multiculturalism" in the 1970s and 1980s. The main emphasis will be on relating changes in migrant-oriented social policy to changes in the composition, size and distribution of the migrant population as well as to changes in Australian economic and political structures. There will be detailed examination of specific policy initiatives, in particular the emergence of ethno-specific agencies and services. Current debates on policy directions will be examined.

Lecturer: Mr M. Morrissey

CMS904 THE FAMILY AND THE EDUCATION SYSTEM
Double session subject; 12 credit points (4 contact hours per week: seminars)
Assessment: Essay, Research Project and Seminar Papers.

The first part of this subject examines the impact of migration on the family. Attention will be paid to induced changes in family structure and interpersonal relations and roles within the family. In this context there will be consideration of the role of the family in relation to mental health, usage of health and other social services, capital accumulation and the development of business networks. In the second half of the subject, there will be a detailed examination of factors affecting the relationship between the migrant family and the education system. The content and relevance of the concept of multicultural education will be explored including past and ongoing programs such as mother-tongue maintenance etc.

Students with particular interests may be permitted to substitute for CMS904 another 12 credit point postgraduate subject subject to approval by the Head of the Centre and Head of the department or school concerned.

Lecturers: Ms M. Kalantsis, Mr W. Cope

CMS999 THESIS
48 credit points

MULTICULTURAL STUDIES 91
PEACE AND WAR STUDIES

COURSE DESCRIPTION

GRADUATE DIPLOMA IN ARTS (PEACE AND WAR STUDIES)

The purpose of the Graduate Diploma in Arts (Peace and War Studies) is to provide in a recognised University course a means for graduates with limited acquaintance with Peace and War Studies to acquire competence in this area at a reasonably advanced level. The Graduate Diploma shall be subject to the University regulations 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 Schedule following the Bachelor Degree Regulations under 'Peace and War Studies' (refer to the Undergraduate Calendar). Of these at least 24 credit points 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 Chairperson of the Board of Peace and War Studies.

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 Chairperson of the Board of Peace and War Studies who shall assess the applicant's aptitude for sustained work in Peace and War Studies at a reasonably advanced level.
PHILOSOPHY

INTRODUCTION

The following postgraduate degrees and diplomas are available:

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

For the Graduate Diploma, subjects are selected from the undergraduate schedules of subjects set out in the Undergraduate Calendar. Please refer to the information about this diploma on the following pages.

The schedule of subjects available for the Masters degrees is set out on the following pages.

For the Doctor of Philosophy degree candidates enrol in the subject PHIL999 Thesis.

The specific requirements for the Masters degrees, the diploma and the descriptions of the subjects available are set out in the pages following the schedule of subjects.

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
Imagination and aesthetic appreciation.
The Aesthetics of Benedetto Croce.

Epistemology and Philosophy of Science
Probability and its theoretical interpretation.
Induction.
The Logic of explanation in the natural and social sciences.
The philosophy of biology.

History of Philosophy
Kant’s critical philosophy.
Cartesian studies.

SCHEDULE OF GRADUATE SUBJECTS

MASTER OF ARTS (PROFESSIONAL AND APPLIED ETHICS)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<tbody>
<tr>
<td>PHIL901</td>
<td>Organizational Ethics</td>
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<td>PHIL902</td>
<td>Ethical Analysis</td>
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<td>PHIL903</td>
<td>Comparative and Critical Professional Ethics</td>
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MASTER OF ARTS (PROFESSIONAL AND APPLIED ETHICS) (Cont'd)

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<tr>
<td>PHIL904</td>
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<td>PHIL981</td>
<td>Organizational Ethics (Social Policy)</td>
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<td>PHIL982</td>
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<tr>
<td>PHIL984</td>
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HONOURS MASTER OF ARTS

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<tr>
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<tr>
<td>PHIL923</td>
<td>Minor Thesis</td>
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<td>PHIL933</td>
<td>Advanced Logic</td>
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<td>PHIL943</td>
<td>Advanced Political Philosophy</td>
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<td>PHIL953</td>
<td>Advanced Philosophy of Value</td>
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<td>PHIL963</td>
<td>Advanced Epistemology and Philosophy of Science</td>
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<td>PHIL973</td>
<td>Philosophical Problems</td>
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<td>PHIL983</td>
<td>Contemporary Issues in Philosophy</td>
<td>6</td>
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<tr>
<td>PHIL999</td>
<td>Major Thesis</td>
<td>48</td>
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COURSE DESCRIPTIONS

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 regulations 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. Provided that, subject to the joint approval of the Heads of the Departments of Philosophy and Education, or of Philosophy and Science and Technology Studies, up to 24 credit points at 200-level and/or 300-level may be taken from subjects listed in the General or the Arts Schedules under 'Education' and/or 'Science and Technology Studies'. Under no circumstances may the total number of subjects credited towards the Graduate Diploma in Philosophy taken from subjects other than those listed under 'Philosophy' total more than 24 credit points.

(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 (PROFESSIONAL AND APPLIED ETHICS)

The purpose of this program is to provide people who are not primarily philosophers with practical skills and a deep background knowledge in addressing ethical issues that arise as a matter of course in the professions, business, and social policy formation. The aim is to produce graduates who are (a) sensitive to the ethical dimensions of general policy questions and concrete applications as they arise; (b) skilled in formulating clearly the ethical issues involved and in distinguishing relevant from irrelevant, and good from bad arguments; (c) knowledgeable in relation to the major available ethical theories, their strengths and weaknesses; and (d) capable of maintaining a continuing understanding of developments and controversies at the frontiers of ethics.
Candidature is open to:

(1) holders of a Bachelor of Arts (Hons) with pure or joint honours in Philosophy;

or:

(2) holders of a Bachelor's degree (pass or honours) in any field, who have also completed a Graduate Diploma in Arts (Philosophy), including a clear pass or better in PHIL206 Moral Problems, and either PHIL251 Ethics A, or PHIL301 Ethics B;

or:

(3) others who satisfy the Board of Research and Postgraduate Studies of comparable professional standing or attainments.

Candidates shall successfully complete a program of 48 credit points, comprising:

PHIL901 Organizational Ethics (Annual or Summer - 12 credit points)
PHIL902 Ethical Analysis (Annual or Summer - 12 credit points)
PHIL903 Comparative and Critical Professional Ethics (Annual or Summer - 12 credit points)
PHIL904 Directed Study in Applied Ethics (Annual or Summer - 12 credit points).

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 satisfactorily complete PHIL913 Advanced Philosophical Topics (48 credit points) 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 (i.e. graduates with Second Class Honours or its equivalent or who have satisfactorily completed PHIL913) 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.

SUBJECT DESCRIPTIONS

PHIL901 ORGANISATIONAL ETHICS
Double Session; 12 credit points (One 2 hour seminar per week)
Assessment: 50 per cent participation in practical individual and group tasks, and 50 per cent 4 written exercises or reports.

Organizations (firms, corporations, local, state, and national governments) as well as individuals are subject to ethical appraisal. The aim of this subject is to investigate criteria for the moral evaluation of the performance of organizations, and to consider possible conflicts that may arise between an individual's personal views of right and wrong, and the demands or expectations of an organization of which he or she is an agent.

Co-ordinator: Dr Harry Beran
Lecturer(s): To be advised.

PHIL902 ETHICAL ANALYSIS
Double session; 12 credit points (One 2 hour seminar per week)
Assessment: 50 per cent participation in practical individual and group tasks, and 50 per cent 4 written exercises or reports.

The aim of this subject is to take up current policy debates as reported in the media (e.g. in relation to invitro fertilization, electronic eavesdropping, affirmative action, advertising and persuasion) and to develop skills in subjecting them to ethical analysis. Special attention will be given to skills in formulating the ethical implications of alternative ways of formulating them, and presenting them in ways that are clear, informative, and accurate to people untrained in ethics.

Co-ordinator: Dr Harry Beran
Lecturer(s): To be advised.

PHIL903 COMPARATIVE AND CRITICAL PROFESSIONAL ETHICS
Double session; 12 credit points (One 2 hour seminar per week)
Assessment: 50 per cent participation in individual and group practical exercises, and 50 per cent 4 written exercises or reports.

The aim of this subject is to compare and critically analyse received codes of professional ethics in a number of professions and occupations (e.g. law, medicine, journalism, advertising, accountancy). Questions to be considered include what defines a profession, and by what standards should a code of professional ethics be assessed? How might some of the existing codes of professional ethics be improved, and
how should a code of professional ethics be enforced? Are there any occupations for which a code of professional ethics should be introduced?

Co-ordinator: Dr Harry Beran
Lecturer(s): To be advised.

PHIL904 DIRECTED STUDY IN APPLIED ETHICS
Double session; 12 credit points
Personal Supervision
Assessment: a major essay of no more than 5,000 words.

The objective of this subject is to encourage each student to identify and articulate a problem with significant ethical dimensions as it arises in his or her work experience, or as it arises in some current area of public policy controversy. The student will work under the supervision of a member of the Department, and will aim to produce a detailed analysis of the problem, an account of how it would be resolved in terms of a selection of major competing ethical theories, and the student's own preferred solution, with its justification. The essay will be expected to exhibit analytical rigour, sensitivity to the nuances of the problem, a good understanding of the major rival ethical theories, and the capacity to explain the issues and recommended solutions in a way which is clear to a person unfamiliar with the technicalities of ethical theory.

Co-ordinator: Dr Harry Beran
Supervisor: as appointed.

PHIL981 ORGANIZATIONAL ETHICS (SOCIAL POLICY)
Double session; 8 credit points
(One 2 hour seminar per week)
Assessment: 50 per cent participation in practical individual and group tasks, and 50 per cent 3 written exercises or reports.

The aim of this subject is to investigate criteria for the moral evaluation of organizations, and to consider the possible conflicts that might arise between an individual's view of what is right or wrong, and the demands or expectations of an organization of which he or she is a member.

Co-ordinator: Dr Harry Beran
Lecturer(s): To be advised.

PHIL982 ETHICAL ANALYSIS (SOCIAL POLICY)
Double session; 8 credit points
(One 2 hour seminar per week)
Assessment: 50 per cent participation in practical individual and group tasks and 50 per cent 3 written exercises or reports.

The aim of this subject is to take up current policy debates as reported in the media, and to develop skills in subjecting them to ethical analysis. Special attention will be given to skills in formulating the ethical implications of alternative ways of constructing them, and presenting them in ways that are clear, informative and accurate to people untrained in ethics.

Co-ordinator: Dr Harry Beran
Lecturer(s): To be advised.

PHIL984 DIRECTED STUDY IN APPLIED ETHICS (SOCIAL POLICY)
Double session; 8 credit points
Personal Supervision
Assessment: a major essay of no more than 4,000 words, together with satisfactory presentation of literature reviews and analyses in the course of supervision.

The aim of this subject is to enable each student to identify and articulate a problem with significant ethical dimensions as it arises in his or her work experience, or as it arises in some current area of public policy supervision. Details of the work required are set out under PHIL904 Directed Study in Applied Ethics.

Co-ordinator: Dr Harry Beran
Supervisor: as appointed.

PHIL913 ADVANCED PHILOSOPHICAL TOPICS
Double session; 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 under section 6(2) of the Honours Masters Degree Regulations.
Assessment: Essays and three hour 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
As laid down in the requirements for the component courses.

Co-ordinator: Dr Harry Beran
Lecturer(s): To be advised.

PHIL923 MINOR THESIS
Double session; 24 credit points.
PHIL933 ADVANCED LOGIC
Double session; 6 credit points. Variable combination of seminars, lectures and lecture-discussions.
Assessment: One three-hour examination.
A study of issues in philosophical inductive and/or formal logic.
Co-ordinator and Lecturer: Dr Barbara Davidson

PHIL943 ADVANCED POLITICAL PHILOSOPHY
Double session; 6 credit points (variable combination of seminars, lectures and lecture/discussions)
Assessment: One three-hour examination.
A study of issues in political and/or social philosophy.
Co-ordinator and Lecturer: Dr Harry Beran

PHIL953 ADVANCED PHILOSOPHY OF VALUE
Double session; 6 credit points (variable combination of seminars, lectures and lecture-discussions)
Assessment: One three-hour examination.
A study of issues in moral philosophy, and/or aesthetics.
Co-ordinator and Lecturer: Ms Suzanne Uniacke

PHIL963 ADVANCED EPISTEMOLOGY AND PHILOSOPHY OF SCIENCE
Double session; 6 credit points (variable combination of seminars, lectures and lecture-discussions)
Assessment: One three-hour examination.
A study of issues to do with the theory of knowledge.
Co-ordinator and Lecturer: Dr Robert Dunn

PHIL973 PHILOSOPHICAL PROBLEMS
Double session; 6 credit points (variable combination of seminars, lectures and lecture-discussions)
Assessment: One three-hour examination.
A study of a selection of traditional philosophical problems.
Co-ordinator and Lecturer: Dr Karen Neander

PHIL983 CONTEMPORARY ISSUES IN PHILOSOPHY
Double session; 6 credit points (variable combination of seminars, lectures and lecture-discussions)
A study of current controversies within one selected field of contemporary philosophy.
Co-ordinator and Lecturer: Dr David Simpson

PHIL999 MAJOR THESIS
Double session; 48 credit points.
POLITICS

INTRODUCTION

The following postgraduate degrees are available in 1990:

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

A limited number of subjects in Politics which may count towards the Master of Policy (Social Policy) and other Masters coursework degrees is also on offer.

Further developments, especially of coursework offerings, in Politics are expected.

SCHEDULE OF GRADUATE SUBJECTS

Additional Politics Subjects†

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<thead>
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<th>Number</th>
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<tr>
<td>POL914</td>
<td>Power and the Modern State</td>
<td>12</td>
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<tr>
<td>POL984</td>
<td>Power and the Modern State: Advanced Topics</td>
<td>8</td>
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</tbody>
</table>

† These subjects in Politics may count towards the Master of Policy (Social Policy) and other Masters coursework degrees.

SUBJECT DESCRIPTIONS

POL914 POWER AND THE MODERN STATE

Autumn session: 12 credit points (3 hours per week, lectures and tutorials)

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

The subject examines perspectives on the modern state, including political, economic, sociological and philosophical views. Its aim is to understand the problems that confront the state in modern industrial societies in the context of conceptions of its origins and ends. Writers dealt with include Weber, Lenin, Gramsci, Foucault and Habermas, although reference is also made to classical understandings of the purpose and role of the state. Particular attention is paid to how the power of the state is or can be made legitimate, and to the problem of violence (the state monopoly of violence, fascism, war, and revolution) in the works dealt with.

Textbook

POL984 POWER AND THE MODERN STATE: ADVANCED TOPICS

First session; 8 credit points (3 hours of lectures/tutorials)

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

The subject examines at an advanced level political, economic, sociological and philosophical perspectives on the modern state. It assumes a background in and understanding of political economy in modern industrial societies such as Australia, Britain and America. The aim is to understand problems confronting the state in these societies, in the context of conceptions of the origins and ends of the state. Writers dealt with include Weber, Lenin, Gramsci, Foucault and Habermas, although reference is also made to classical understandings of the purpose and role of the state. Particular attention is paid to how the power of the state is legitimatated, and to the problem of violence (the state monopoly of violence, fascism, war and revolution). There is scope for students to specialise in areas of expertise or interest.

Textbook(s)
To be advised.
POL931 MAJOR THESIS

*Full year: 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.
SCIENCE AND TECHNOLOGY STUDIES

INTRODUCTION

The following postgraduate degrees and diplomas are available:

1. Graduate Diploma in Arts
2. Master of Arts (Technology Policy)
3. Honours Master of Arts
   (a) (Science and Technology Studies) by Coursework and/or Research
   (b) (Technology and Social Change) by Coursework
   (c) (History, Philosophy and Politics of Science) by Coursework and/or Research
4. Doctor of Philosophy

For the Graduate Diploma, subjects are selected from the undergraduate schedules of subjects set out in the Undergraduate Calendar. Please refer to the information about this diploma on the following pages.

The schedule of subjects available for Honours Master degrees is set out below.

For the Doctor of Philosophy degree candidates enrol in the subject STS999 Thesis.

The specific requirements for each degree and diploma and the descriptions of the subjects available are set out in the pages following the schedule of subjects.

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master

SCHEDULE OF GRADUATE SUBJECTS

MASTER OF ARTS (TECHNOLOGY POLICY)

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<th>Number</th>
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<tr>
<td>STS921</td>
<td>The Dynamics of Science and Technology</td>
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<td>STS943</td>
<td>Technology Policy and the Policy Environment</td>
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<tr>
<td>STS944</td>
<td>Research Indicators and Instruments</td>
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<td>STS945</td>
<td>Technology and Economics</td>
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<td>STS946</td>
<td>Management of Technological Change</td>
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<td>STS947</td>
<td>Case Studies in Science and Technology Policy</td>
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<td>STS948</td>
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HONOURS MASTER OF ARTS

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<tr>
<td>STS902</td>
<td>Advanced topics in Science and Technology Studies</td>
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<tr>
<td>STS903</td>
<td>Minor Thesis</td>
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COURSE DESCRIPTIONS

1. 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 University Regulations 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.

2. MASTER OF ARTS (TECHNOLOGY POLICY)

This degree is offered by the Department of Science and Technology Studies and the Centre for Technology and Social Change which have combined their expertise to develop a programme focussed on the management of technology in the public and private sector. The course is international in scope, drawing on experience from both advanced and newly emerging industrialised nations including the
US, Europe, Japan and Korea, Australia and other Asian nations. It is designed to be useful for students from both developing and developed countries. The programme is expected to be especially useful for scientists in the public and productive sector dealing with science and technology; managers and administrators required to make decisions about research, technology transfer or the development and implementation of a technology; and graduates intending to enter a career involving technology and science policy and management.

The programme is inter-disciplinary in nature and is designed to develop a deep understanding and professional capability in the area of the management of science and technology.

Students are required to complete the subjects set out in the Schedule.

3. HONOURS MASTER OF ARTS

The Department of Science and Technology Studies offers three separate Honours Masters programs by coursework. The first (Program 1) is open to students with a background in Science and Technology Studies who wish to pursue their studies at a higher level. The remaining two programs are designed primarily for students with less or no background in STS. Program 2 (the MA in the area of Technology and Social Change) focuses on the new area of the study of technology in its socio-economic and political context. Program 3 (the MA in the area of History, Philosophy and Politics of Science) centres on the nature and dynamics of science studied from historical, philosophical, sociological and political perspectives.

PROGRAM 1

(a) 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.

Structure

Students entering the program with a degree in Science and Technology Studies or a degree in another appropriate discipline at a standard below Honours Class II, Division 2 (Category A) 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 (Category B) will be required to complete subjects with a minimum value of 48 credit points.

Category A

Students are required to take their first 48 credit points from subjects offered in Programs 2 and 3 selected as approved by the Head of the Department.

Category B

Category B students and Category A students who have successfully completed the first 48 credit points of the program will select their subjects from the following:

- STS901 Theory and Methods of Science and Technology Studies
- STS902 Advanced Topics in Science and Technology Studies
- STS903 Minor Thesis
- STS951 Research Report
- STS999 Major Thesis

Interdisciplinary Seminar

All students 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.

PROGRAM 2

(b) Honours Master of Arts (Technology and Social Change)

This program offers a coherent set of courses in the new area of technology in its socio-economic and political context.

Technology plays a central and crucial role in our society. Its social and economic implications are becoming increasingly important and contentious issues. These postgraduate courses are 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 technology and its social, economic and political dimensions in modern industrial society.

The degree of Honours Master of Arts in the area of technology and social change 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 technology.

Structure

Students entering the program with a degree in Science and Technology Studies or a degree in another appropriate discipline at a standard below Honours Class II, Division 2 (Category A) will be required to complete subjects with a
minimum value of 96 credit points. Those with an Honours degree in Science and Technology Studies or its equivalent at a standard above Class II, Division 2 (Category B) will be required to complete subjects with a minimum value of 48 credit points. Those who have met the requirements of the Master of Arts (Technology Policy) (Category C) will be required to complete 48 credit points.

Category A students are required to take the following subjects:

STS921 The Dynamics of Science and Technology
STS923 Technology and the State
STS945 Technology and Economics
STS946 The Management of Technological Change
and either
STS924 Minor Thesis
or
STS951 Research Report
and to select from the following subjects to make up the total of 96 credit points:

STS931 Risk Assessment
STS933 Energy and Technological Development
STS934 Genetics and Technological Innovation
STS935 The Impact of Computers and Communications Technology
STS936 The Technology of Medicine and Health
STS937 The Management of Technology
STS938 Science, Technics and Technology
STS939 Technology and War
STS940 Theories of Science, Technology and Society*
STS941 The Organisation of Modern Science
STS942 Women and Technology*

Category B students are required to take 48 credit points from the following subjects:

STS921 The Dynamics of Science and Technology
STS923 Technology and the State
STS931 Risk Assessment, Health and Safety
STS933 Energy and Technological Development
STS934 Genetics and Technological Innovation
STS935 The Impact of Computers and Communications Technology
STS936 The Technology of Medicine and Health
STS937 The Management of Technology
STS938 Science, Technics and Technology
STS939 Technology and War
STS940 Theories of Science, Technology and Society*
STS941 The Organisation of Modern Science
STS942 Women and Technology*

Category C students are required to take 48 credit points from the following subjects:

STS923 Technology and the State
STS924 Minor Thesis
STS931 Risk Assessment, Health and Safety
STS933 Energy and Technological Development
STS934 Genetics and Technological Innovation
STS935 The Impact of Computers and Communications Technology
STS936 The Technology of Medicine and Health
STS938 Science, Technics and Technology
STS939 Technology and War
STS940 Theories of Science, Technology and Society*
STS941 The Organisation of Modern Science
STS942 Women and Technology*
STS951 Research Report

12 credit points must be taken from:

STS921 The Dynamics of Science and Technology

Category C students are required to take 48 credit points from the following subjects:

STS931 Risk Assessment, Health and Safety
STS933 Energy and Technological Development
STS934 Genetics and Technological Innovation
STS935 The Impact of Computers and Communications Technology
STS936 The Technology of Medicine and Health
STS938 Science, Technics and Technology
STS939 Technology and War
STS940 Theories of Science, Technology and Society*
STS941 The Organisation of Modern Science
STS942 Women and Technology*
STS951 Research Report

Interdisciplinary Seminar
All students 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 Session 1 and 2.

Assessment
Continuous Assessment by written assignments and seminar dissertations.

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

Program Determination
Students wishing to enrol for this program must have their proposed course of study approved by the Head of the Department.

* To be offered in alternate years. Not on offer in 1990.
PROGRAM 3

(c) History, Philosophy and Politics of Science

This program offers a coherent set of courses focusing upon the nature and dynamics of science studied from historical, philosophical, sociological and political perspectives.

Structure

Students entering the program with a degree in Science and Technology Studies or a degree in another appropriate discipline at a standard below Honours Class II, Division 2 (Category A) 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 Class II, Division 2 or higher (Category B) will be required to complete subjects with a minimum value of 48 credit points.

Category A

Students are required to select from the following subjects to make up the total of 96 credit points, including STS905 and STS906 and either STS903 or STS999; and taking no more than 24 credit points from STS936, STS940 and STS942.

Category B

Students are required to select from the following subjects to make up the total of 48 credit points, including either STS903 or STS999; and taking no more than 12 credit points from STS936, STS940, STS941 and STS942.

STS902 Advanced Topics in Science and Technology Studies
STS903 Minor Thesis
STS904 Science, Technology and Society in Antiquity and the Middle Ages
STS905 Science, Technology and Society in Early Modern Europe 1500-1750*
STS906 The Social History of Evolutionary Biology
STS908 The Social History of Medicine and Health Care*
STS934 Genetics and Technological Innovation
STS936 Technology of Medicine and Health
STS940 Theories of Science, Technology and Society*
STS941 The Organisation of Modern Science
STS942 Women and Technology*
STS999 Major Thesis

* To be offered in alternate years. Not on offer in 1990.

Interdisciplinary Seminar

All students 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 Sessions 1 & 2.

Assessment

Continuous assessment by written assignments and seminar dissertations.

Entry to Course

Will be dependent upon approval by the Head of Department.

Program Determination

Students wishing to enrol for this program must have their proposed course of study approved by the Head of Department.

SUBJECT DESCRIPTIONS

STS901 THEORIES AND METHODS OF SCIENCE AND TECHNOLOGY STUDIES

Autumn or spring session; 12 credit points (contact hours per week: 3 hrs seminars)

Assessment: Essays and Seminar papers.

Students will study topics appropriate to their field of special interest subject to the approval of the Head of Department.

STS902 ADVANCED TOPICS IN SCIENCE AND TECHNOLOGY STUDIES

Autumn or spring session; 12 credit points (contact hours per week: 3 hrs seminars)

Assessment: Essays and Seminar papers.

Students will study topics appropriate to their field of special interest, subject to the approval of the Head of the Department.

STS903 MINOR THESIS

Autumn or spring session; 24 credit points (contact hrs per week: 4 hrs)

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.

STS904 SCIENCE, TECHNOLOGY AND SOCIETY IN ANTIQUITY AND THE MIDDLE AGES

Autumn Session; 12 credit points (3 contact hours per week)

Assessment: 1 essay, 1 seminar paper and two oral seminar criticisms.

This subject concentrates on social aspects of the history of science and technology in classical antiquity and the late Middle Ages, and upon the analysis of existing interpretive
perspectives in the historical literature. Topics will include: conditions of the rise of Greek natural philosophy and its relation to myth; socio-political resonances of Greek natural philosophies; interpretations of the 'decline' of ancient science; the nature of ancient technology and its social role, including its relation to natural philosophy; the rise of the European universities and the construction of Scholastic Aristotelianism; Medieval contributions to mechanics, optics and astronomy and their limitations; interpretations of Medieval science; printing and the problem of the 'Renaissance' in the sciences and natural philosophy.

Lecturer: John Schuster

STS905 SCIENCE, TECHNOLOGY AND SOCIETY IN EARLY MODERN EUROPE 1500-1750*
Autumn or spring session; 12 credit points (3 contact hours per week)
Assessment: 1 essay, 1 seminar paper and two oral seminar criticisms.

This subject concentrates on social aspects of the history of science and technology in the period of the Scientific Revolution and Early Enlightenment. It also focuses upon interpretive perspectives in the historical literature and their political and normative resonances. Topics will include: social and economic factors in changing images of nature; the decline of Scholasticism and the re-evaluation of technology and practice; the rise of the cult of method and the mechanistic world-view; the social construction of experimental natural philosophy; the crisis of the 17th century and the Scientific Revolution; Marxist, idealist and constructivist approaches to the Scientific Revolution; science, religion and politics during the English Revolution, Commonwealth and Restoration; changing perspectives in Newton scholarship.

Lecturer: John Schuster

STS906 THE SOCIAL HISTORY OF EVOLUTIONARY BIOLOGY*
Autumn or spring session; 12 credit points (3 contact hours per week)
Assessment: 2 essays, 1 seminar paper.

An examination of the social history of evolutionary biology, based primarily on recent contextual historiography. Emphasis will be placed on the micro-politics and sociology of the scientific community and scientific institutions, as well as on the larger socio-economic, political and intellectual contexts which have shaped evolutionary biology and its practice.

Lecturer: Evelleen Richards

STS908 THE SOCIAL HISTORY OF MEDICINE AND HEALTH CARE*
Autumn or spring session; 12 credit points (3 contact hours per week)
Assessment: 1 essay, 2 seminar papers.

An analysis of the interrelationship of the state, professional groups and knowledge claims in the development of modern medicine.

Lecturer: Evelleen Richards

STS921 THE DYNAMICS OF SCIENCE AND TECHNOLOGY
Double session; 12 credit points (4 contact hours per week)
Assessment: 1 Group Project (approximate word contribution 2000) (20%), 2 Case Study Projects (3000 words each) (30%), 4 Review Papers (15000 words each) (30%), 1 Essay (4000 words each) (20%). (Total Words: 18000)

The aim of this subject is to introduce students to contemporary research on the dynamics of science and technology (S&T) in their social context. This general aim is addressed through an assessment of the alternative explanations of scientific and technological change and how they inform the promotion and regulation of S&T for economic and political purposes. Against the background of a critical evaluation of traditional linear approaches to science, technology and development, the subject introduces the student to (i) contemporary approaches to scientific and technological change and their implications for the promotion of science and technology; (ii) alternative perspectives on scientific and technological control and their implications for the regulation of science and technology; and (iii) the realities of bureaucratic politics and socio-technical engineering in combining 'internal' and 'external' influences on S&T and 'promotion' and 'regulation' mechanisms in shaping sectoral, institutional and national forms of development. The course concludes with a discussion of the implications of contemporary perspectives on the dynamics of S&T for the role of the policy analyst.

Textbooks
J. Ronayne, Science in Government
N. Clark, The Political Economy of Science and Technology

* To be offered in alternate years. Not on offer in 1990.
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.

Textbook

Subject Co-ordinator & Lecturer: Stewart Russell

STS934 GENETICS AND TECHNOLOGICAL INNOVATION
Spring session; 12 credit points (contact hours per week: 3 hours)
Assessment: 3 seminar papers (2000 words each), tutorial participation

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 genetic code; 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
Nossal, G.J.V. Reshaping Life, Melbourne University Press.

Lecturer: Terry Stokes

STS935 THE IMPACT OF COMPUTERS AND COMMUNICATIONS TECHNOLOGY
Autumn session; 12 credit points (contact hours per week: 3 hours)
Assessment: 2 x 3000 word essays, 1 seminar paper, 1 presentation

This subject concentrates on the issues that technological, regulatory and political developments have created in modern computer and telecommunications technology. Topics covered include: the role of telecommunications in the social transformation described as the Information
Society; the developing commerce in electronic information; telecommunications as a technology of information control; national and international dimensions of telecommunications policy and conflict; prospects for democratic communications; telecommunications and political power, development and dependency.

Students will be expected to interpret technical, regulatory and political developments in telecommunications, revealing the background and underlying motivations of the parties involved. They should also be capable of assessing the various strategies adopted by different countries towards their telecommunications and to be able to identify their strengths and weaknesses.

Lecturer: Ian Reinecke

STS936 THE TECHNOLOGY OF MEDICINE AND HEALTH
Spring session; 12 credit points (contact hours per week: 3 hours)
Assessment: 1 essay, 2 seminar papers

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.

Lecturer: Evelleen Richards

STS937 THE MANAGEMENT OF TECHNOLOGY
Autumn or spring session; 6 credit points (3 contact hours per week)
Assessment: participation and performance in seminars (50%), project (50%)

The nature and process of technological innovation; strategies for research and development; technological forecasting; project selection and evaluation; financial evaluation of R & D; R & D programme planning and control; the effects of technological change; government incentives and regulations.

Textbooks
Norris, K. & Vaizey, J. The Economics of Research and Technology.
Twiss, B., Managing Technological Innovation. (This subject is available only to Master of Management students).
Lecturer: Ron Johnston

STS938 SCIENCE, TECHNICS AND TECHNOLOGY
Spring session; 12 credit points (3 contact hours per week)

Assessment: 2 essays: 30% % 50%, 1 seminar paper: 20%

An introduction to major theories and philosophies concerned with technology and progress. Debates surrounding the role of scientists and the ideological role of technology in society, past interpretations of the nature of technology and progress, and the recent development of 'alternative technology' and 'limits to growth' theories are examined. Analysis of the links between technology and freedom, and technology and alienation, is central to this course.

Textbooks

Lecturer: To be advised.

STS939 TECHNOLOGY AND WAR
Spring session; 12 credit points (3 contact hours per week)

An analysis of the changing character of war and peace in relation to technological change. The history of military technology; the relationships between scientists, the military, the state and corporations; the arms race, balances of power, developments in biochemical warfare, nuclear weapons and nuclear war; and theories of conflict resolution and strategies for peace are examined.

Textbooks
No single suitable text.

STS940 THEORIES OF SCIENCE TECHNOLOGY AND SOCIETY: 1850 TO THE PRESENT*
Autumn or spring session; 12 credit points (4 contact hours per week)
Assessment: 1 essay, 1 seminar paper and two oral seminar criticisms.

Since the rise of 19th Century Positivism theories of scientific method and social theories have been closely intertwined, and both sorts of theory have had political implications. The subject surveys the debates over the nature of science from nineteenth century Positivism to the present, focussing upon the ways these debates have reflected opposing political philosophies and social theories.

Topics will include: Classical Positivism as ideology and as methodology; Logical Positivism and the defence of the social authority of science; methodology and

* Not on offer in 1990.
ideology in the work of Karl Popper; Thomas Kuhn, Feyerabend and the demise of Positivist methodology; the new scientific realism and the debate about Marx's method; Althusser's critique of empiricism, the Frankfurt School

Textbooks

Lecturer: John Schuster

STS941 THE ORGANISATION OF MODERN SCIENCE
Spring session; 12 credit points (3 contact hours per week)
Assessment: 2 essays totalling 6000 words based on seminars, tutorial participation.

This subject will examine the development, organisation and influence of science over the past fifty years. The focus will be comparative and contemporary but with a strong emphasis on both historical and policy dimensions. It will examine the changing patterns of organisation at different times and places, and the arguments about the place and influence of science which led to the changes. Issues addressed include the kinds of scientific research conducted, its objectives, its organisational structures; and its financing and management in a range of countries, selected from USA, USSR, Western Europe, Japan, China, Australia and the third world.

Textbooks

Lecturer: Terry Stokes

STS942 WOMEN AND TECHNOLOGY*
Autumn or spring session; 12 credit (3 contact hours per week)
Assessment: 1 essay, 2 seminar papers

An examination of technology in terms of its relation to women and women's work. Themes will include: the 'masculinity' of technology; the exclusion of women from technology; kitchen technology and the domestic revolution; reproductive technology; women and technology assessment; the impact of computers on 'women's work'.

Textbooks

Lecturer: Evelleen Richards

* To be offered in alternate years. Not on offer in 1990.

STS943 TECHNOLOGY POLICY AND THE POLICY ENVIRONMENT
Autumn session; 6 credit points (4 contact hours per week)
Assessment: 1 essay (25%), 1 seminar (20%), 2 critical reviews (20%), 1 research paper (35%)

The objectives of this subject are to provide students with a deep knowledge of the policy process, its various stages and the forces which shape the formulation of policy with respect to science and technology.

The emphasis will be on strategic planning for the development and application of science and technology and the interplay of market, trade, labour, economic, political and social forces in the shaping of science and technology policy.

Issues to be studied include approaches to the study of public policy, theories of policymaking and stages of the policy process, the administrative process - theory and practice, the S&T machinery of governments (comparing industrialised, industrialising and developing countries), policy instruments for science and technology, the interest communities for science and technology, and the interaction of S&T policy with fiscal, trade and industrial policies.

Textbooks
G. Davis et al, Public Policy in Australia, Allen & Unwin, Sydney, 1988
J. Ronayne, Science in Government, Edward Arnold, Melbourne, 1984
S. Hill and R. Johnston (eds), Future Tense? Technology in Australia, University of Queensland Press, St Lucia, 1985

Subject Co-ordinator: To be advised.
Lecturer(s): To be advised.
STS944 METHODS, INDICATORS AND INSTRUMENTS
Autumn session; 6 credit points (4 contact hours per week)
Assessment: 1 forecasting/evaluation exercise (25%), 1 research report (25%), 1 team project (25%), 1 data-base access exercise (25%)

Contemporary science and technology (S&T) policy development and analysis is making increased use of a broad range of analytical and information-gathering techniques. The objectives of this course are to provide a working knowledge of a wide range of these techniques, together with an understanding of their fields of application, conditions of use and limitations.

The course will provide techniques, skills and models which can be used to assist in decision-making about resource allocation to science and technology and to assess the effectiveness of science and technology policies.

The course will cover the role of policy research in public policy decision-making, research design and strategy, technology forecasting and evaluation, cost-benefit analysis, project selection, priority-setting, quantitative analysis of productivity increases in S&T, including institutional efficiency, resource allocation, and labour force resources, indicators of research output, performance and technological potential, and the use of national and international databases.

Textbooks

Subject Co-ordinator: To be advised
Lecturer: To be advised.

STS945 TECHNOLOGY AND ECONOMICS
Autumn session; 6 credit points (4 contact hours per week)
Assessment: essay (25%), seminar paper (20%), reviews (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.

Textbook(s)

Subject Co-ordinator: To be advised
Lecturer(s): To be advised.

STS946 MANAGEMENT OF TECHNOLOGICAL CHANGE
Spring session; 6 credit points (4 contact hours per week)
Assessment: 1 major case study (50%), 6 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 intervention, new manufacturing technologies, work organisation and skill formation, and management information systems.

Textbooks
P. Link, Marketing Technology, Nelson Wadsworth, Melbourne, 1987
M. Fransman and K. King, Technological Capability in the Third World, Macmillan, 1984

Subject Co-ordinator: To be advised
Lecturer(s): To be advised.

STS947 CASE STUDIES IN SCIENCE AND TECHNOLOGY POLICY
Spring session; 6 credit points (4 contact hours per week)
Assessment: 1 major case study (70%), 2 minor case studies (30%)

The objectives of this subject are to provide practical lessons and experience in the application of methods of analysis, policy formulation, implementation monitoring and evaluation on science and technology issues.

Students will engage in a small number of case studies based on real or simulated decision-making environments in which they will be required to identify key issues and players, collect information, evolve strategies, enrol supporters, and adjust to a continually changing economic and political environment.

Typical case studies include the development of a pesticide residue control policy, a national communication satellite facility, a national set of research priorities, a set of performance indicators for education funding and negotiating a major computer system purchase.

Textbooks
Relevant material will be provided initially by the Department through its policy laboratory.

Subject Co-ordinator: To be advised
Lecturer: To be advised.

STS948 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 their experience 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.

Subject Co-ordinator: To be advised
Lecturer(s): To be advised.

STS951 RESEARCH REPORT
Autumn or spring session; 12 credit points (3 contact hours per week)

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.

SCIENCE AND TECHNOLOGY STUDIES 111

STS961 RISK ASSESSMENT, HEALTH AND SAFETY
Spring session; 8 credit points
Pre-requisite: available only to Master of Social Policy students
Assessment: to be advised

For subject description see STS931 Risk Assessment, Health and Society

*STS962 WOMEN AND TECHNOLOGY
Spring session; 8 credit points
Pre-requisite: available only to Master of Social Policy students
Assessment: to be advised

For subject description see STS942 Women and Technology.

STS963 TECHNOLOGY AND THE STATE
Autumn session; 8 credit points
Pre-requisite: available only to Master of Social Policy students
Assessment: to be advised

For subject description see STS923 Technology and the State

STS968 SCIENCE, TECHNICS AND TECHNOLOGY
Spring session; 8 credit points
Pre-requisite: available only to Master of Social Policy students
Assessment: to be advised

For subject description see STS938 Science, Technics and Technology

STS971 STUDIES IN LAW AND TECHNOLOGICAL CHANGE**
Autumn session; 12 credit points (2 two-hour lecture/seminars per week)
Assessment: 1 essay 5000 words (45%), 2 seminar papers of 1500 words each (20%) and seminar performance (15%).
Pre-requisite: N/A

This subject investigates three broad areas: (1) how law is used as a mechanism for regulating technological change, including the process of law reform, and the suitability of law for this purpose; (2) the impact of technological changes on legal institutions and practices; and (3) how legal institutions and procedures affect the course and nature of scientific, medical and technological controversies, for

** The Department of Science and Technology Studies and the Department of Legal Studies intend to introduce in 1991 an Honours Masters Degree in Law/STS to be jointly taught by both Departments and for which STS371 and STS372 will be core subjects.
example, the role of expert witnesses in such controversies.

The subject will proceed through the examination of case studies in areas of current interest, for example: in-vitro fertilization and surrogacy; data protection and issues of privacy; drug regulation and medical practice; environmental issues; euthanasia; the nature, role and assessment of forensic evidence.

These case studies will be considered in the light of current perspectives on the social/political construction of scientific and technological knowledge; the function of legitimatory rhetorics in science; and the dynamics of scientific and technological controversies in general.

This subject will be taught jointly by members of the Department of Legal Studies and Department of Science and Technology Studies.

Textbooks
There are no set textbooks for this subject. Comprehensive reading lists will be provided at the beginning of session.

Subject Co-ordinator: Associate Professor J. Falk/Professor H. Gamble
Lecturer(s): To be advised

STS972 ADVANCED STUDIES IN LAW AND TECHNOLOGICAL CHANGE**
Spring session: 12 credit points (1 hour of research supervision per week and several 2 hour seminars as need to complete assessment requirements)
Assessment: 1 8500 word research paper (75%) and 1 seminar presentation (25%).
Pre-requisite: STS971

This subject involves supervised research leading to the completion of a research paper on a topic related to the case studies examined in STS971. Students will also be required to make a seminar presentation, prior to the completion of the paper.

This subject will be taught jointly by members of the Department of Legal Studies and Department of Science and Technology Studies.

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**SOCIETY**

**INTRODUCTION**

The following postgraduate degrees and diplomas are available.

1. Graduate Diploma in Arts
2. Master of Arts
3. Master of Policy (Social Policy)
4. Honours Master of Arts by Research
5. Doctor of Philosophy

For the Graduate Diploma, subjects are selected from the undergraduate schedules of subjects set out in the Undergraduate Calendar. Please refer to the information about this diploma on the following pages.

The schedule of subjects available for Masters degrees is set out on the following pages.

For the Doctor of Philosophy degree and the Honours Master of Arts by Research degree candidates enrol in the subject SOC999 Thesis.

The specific requirements for each degree and diploma and the descriptions of the subjects available are set out in the pages following the schedule of subjects.

**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:

- Social Policy
- Ethnic Relations
- Political Economy of Migration
- Urban Political Economy and Social Movements
- Impact of Science and Technology in Developing Countries
- Social Change in Papua New Guinea and Irian Jaya
- Regional Development and the Role of the Steel Industry
- Technology, Social Change and Social Relations of Production
- Unemployment
- Media and Australian Society
- The Changing Role of the Military in Contemporary Society
- Social and Cultural Aspects of the Environment Crisis
- Sociology of the Sciences
- Myth, shamanism and the occult: the institutionalisation of cosmologies
- Consciousness and Human Identity
- Analyses of Culture
- Epistemology and the Sociology of Knowledge
- Sociology of Organisations

**SCHEDULE OF GRADUATE SUBJECTS**

# NOTE:
A limited number of the following SOC900 level subjects will be offered in any one year. Intending students should consult the Department before enrolment.

**MASTER OF ARTS**

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<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tr>
<td>SOC910</td>
<td>Postgraduate Sociology Seminar (Session Offered - A)</td>
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<tr>
<td>SOC921</td>
<td>Special Topic in Sociological Studies - A</td>
<td>8</td>
</tr>
<tr>
<td>SOC922</td>
<td>Special Topic in Sociological Studies - B</td>
<td>8</td>
</tr>
<tr>
<td>SOC930</td>
<td>Advanced Contemporary Social and Political Thought</td>
<td>8</td>
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<tr>
<td>SOC933</td>
<td>Advanced Research Techniques (Session Offered - 1 or 2)</td>
<td>8</td>
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<tr>
<td>SOC938</td>
<td>Advanced Studies in the Sociology of Health and Illness</td>
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<tr>
<td>SOC939</td>
<td>Advanced Studies in the Sociology of Crime and Justice</td>
<td>8</td>
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<tr>
<td>SOC940</td>
<td>Advanced Social Policy Studies</td>
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<tr>
<td>SOC941</td>
<td>Advanced Political Sociology</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 Sociology</td>
<td>8</td>
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<tr>
<td>SOC944</td>
<td>Advanced Organisation Studies*</td>
<td>8</td>
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<tr>
<td>SOC945</td>
<td>Advanced Studies in the Sociology of Technology and Industrial Society*</td>
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<tr>
<td>SOC950</td>
<td>Advanced Studies in the Individual in Society</td>
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<tr>
<td>SOC952</td>
<td>Advanced Studies in Psychoanalysis and Culture</td>
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<tr>
<td>SOC953</td>
<td>Advanced Studies of Mass Communication</td>
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* Not on offer in 1990.
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. Courses available will allow students to focus their sociological coursework either towards vocational interests, e.g. community development, management of technological change, organisation and personnel, or towards a more general understanding of the social world. 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 University Regulations 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 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 recommendation of the Head of the Sociology Department who shall assess the applicant's aptitude for sustained sociological study at a reasonably advanced level.

2. 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. The program is designed particularly to capitalise on the Department's capabilities in areas of cultural and knowledge studies. Students are required to choose courses 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 should ensure that they discuss their overall program with the Head of the Department prior to enrolment, at which time the most appropriate program will be decided.

(3) Subjects will be offered depending on resources and demand; not all subjects will be offered in any one year or session.

(4) Students enrolled in courses, SOC921 through to SOC960 will need to gain CREDIT grade to pass the course.

3. MASTER OF POLICY (SOCIAL POLICY)

(1) The purpose of the Master of Policy is to allow pass graduates in the social sciences or with other approved areas of study or experience, to pursue policy-oriented studies concerned with social issues. The Masters Programme (M.Pol (Soc)) allows for a broadly based, flexible, interdisciplinary programme which qualifies graduates to operate more effectively in government, welfare bodies, trade unions or private industry. Students shall be admitted under the regulations covering the Masters Degree, with the additional qualifications covered below.

(2) Students are required to complete successfully an approved programme of study of 48 credit points drawn from the Schedule of Graduate Studies, which must include:

(a) SPS901 Case Studies in Social Policy;

(b) SPS902 Social Policy Research Project - the topic for which shall relate to the coherent area of substantive policy studies approved by Council for each student;

(c) At least two of the three courses: SPS903 Methods in the Social Sciences; SPS904 Advanced Social Policy Studies; SPS905 Policy and the Policy Environment.

(d) The remaining credit points (to 48) from subjects drawn from the Schedule of Graduate Subjects and approved by Council as comprising a coherent area of substantive policy studies - these may be policy areas such as health,
welfare, employment, equal opportunity, etc., population groups such as women, the aged, youth, Aborigines, people with disabilities, migrants, etc., or methodologies such as experimental, evaluative, ethnographic, action research, etc. Students may advance their own combination of subjects with a rationale as to their coherence, for determination. Students shall not normally include subjects drawn all from the same Department.

(e) Where previous studies do not include courses in at least one appropriate social science methodology, the successful completion of such a subject may be required - i.e. SPS903 Methods in the Social Sciences.

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

(4) Students shall discuss their proposed programme with an academic adviser prior to enrolment and shall be required to have the course of study approved by Council.

(5) In all cases students shall undertake any additional work required by Departments 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 programme. Full-time students are expected to complete the degree in two academic sessions, part-time students in not less than four and not more than six academic sessions.

**SUBJECT DESCRIPTIONS**

**SOC910 POSTGRADUATE SOCIOLOGY SEMINAR**

*Double session; 8 credit points (2 contact hours; seminars)*

Assessment: Seminar presentations of ongoing thesis and project work and general participation.

This program provides a core seminar in which all postgraduate students will normally be expected to participate. The subject matter will explore contemporary theoretical and methodological issues in sociology. The course will particularly provide a means of exploring at a general level, theoretical and methodological issues that are raised within the more specialised SOC900 courses.

**Textbooks**
To be advised.

**SOC921 SPECIAL TOPIC IN SOCIOLOGICAL STUDIES - A**

*Autumn session; 8 credit points; variable combination of individual supervision and seminars*

Assessment: one essay of approximately 4,000 words plus tutorial assignments.

**SOC922 SPECIAL TOPIC IN SOCIOLOGICAL STUDIES - B**

*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 considers to be of suitable substance and level to be offered as a SOC 900 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 the Department.

**SOC933 ADVANCED RESEARCH TECHNIQUES**

*Autumn or spring session; 8 credit points (3 contact hours; 1 lecture; 1 'practical' seminar)*

Assessment: 1 research project (5,000 words); continuous assessment of work set in 'practical' seminars.

This subject will explore the comparative validity of alternate techniques of research enquiry (with particular emphasis on the contrast of empirical vs. subjective forms of analysis). Students will gain experience in using traditional sociological tools of analysis - questionnaire, interviewing and formal observation, as well as in less conventional - film, video, participant and unobstructive techniques of observation and measurement.

**SOC938 ADVANCED STUDIES IN THE SOCIOLOGY OF HEALTH AND ILLNESS**

*Autumn or spring session; 8 credit points (3 contact hrs; 1 x 1 lecture, 1 x 2 hr seminar per week)*

Assessment: 1 seminar paper; 1 essay/research project of up to 5,000 words.

The course draws on a wide range of sociological theories and a substantial body of sociological research as applied to health and illness. Functionalist, Symbolic Interactionist, Weberian, Marxist, Feminist and Foucauldian perspectives will be examined. The course is divided into two parts. The first half focusses on the illness experience and on interaction
between health care consumers and providers. We will discuss Parson's sick role, the stigma of illness and disability, institutionalisation, and the social construction of 'diseases' such as infertility, AIDS and depression. In the second half it broadens out to examine macrosociological issues, and in particular the economic and political context of health and health care. Topics include the division of labour in health care, inequalities in health, aboriginal health, women's health, prevention, and current health policy initiatives at federal, state and regional levels.

SOC939 ADVANCED STUDIES IN THE SOCIOLOGY OF CRIME AND JUSTICE
Autumn or spring session; 8 credit points (3 contact hrs; 1 x 1 hr lecture, 1 x 2 hr seminar per week)
Assessment: 1 seminar paper; 1 essay/research project of up to 5,000 words.

Societal rules regarding what behaviour is to be deemed deviant have been a central concern of sociology and social anthropology. This course offers an examination of the social construction of deviance and its management. Opening with a review of the classic studies on crime, deviance and law enforcement, the course examines the many dimensions of crime and criminality, paying particular attention to contemporary capitalist societies. Among the issues to be examined are criminality, class, gender and ethnicity; 'organised' crime; police and policing; courts and prisons as institutions; 'white collar' crime; metropolitan and peripheral societies; and crime, justice and imperialism.

SOC940 ADVANCED SOCIAL POLICY STUDIES
Autumn or spring session; 8 credit points (3 contact hrs; 1 lecture, 1 seminar per week)
Assessment: 1 essay, 2 seminar papers

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.

The discussion of social policy in Australia will focus on understanding the role of the State, the development and impact of policy and the historical and materialist base in which the State and its policies are located.

SOC941 ADVANCED POLITICAL SOCIOLOGY
Autumn or spring session; 8 credit points; lectures and seminars

Assessment: 2 seminar papers; long essay

The course will explore the social bases and contexts of political life. In particular it will examine processes of decision-making, the nature of political parties, processes of social change, and the bases of social and political mobilization in contemporary societies. The course will provide an opportunity to compare political processes in modern nation states, and will examine the relations between social base, political ideology and political action.

SOC942 ADVANCED RACE AND ETHNIC STUDIES
Autumn or spring session; 8 credit points (3 contact hrs; lecture/seminars)
Assessment: 2 seminars and long essay

The concepts of race and ethnicity are highly contentious within Sociology. Within an analysis of the Australian social experience of colonisation and immigration questions of race and ethnicity will be explored as explanatory frameworks in approaching inter-group relations. In particular, class will be tested against social phenomena which certain sociologists interpret within the dynamics of 'race', 'ethnicity' and 'gender' analysis.

SOC943 ADVANCED URBAN SOCIOLOGY
Spring session; 8 credit points (3 contact hrs; 1 lecture/seminar per week)
Assessment: Original project work; 2 seminar papers

This subject will concentrate on an evaluation of the three levels of crisis in the sphere of collective consumption/reproduction: the crises of capitalism, the crisis of State intervention, and the crisis of State legitimacy.

The subject will focus on the emergence and histories of urban social movements, and their importance in developing an effective urban political economy. Case studies of Leeds, Paris, Sydney, San Francisco and Wollongong will be used to provide a comparative base.

SOC944 ADVANCED ORGANISATION STUDIES*
Autumn or spring session; 8 credit points (3 contact hrs; 1 lecture/1 seminar per week)
Assessment: 1 essay, 2 seminar papers

This subject uses work in the fields of psychology and sociology to study the relationship between the individual and the organisation at various organisational levels

* Not on offer in 1990.
and in different situations. Emphasis is on the extent to which the individual has autonomy within the organisation.

SOC945 ADVANCED STUDIES IN THE SOCIOLOGY OF TECHNOLOGY AND INDUSTRIAL SOCIETY
Autumn or spring session; 8 credit points (3 contact hrs; 1 lecture/1 seminar per week)
Assessment: 1 essay, 2 seminar papers

This subject examines the power of technological change to shape contemporary social functions, values, culture and institutions. Equally, the course will examine the social and cultural context for the shaping of scientific and technological innovation. The course will particularly explore sociological theories of industrial society and culture to identify the role of technology in contemporary society. It will examine the context of technology-social relations historically and cross-culturally, as well as through identifying the linkages between science and technology.

SOC950 ADVANCED STUDIES IN THE INDIVIDUAL IN SOCIETY
Autumn or spring session; 8 credit points (3 contact hrs; 1 lecture, 1 seminar per week)
Assessment: 1 essay, 2 seminar papers

A comparison of different theories of society and their assumptions with regard to the nature of the individual implicit in such theories (and perhaps vice versa). Sociologically established positions such as those of Marx, Weber, Durkheim, Comte, Parsons and Schutz (for example) will be contrasted with esoteric, "Occult", Comte, Parsons and Schutz (for example) will be contrasted with esoteric, "Occult", and non-western systems. The systems (universes) to be compared will depend to some extent on a balance between the interests of students and the course tutor.

SOC953 ADVANCED STUDIES IN MASS COMMUNICATION
Autumn or spring session; 8 credit points (3 contact hrs; 1 lecture, 1 seminar per week)
Assessment: 2 seminar papers, 1 essay

A study of the institutions, markets and content of mass communications, in particular the newspaper, television, radio and advertising industries. The sociological approach to this area studies the social and organisational context of the producers and consumers of the mass media, the social variables. Methodology employed is based upon structuralism/semiotics, cultural anthropology, political economy, social history and empirical sociology.

SOC954 ADVANCED STUDIES OF BELIEF SYSTEMS AND IDEOLOGIES
Autumn or spring session; 8 credit points (3 contact hrs; 1 lecture, 1 seminar per week)
Assessment: 1 essay, 2 seminar papers

This subject examines the notion that in certain ideologies, the belief system and the experiential concomitants of the belief system are inseparable, even in principle. Studying such ideologies therefore necessitates the individual student participating at an intellectual and behavioural level in order to move towards a theoretical perspective which includes these two components.

SOC956 ADVANCED STUDIES OF SOCIAL AND POLITICAL ANTHROPOLOGY OF THE "THIRD-WORLD"
Autumn or spring session; 8 credit points (3 contact hrs; 1 lecture, 1 seminar per week)
Assessment: 1 research project, 1 essay

The subject aims to acquaint students with the major theoretical writings on the "third-world" and its relations to the "first-world", including theories of imperialism and neocolonialism, development and underdevelopment. The subject focuses particularly on key economic and political concepts, and involves a discussion of technology and the varieties of recipient cultures in the "third-world". The major empirical focus will be on Papua New Guinea, Thailand and India.

SOC957 ADVANCED STUDIES IN THE SOCIOLOGY OF PEACE AND WAR
Autumn or spring session; 8 credit points (3 contact hrs; 1 lecture, 1 seminar per week)
Assessment: 1 essay, 2 seminar papers, compulsory excursion to Royal Military College Duntroon.

Warfare continues to absorb a considerable portion of all government spending. Yet the military machine, its aims, functions, and interactions with the rest of society is only hazily understood. The focus is twofold: i) the development of modern military systems, and their real and projected employment, ii) the social reality of individuals within the military structure.

* Not on offer in 1990.

consequences of this consumption, as well as the content itself and how it relates to these
SOC958 ADVANCED STUDIES IN THE
SOCIOLOGY OF NATURE AND HUMAN
ENVIRONMENT

Autumn or spring session; 8 credit points
(Contact hours: 1 x 1 hr lecture, 1 x 2 hr seminar per week)
Assessment: 1 seminar paper; 1 essay/research project of up to 5,000 words.

This course challenges the idea that 'nature' and 'environment' are simply physical categories. Starting with the proposition that 'nature' is culturally and historically variable and generally human-centred, the course explores the various effects that human society has had on the planet in the context of contemporary sociological theory. The broad aim of the course is to show that different kinds of relationships with the land are possible and necessary if we are to avoid global catastrophe. Towards this end, the development and critical assessment of 'ecological' perspectives and strategies of resource management will be investigated. The course also involves a critical assessment of the nature and role of expertise in the development of knowledge, belief and legislation about the environment and its pollution, modification and general control.

SOC959 ADVANCED STUDIES IN GENDER
IN SOCIETY

Spring session; 8 credit points (3 contact hours; 1 lecture, 1 x 2 hr seminar per week)
Assessment: 2 seminar papers; 1 essay of 5000 words.

This subject takes as its focus the complex interaction between capitalism and patriarchy in the construction of gender relations. The subject begins with a discussion of the classic debate on the sociology of gender construction and the contemporary perspectives on the nature/nurture debate presented by sociobiology. The cultural and ideological reproduction of gender is explored through the insights offered by psychoanalytic accounts of masculinity, femininity and sexual practice.

The subject then concentrates on the operation of gender relations in society. The focus is the role of the state in the reproduction, reinforcement and redefinition of gender division. The particular experience and expression of gender relations in Australia will be examined in the cases of equal employment opportunity/affirmative action and social services, especially health and welfare.

SOC960 ADVANCED COMMUNITY
RESEARCH

Autumn or spring session; 8 credit points (3 contact hrs; 1 lecture, 1 seminar per week)
Assessment: 1 seminar paper; 1 research project of up to 5,000 words
Pre-requisites: SOC231/331 and SOC232/332

This vocationally oriented course is designed to equip students with knowledge and experience required to carry out community research. The course involves the construction and execution of a research project with a community organisation in the Illawarra region. The research will be supervised by the course co-ordinator.

The research report will initially be presented as a work-in-progress seminar, and will meet the scholarly standards requisite of the sociological enterprise.

Textbook

SPS901 CASE STUDIES IN SOCIAL POLICY

Autumn or spring session; 8 credit points (4 hours per week in two seminars/workshops)
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. Case studies will be presented by visiting specialists and members of academic staff. Students will develop case analyses based on these presentations. Topics may include welfare, health, employment and communications policies, programmes 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.

SPS902 SOCIAL POLICY RESEARCH
PROJECT

Autumn or spring session; 8 credit points; 2 hour seminar once a fortnight
Assessment: Research Report of 10,000 - 15,000 words; participation in fortnightly work in progress seminars.

The research report shall be based on empirical research into a social policy issue which demonstrates significant problems for policy analysis and response. The issue will relate to the substantive area of study chosen
as a focus for the student's course work programme and approved by Council.

SPS903 METHODS IN THE SOCIAL SCIENCES
*Autumn or spring session; 8 credit points; 3 hour lecture/seminar per week.*
*Assessment: Participation in seminars, 1 seminar paper, 1 method exercise, 1 essay or project.*

The social sciences seek understandings of society through the application of research methods to social phenomena. The debate over the legitimacy and value of different methods and the outcomes they generate form the focus of this course. Practitioners from various disciplinary backgrounds provide students with demonstrations of how perspectives drawn from different disciplines have developed and can be applied. Students will develop skills in identifying methodologies and selecting appropriate approaches for specific problem resolution. Special attention will be given to the use of micro computers in the social sciences, through reviews of statistical, word processing and data base programmes.

SOC904 ADVANCED SOCIAL POLICY STUDIES
*Autumn or spring session; 8 credit points (3 contact hours; 1 lecture, 1 seminar per week)*
*Assessment: 1 essay, 2 seminar papers.*

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.

The discussion of social policy in Australia will focus on understanding the role of the State, the development and impact of policy and the historical and materialist base in which the State and its policies are located.

SPS905 POLICY AND THE POLICY ENVIRONMENT
*Autumn or spring session; 8 credit points (4 contact hours)*
*Assessment: 1 essay (25%), 1 seminar (20%), 2 critical reviews (20%), 1 research paper (35%)*

The objectives of this subject are to provide students with a deep knowledge of the policy process, its various stages and the forces which shape the formulation of policy with respect to science and technology.

The emphasis will be on strategic planning for the development and application of science and technology and the interplay of market, trade, labour, economic, political and social forces in the shaping of science and technology policy.

Issues to be studied include approaches to the study of public policy, theories of policy-making and stages of the policy process, the administrative process - theory and practice, the S&T machinery of governments (comparing industrialised, industrialising and developing countries), policy instruments for science and technology, the interest communities for science and technology, and the interaction of S&T policy with fiscal, trade and industrial policies.

SOC999 MINOR THESIS
*Double session; 24 credit points*
*Assessment: 1 research thesis*

SOC999 THESIS
*48 credit points*
FACULTY OF COMMERCE

PRINCIPAL OFFICERS

Dean: Associate Professor John Steinke
Sub Dean: Associate Professor Gary Tibbits
Faculty Officer: Ms Miranda Baker

MEMBERSHIP

The Faculty of Commerce is made up of the following Departments and Schools:

- Accountancy
- Economics
- Information Systems
- Legal Studies
- Management

COURSES

All Departments offer Honours Master of Commerce & Doctor of Philosophy degrees by research and some offer the Honours Master of Arts by research.

Major coursework programs are available in the Faculty in the following areas:

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<td>Occupational Health &amp; Safety</td>
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Application forms may be obtained from the Student Enquiry Office on the Ground Floor of the Administration Building or by writing to the Vice-Principal (Administration), The University of Wollongong, P.O. Box 1144, Wollongong, NSW, 2500, Australia.
ACCOUNTANCY

INTRODUCTION

The following postgraduate degrees and diplomas are available:

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

The schedule of subjects available for the Masters degrees is set out on the following pages.

For the Graduate Diploma, subjects are selected from the undergraduate schedules of subjects set out in the Undergraduate Calendar. Please refer to the information about this diploma on the following pages.

SCHEDULE OF GRADUATE SUBJECTS

HONOURS MASTER OF ARTS*

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<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<tr>
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<td>ACCY904</td>
<td>Financial Accounting</td>
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<td>ACCY993</td>
<td>Research Essay</td>
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<td>ACCY974</td>
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For the Doctor of Philosophy degree candidates enrol in the subject ACCY996 Thesis.

The specific requirements for each degree and diploma and the descriptions of the subjects available are set out in the pages following the schedule of subjects.

CURRENT RESEARCH AREAS

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

- External financial reporting
- Management accounting
- Auditing
- Business finance
- History of accounting thought
- Small business management
- Accounting and Information Systems
HONOURS MASTER OF ARTS* (Cont'd)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<tbody>
<tr>
<td>ACCY985</td>
<td>Special Topic in Accounting - A</td>
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<tr>
<td>ACCY986</td>
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<tr>
<td>ACCY994</td>
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<td>ACCY995</td>
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<tr>
<td>ACCY996</td>
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* NOTES:

1) Combination of subjects from the Departments of Economics, Accountancy, Legal Studies and Management may be approved by the Heads of the appropriate Departments. 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, Management, Legal Studies or Economics 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). A candidate may not include for this degree subjects similar in content to subjects included in the Honours part of the undergraduate course.

2) For general conditions of registration, see Honours Masters Degree Regulations and for additional specific conditions applying to Accountancy see Description of Postgraduate Courses - Accountancy.

3) For details of these subjects, refer to the Description of Subjects.

** Normally taught in collaboration with the Department of Management

*** Offered jointly with the Institute of Chartered Accountants in Australia. Candidates wishing to enrol in them must be employed by a firm of Chartered Accountants.

HONOURS MASTER OF COMMERCE*

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<td>ACCY993</td>
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</tr>
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</table>

Compulsory subjects for students not holding an Honours degree in Accountancy (that is, undertaking a 96 credit point Masters degree)

Optional subjects

| ACCY905  | International Accounting             | 6             |
| ACCY906  | Issues in Financial Accounting       | 6             |
| ACCY907  | Empirical Research Methods in Accounting | 6         |
| ACCY908  | Applied Financial Accounting         | 6             |
| ACCY909  | Comparative Accounting Systems       | 6             |
| ACCY914  | Management Planning and Control Systems | 6         |
| ACCY915  | Capital Investment**                 | 6             |
| ACCY916  | Studies in Controllership            | 6             |
| ACCY918  | Applied Management Accounting        | 6             |
| ACCY923  | Investment Management**              | 6             |
| ACCY924  | Corporate Financial Information Analysis** | 6         |
| ACCY925  | Australian Banking Practices**       | 6             |
| ACCY926  | Studies in Business Finance**        | 6             |
| ACCY931  | Advanced Decision Support Systems    | 6             |
| ACCY933  | Studies in Information Systems in Accounting | 6         |
| ACCY936  | Management and Information Systems   | 6             |
| ACCY943  | Auditing and Accounting Information Systems | 6         |
| ACCY944  | Issues in Auditing                   | 6             |
| ACCY961  | Professional Practice - Accounting   | 6             |
| ACCY962  | Professional Practice - Auditing & EDP | 6         |
| ACCY963  | Professional Practice - Taxation**   | 6             |
HONOURS MASTER OF COMMERCE* (Cont'd)

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<td>ACCY973</td>
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<td>ACCY983</td>
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<tr>
<td>ACCY996</td>
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* See NOTES for the "Honours Master of Arts".

** Subjects are normally taught in collaboration with the Department of Management.

*** Offered jointly with the Institute of Chartered Accountants in Australia. Candidates wishing to enrol in them must be employed by a firm of Chartered Accountants.

COURSE DESCRIPTIONS

1. 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 Department of Accountancy. 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 Accountancy.

2. With the approval of the Head of the Department of Accountancy subjects may be selected from 900 level subjects offered by the Department of Accountancy. (Any subjects selected under this clause may be included in the 30 credit points required under 1.).

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

2. MASTER OF COMMERCE

The purpose of this pass degree is to provide graduate students, who have completed the accountancy specialisation for the BCom degree, with the opportunity of further in-depth study of advanced topics in accounting and commercial law. This degree should be particularly suitable for students wishing to specialise in professional areas, or wishing to complete specialisations approved by the Australian Society of Accountants.

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. Entry requires a BCom degree with a specialisation in Accountancy, or equivalent degree.

Candidates who do not have a specialisation in Accountancy in their undergraduate degree may be permitted to study for the degree provided that they have first passed Financial Accounting III and Management Accounting III; 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.

3. HONOURS MASTER OF ARTS

A. Candidates who have completed at an acceptable standard the requirements for the award of the BA(Hons) 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.

2. See corresponding comments below under the Honours Master of Commerce degree, Accountancy.

B. Candidates who have completed the requirements for the BA 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. 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 (1) to (3) above.

4. HONOURS MASTER OF COMMERCE

A. 1. Candidates who have completed the requirements for the award of the BCom(Hons) 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 MCom(Hons) degree by completing at honours standard any one of the following courses of study.

(i) Thesis (48 credit points)

or

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

or

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

or

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

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

(a) A combination of Economics and Accountancy subjects may be approved by the Heads of the two Departments, and

(b) 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 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).

3. A candidate may not include for this degree subjects similar in content to subjects included in the honours part of subjects included in the undergraduate course.

B. 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 (1) to (3) above.

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 5(3) of the Honours Masters Degree Regulations may have their enrolment cancelled in the event that the preliminary program or designated subjects is not completed at the appropriate standard.

SUBJECT DESCRITIONS

Seminars
Generally a one or two hour weekly seminar, or a two hour fortnightly seminar, 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 Accountancy Department.

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.

No prescribed textbooks.

ACCY903 ACCOUNTING THEORY
6 credit points


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.

ACCY905 INTERNATIONAL ACCOUNTING
6 credit points


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.

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 and 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 method of empirical research in accountancy and information systems.
ACCY908 APPLIED FINANCIAL ACCOUNTING
6 credit points

Advanced problems in external financial reporting, including accounting for groups of companies, price level accounting and reporting thereon involving consideration of taxation and economic implications.

ACCY909 COMPARATIVE ACCOUNTING SYSTEM
6 credit points

An indepth 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.

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.

ACCY914 MANAGEMENT PLANNING AND CONTROL SYSTEMS
6 credit points

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

ACCY915 CAPITAL INVESTMENT**
6 credit points

An indepth study of capital investment decision analysis. The theoretical bases of net present value and internal rate of return selection criteria. The application of investment selection criteria under diverse conditions such as capital rationing, mutually exclusive choice situations, buy/lease decisions, fluctuating rates of output and inflation. The incorporation of risk into capital investment decision analysis, including the application of capital asset pricing models to investment evaluation.

ACCY916 STUDIES IN CONTROLLERSHIP
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.

ACCY918 APPLIED MANAGEMENT ACCOUNTING
6 credit points

An indepth 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.

ACCY923 INVESTMENT MANAGEMENT**
6 credit points


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 stockmarket data. Equal emphasis is placed upon the development of theoretical constructs, and appraisal of the results of empirical research, especially Australian studies.

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.

** These subjects, ACCY915, ACCY923, ACCY924, ACCY925 and ACCY926 are normally taught in collaboration with the Department of Management.
ACCY926 STUDIES IN BUSINESS FINANCE**
6 credit points

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

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.

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.

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 these functions.

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.

** These subjects, ACCY915, ACCY923, ACCY924, ACCY925 and ACCY926 are normally taught in collaboration with the Department of Management.

ACCY944 ISSUES IN AUDITING
6 credit points

An indepth 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.

ACCY961 PROFESSIONAL PRACTICE - ACCOUNTING
6 credit points


ACCY962 PROFESSIONAL PRACTICE - AUDITING AND EDP
6 credit points

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

ACCY963 PROFESSIONAL PRACTICE - TAXATION
6 credit points


ACCY968 INSOLVENCIES
6 credit points

Accounting and legal aspects of corporate and non-corporate insolvencies including bankruptcies, liquidations, receivership; alteration of capital, reconstruction, amalgamation and takeovers. (N.B. A student who has passed ACCY368 Insolvencies may not enrol in this subject).

ACCY973 HISTORY OF ACCOUNTING THOUGHT
6 credit points

ACCY974 ACCOUNTING REGULATION
6 credit points

An indepth 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.

ACCY983 STUDIES IN GOVERNMENT ACCOUNTING
6 credit points

A detailed examination of selected areas in federal, state, regional or local government accounting.

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. (N.B. 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.)

ACCY993 RESEARCH ESSAY
12 credit points +

ACCY994 PROJECT
12 credit points +

ACCY995 RESEARCH PROJECT
24 credit points +

ACCY996 THESIS
48 credit points +

Information may be obtained from the Head of Department regarding ACCY993, ACCY994, ACCY995 and ACCY996.

+ Candidates intending to undertake empirical research (as part of this subject) are required to have first passed, or to concurrently enrol in ACCY907 Empirical Research Methods in Accounting.
ECONOMICS

INTRODUCTION

The following degrees and diplomas are available:

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

The schedule of subjects for the Masters degrees is set out on the following pages.

For the Graduate Diploma, subjects are selected from the undergraduate schedules of subjects set out in the Undergraduate Calendar. Please refer to the information about this diploma on the following pages.

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

The specific requirements for each degree and the descriptions of the subjects available are set out in the pages following the schedules of subjects.

CURRENT RESEARCH AREAS

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

REGIONAL ECONOMIC RESEARCH
Analysis of safety statistics and procedures at Australian Iron and Steel
Decentralisation in Australia
Impact of the Port Kembla coal loading facility expansion on the regional traffic programme
Methodology of estimating regional input/output tables

ECONOMICS OF DEVELOPING COUNTRIES
Agricultural development in The Philippines and Indonesia
The role of natural resources in economic development
Turnpike optimality in input/output systems
Rural employment and development in Indonesia

INDUSTRIAL RELATIONS
Trade union response to technological change
Trade union history and the development of trade unionism
Regional industrial relations agreements
Industrial democracy

OTHER RESEARCH AREAS
The relationship between income taxes and the distribution of income
The effect of the tax system on capital investment decisions
The economics of crime and the criminal justice system
Models of flood mitigation
National income and expenditure accounts
Exchange rate determination
Econometric modelling

SCHEDULE OF GRADUATE SUBJECTS

HONOURS MASTER OF ARTS*

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* See NOTE 1 at foot of Accountancy Schedule

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### COURSE DESCRIPTIONS

#### 1. GRADUATE DIPLOMA IN COMMERCE

The general regulations 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 one year full-time study or the part-time equivalent. Specific requirements for the Graduate Diploma in Commerce are:

1. A minimum of 48 credit points are required, of which, not less than 32 credit points are to be obtained from subjects offered by the Department of Economics.

2. Normally the 48 credit points required for awarding of the Graduate Diploma in Commerce will be selected from 900 level subjects. In special circumstances up to 16 credit points may be chosen from 200-300 level subjects.

3. The whole course must be approved by the Head of the Department of Economics as providing a coherent course of study.

#### 2. 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 of further in-depth study of advanced topics in Economics.

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 Honours Master of Commerce Schedule of Graduate Subjects. Entry requires a BCom degree with a specialisation in Economics or an equivalent degree.

Candidates who do not have a specialisation in Economics but 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 programme 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.

#### 3. HONOURS MASTER OF ARTS

**A. 1.** Candidates who have completed at an acceptable standard the requirements for the award of the BA(Hons) 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.

2. See corresponding comments below under the Honours Master of Commerce degree, Economics.

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* See NOTES under the Department of Accountancy subject list for the 'Honours Master of Arts'.
3. See corresponding comments below under the Honours Master of Commerce degree, Economics.

B. Candidates who have completed the requirements for the BA 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. 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 (1) to (3) above.

4. HONOURS MASTER OF COMMERCE

A. 1. Candidates who have completed the requirements for the award of the BCom(Hons) 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 MCom(Hons) degree by completing at honours standard any one of the following courses of study.

   (i) Thesis (48 credit points).

   or (ii) Project (12 credit points, Accountancy; 16 credit points, Economics) plus coursework to aggregate not less than 48 credit points.

   or (iii) Research report (24 credit points) and coursework aggregating not less than 24 credit points.

   or (iv) Coursework aggregating not less than 48 credit points.

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

   (a) A combination of Economics and Accountancy subjects may be approved by the Heads of the two Departments, and

   (b) 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 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.).

3. A candidate may not include for this degree subjects similar in content to subjects included in the honours part of the undergraduate course.

B. 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 (1) to (3) above.

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 5(3) of the Honours Masters Degree Regulations may have their enrolment cancelled in the event that the preliminary program or designated subjects is not completed at the appropriate standard.
SUBJECT DESCRIPTIONS

Composition of Courses:
Seminars
Three hours lectures/seminars per week.

Assessment
Continuous assessment by written assignments and Departmental examinations.

ECON901 MONETARY ECONOMICS
8 credit points

The course is in two sections. The first section compares the monetarist theory of money with the reinterpreted 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 rules.

Much of the course will be based on the formal articles in which most of the debates have been carried.

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.

ECON903 PUBLIC FINANCE
8 credit points

This course 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.

ECON904 PUBLIC SECTOR ECONOMICS
8 credit points

The course examines the public sector as an economic entity in an industrial economy. The concept of a public good is discussed and the question of what goods the government should provide is examined. The growth of the public sector is analysed and the undernourishment thesis is examined. Public enterprises' pricing policies, goals, and efficiency are then examined. Finally the interaction between private and public sectors is considered.

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.

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.

ECON907 COST-BENEFIT ANALYSIS
8 credit points

The main objective of the course 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 course contains a practical component involving the appraisal of specific investment projects.

Topics covered will include: welfare economics; the derivation of analytical criteria for investment appraisal; the identification and valuation of benefits and costs; shadow prices for imperfect factor and product markets; unpriced goods and services; multiple objective planning; and the incorporation of risk and uncertainty.

ECON908 ADVANCED TOPICS IN THE ECONOMICS OF DEVELOPMENT
8 credit points

The course provides an indepth 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; role of capital; credit and institutions; international dimensions of development and development planning.
ECON911 ADVANCED INTERNATIONAL ECONOMICS
8 credit points

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)

ECON912 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 character 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.

ECON913 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.

ECON914 ECONOMICS OF SOCIAL WELFARE I
8 credit points

A study of the theoretical basis of economic policy decisions and the economic significance of criteria adopted or proposed for policy decisions about the use of public goods or about conditions affecting the use of private goods.

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.

ECON917 ECONOMICS OF HEALTH CARE
8 credit points. Not to count with ECON918.

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.

ECON918 ECONOMICS OF HEALTH CARE - A
8 credit points. Not to count with ECON917.

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.

ECON920 WORK EXPERIENCE AND REPORT
24 credit points

At the invitation of the Head of the Department, students may undertake a period of supervised work experience with a substantial report thereon.

ECON921 ECONOMETRIC MODELS
8 credit points

This is an applied course in econometric model building. Both single-equation and simultaneous multi-equation models will be analysed. Emphasis is on building a model with economic content, on obtaining robust estimates, on model evaluation and selection. The role played by a priori or subjective information will be discussed. Examples from Australian economy-wide econometric models in use will be critically examined.

ECON922 ADVANCED MACROECONOMICS
8 credit points

The 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.
This subject will develop the skills needed by those engaged in economic development planning and analysis. Topics covered will include: identification of programme objectives, programme planning, programme evaluation and appraisal, programme implementation and management. Several programmes in developing nations will be reviewed.

The course will examine policy issues in the international economy especially as they affect the Asia-Pacific region. The role of international economic organisations such as the IMF, World Bank, and GATT will be 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 will be explored.

The subject explains both the macroeconomic and the microeconomic frameworks within which the business enterprise operates. Special attention will be given to current issues of economic policy, problems facing the Australian economy as they affect the corporate sector, and the role of macro-economic forecasts in evaluating the business environment.

The objective of this course 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 form of employer associations. This covers the bases of employer organisation, the structure and function of employer associations in Australia, and a comparison of Australian employer associations with those in other countries.
The subject surveys in-depth a number of key industrial relations policy issues at macro and micro levels, such as: the impact on industrial relations of the introduction of new technology, incomes policy, industrial democracy, women in the workforce, public sector industrial relations, and occupational health and safety.

**ECON954 INDUSTRIAL RELATIONS IN AUSTRALIA**
6 credit points. Not to count with ECON964

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.

**ECON956 ADVANCED INDUSTRIAL RELATIONS PROCESSES**
8 credit points

This subject is designed for students who are industrial relations practitioners, or who wish to become so. It develops concepts and techniques at an advanced level for the choice and evaluation of strategies and tactics in collective bargaining processes in a wider industrial relations context. Much of the subject methodology will be based upon case studies, role playing, and where feasible, instruction and supervision by practitioners in workplace projects.

**ECON962 THE ECONOMIC FRAMEWORK FOR DECISION MAKING - A**
8 credit points. Not to count with ECON952.

An introduction to the economic framework for decision making. Topics include: marginal analysis and decisions; managerial objectives, profit and uncertainty; cost analysis, advertising and price theory; competition and industrial market structures; implications of monetary and fiscal policy for the firm; and the influence of international trade on the domestic economic framework.

**ECON963 STATISTICAL TECHNIQUES FOR DECISION MAKING - A**
8 credit points. Not to count with ECON953.

A survey of quantitative tools commonly used by managers. Topics will include descriptive and inferential statistics; regression and correlation analysis, sampling; significance testing; decision-tree models; forecasting; queuing models and linear programming. Applications will be in microeconomic aspects of managerial decision making such as the empirical estimation of demand schedules and the analysis of production decisions.

**ECON964 INDUSTRIAL RELATIONS IN AUSTRALIA - A**
8 credit points. Not to count with ECON954.

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.

**ECON970 THE ECONOMY AND ECONOMIC DATA**
6 credit points

An introduction to the economy and to the main statistics published by the Australian Bureau of Statistics and other data which have to be reported and analysed. Basic macroeconomics and data on national accounts, balance of payments, foreign debt, labour force wages, price inflation, (Consumer Price Index), financial statistics, government finance, and the Budget Statements. Basic microeconomics and profit and loss accounts, balance sheets, flow of funds statements, and household income and expenditure. Techniques of presenting statistical data.

**ECON971 APPLIED MICROECONOMICS**
6 credit points

The objective of this course is to provide a balanced and comprehensive coverage of the core topics in theoretical microeconomics, with particular regard for welfare economics and contestable markets.

**ECON972 NATURAL RESOURCE AND ENVIRONMENTAL ECONOMICS - A**
6 credit points

The subject seeks to develop skills in the economic analysis of natural resource and environmental issues. Theoretical frameworks for the analysis of natural resources are developed and applied to the management of specific natural resources. Policy formulation is also examined. Specific topics could include energy, minerals, water, forestry and pollution.

**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 I.R.
management in the firm, and the structure and function of employer associations in Australia and overseas.

ECON974 INDUSTRIAL RELATIONS POLICY - A
6 credit points. Not to count with ECON950.

The subject surveys in depth a number of key industrial relations policy issues at macro and micro levels such as: new technology, industrial democracy, women in the workforce, public sector industrial relations and occupational health and safety.

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 processes in a wider industrial relations context. Much of the methodology will be based upon case studies, role playing and workplace projects with contributions from practitioners.

ECON991 PROJECT
16 credit points

ECON992 RESEARCH REPORT
24 credit points

ECON993 THESIS
48 credit points
INDUSTRIAL RELATIONS

INTRODUCTION

The following postgraduate degrees and diplomas are available:

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

Assessment will vary according to the type of program offered by individual lecturers. Students must satisfactorily complete every subject in their program of study before the degree or diploma will be awarded. More specific details of assessment will be given in subject outlines.

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

The specific requirements for each degree are set out in the pages following the schedules of subjects.

CURRENT RESEARCH AREAS

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

Labour Economics and Industrial Relations
Aborigines in the workforce
An Australian social contract
Household-market production
Industrial democracy
Labour market implications of changing patterns of work and education
Manpower management for the individual or organisation
New technology and union bargaining procedures
Occupational and industrial segregation of women
Theory and measurement of labour hoarding
Disadvantaged workers in the workforce
Scientific management
Work practices and industrial relations in the steel industry

SCHEDULE OF GRADUATE SUBJECTS

HONOURS MASTER OF ARTS
HONOURS MASTER OF COMMERCE

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>ECON912</td>
<td>Labour Economics</td>
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<td>ECON913</td>
<td>Industrial Economics</td>
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<td>ECON930</td>
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<tr>
<td>ECON941</td>
<td>Advanced Topics in Economics - A</td>
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<td>ECON942</td>
<td>Advanced Topics in Economics - B</td>
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<td>ECON943</td>
<td>Advanced Topics in Economics - C</td>
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<td>ECON944</td>
<td>Advanced Topics in Economics - D</td>
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<td>ECON945</td>
<td>Advanced Topics in Economics - E</td>
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<td>ECON946</td>
<td>Advanced Topics in Economics - F</td>
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<td>ECON948</td>
<td>Employers and Industrial Relations</td>
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<tr>
<td>ECON950</td>
<td>Industrial Relations Policy</td>
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<td>ECON956</td>
<td>Advanced Industrial Relations Processes</td>
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<td>ECON964</td>
<td>Industrial Relations in Australia</td>
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<td>ECON991</td>
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<td>ECON992</td>
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<td>ECON993</td>
<td>Thesis</td>
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<td>LAW965</td>
<td>Studies in Administrative Law</td>
<td>8</td>
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<td>LAW966</td>
<td>Studies in Industrial Law</td>
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<td>LAW987</td>
<td>Special Topic in Law - A</td>
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<tr>
<td>LAW988</td>
<td>Special Topic in Law - B</td>
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<td>PSYC924</td>
<td>Organisational Psychology</td>
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<tr>
<td>PSYC956</td>
<td>The Psychology of Organisational Communication</td>
<td>8</td>
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<tr>
<td>SOC933</td>
<td>Advanced Research Techniques</td>
<td>8</td>
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<tr>
<td>SOC944</td>
<td>Advanced Organisation Studies*</td>
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<tr>
<td>SOC945</td>
<td>Advanced Studies in the Sociology of Technology and Industrial Society*</td>
<td>8</td>
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</table>

* Not offered in 1990.
HONOURS MASTER OF ARTS
HONOURS MASTER OF COMMERCE (Cont'd)

Number Subject Credit Points
SOC940 Advanced Social Policy Studies 8
MGMT911 Organisational Behaviour 6
MGMT912 Organisation Structure and Control 6
MGMT953 Personnel Management 6
HIST901 Australian Economic History 1850-1930 12
HIST902 Australian Economic History 1930-1985 12

COURSE DESCRIPTIONS

1. GRADUATE DIPLOMA IN COMMERCE

(i) The Graduate Diploma in Commerce shall be subject to the University regulations for the award of Graduate Diplomas together with the following conditions:

(ii) Candidates are required to complete subjects making up 48 credit points, normally including the following:

ECON140 Wage Determination in Australia - 6
or ECON240 Wage Determination in Australia - 8
and ECON142 Trade Unions, Employers and Government - 6
or ECON242 Trade Unions, Employers and Government - 8
and ECON340 Comparative Studies in Industrial Relations - 8
and ECON342 Research Topics in Industrial Relations - 8
or ECON948 Employers and Industrial Relations - 8
or ECON950 Industrial Relations Policy - 8
or ECON956 Advanced Industrial Relations Processes - 8

(iii) The remaining subjects will normally be chosen from Schedule C5 of the Bachelor Degree Regulations

(iv) Subjects making up at least 30 credit points will normally be chosen from Schedule C5 of the Bachelor Degree Regulations - 200- and 300-level subjects, but appropriate 900-level subjects may be prescribed in the place of the 200- or 300-level subjects.

(v) The course for the Graduate Diploma requires approval by the Head of the Department of Economics as providing a coherent study in Industrial Relations.

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

(vii) The Graduate Diploma will normally occupy two sessions of full-time study, or four sessions of part-time study.

(viii) Departmental pre-requisites apply to choice of subjects.

2. HONOURS MASTER OF ARTS

A. 1. Candidates who have completed at an acceptable standard the requirements for the award of the BA (Hons) in Industrial Relations, or in a cognate discipline, 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 following subjects, or combination of subjects.

(i) Thesis (48 credit points); or
(ii) Project (16 credit points) plus coursework to aggregate not less than 48 credit points; or
(iii) Research report (24 credit points), and coursework aggregating not less than 24 credit points; or
(iv) Coursework aggregating not less than 48 credit points.

A. 2. Subjects are to be selected from 900-level Industrial Relations subjects
offered by the Department of Economics and other Departments, as included in the Schedule of Graduate Subjects for Industrial Relations; provided that

(a) ECON948 and ECON950 are compulsory when not proceeding by thesis alone, and

(b) subjects aggregating not more than 12 credit points may be selected from outside the Schedule of Graduate Subjects for Industrial Relations, where approval is given by the Heads of the respective Departments (i.e. the Department offering the subject or subjects on one hand, and the Department of Economics on the other).

A. 3. Students shall normally not include in their program subjects substantially similar to any completed at undergraduate level.

B. Candidates who have completed the requirements for the BA 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 in Industrial Relations. 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 (1) to (3) above.

3. HONOURS MASTER OF COMMERCE

A. 1. Candidates who have completed the requirements for the award of a bachelor's degree with honours in Economics at a standard of Class II, Division 2 or higher, or who have an equivalent qualification may fulfil the requirements for an MCom (Hons) degree in Industrial Relations by completing at honours standard an approved course of at least 48 credit points from the following schedule:

(i) Thesis (48 credit points); or
(ii) Project (16 credit points) and coursework aggregating not less than 32 credit points;

(iii) Research report (24 credit points) and coursework aggregating not less than 24 credit points; or
(iv) Coursework aggregating not less than 48 credit points.

2. Supervision of research and approval of courses will be organised by the Head of the Department of Economics.

3. Subjects are to be selected from the Schedule of Graduate Subjects; subjects aggregating not more than 12 credit points may be selected from those offered by Departments other than Economics.

B. Applicants who have completed at an acceptable standard the requirements for a bachelor's degree with a specialisation in Economics or Industrial Relations at a standard less than Class II, Division 2, or who have an equivalent qualification, may be permitted to register as candidates for the MCom (Hons) degree in Industrial Relations. 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 requirements 1, 2 and 3 above.

For descriptions of subjects, refer to Economics section.
INFORMATION SYSTEMS

For information on course co-ordinators and lecturers please contact the Department of Information Systems on (042) 27 0958.

INTRODUCTION

The following postgraduate degrees and diplomas are available:

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

The schedules of subjects for the Graduate Diploma and the Master of Business Administration (MIS) degree are set out on the following pages. A number of subjects are common to both courses and transition is possible from the Diploma to the MBA, usually after the first session.

For the Honours Master of Commerce degree by research and the Doctor of Philosophy degree, candidates enrol in the subject AICA 987 or AICA 999 respectively.

The specific requirements for each degree and diploma and the description of the subjects available are set out in the pages following the schedule of subjects.

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:

SCHEDULE OF GRADUATE SUBJECTS

GRADUATE DIPLOMA IN COMMERCE (BUSINESS INFORMATION SYSTEMS)
MASTER OF BUSINESS ADMINISTRATION (MANAGEMENT INFORMATION SYSTEMS)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>AICA 901</td>
<td>Computer Hardware/Software Systems</td>
<td>6</td>
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<tr>
<td>AICA 902</td>
<td>Structure of Programs and Data</td>
<td>6</td>
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<td>AICA 903</td>
<td>Business Data Processing Systems</td>
<td>6</td>
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<td>AICA 904</td>
<td>Information Analysis</td>
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<td>AICA 905</td>
<td>Structured Systems Design</td>
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<td>AICA 906</td>
<td>Information in Organisations</td>
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<tr>
<td>AICA 907</td>
<td>Systems Development Environment</td>
<td>6</td>
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<tr>
<td>AICA 908</td>
<td>Intelligent Tutoring Systems</td>
<td>6</td>
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<tr>
<td>AICA 909</td>
<td>Office Automation</td>
<td>6</td>
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</tbody>
</table>
GRADUATE DIPLOMA IN COMMERCE (BUSINESS INFORMATION SYSTEMS)

1. 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 skills and the human emphases of the information systems field, while allowing for some degree of freedom in the choice of a specialised application area of the individual’s interest. The flexibility in the Diploma programme provides an excellent means by which graduates from other disciplines are retrained into the information systems profession.

Specific Admission Requirements for the Diploma:
1. In accordance with the general regulations governing graduate diplomas, candidates must have been admitted to the degree of Bachelor in the University of another approved institution.

2. Furthermore, a candidate will be expected to have a suitable computing background. By a ‘suitable computing background’, it is meant that the candidate has successfully completed at least the equivalent of one introductory computing subject at tertiary level.

3. Notwithstanding the above conditions, a candidate who has not previously attained a proficiency in computer programme at a level acceptable to the Department will be required to do a ’bridging’ course in introductory computing prior to entry into the course, or by full-time study over two sessions.

Course Duration
Currently the course is available by part time study over four sessions (two years), in which each student takes 2 subjects in any session, or by full time study over two sessions.

The Course Structure
The Graduate Diploma in Commerce (Business Information Systems) is a coherent program of study which involves the successful completion of 8 subjects (48 credit points). The 8 subjects are divided into two components: a compulsory component consisting of 6 subjects and an optional component consisting of 2 subjects, chosen in the following manner:

(a) The 6 subjects in the compulsory component are: FOUR subjects, one from each of the following four groups A, C, D and E (see subject list below). TWO subjects from Group B.

(b) The 2 subjects in the optional component may be chosen from the remaining subject options listed in these groups.

(c) No advanced standing will be granted. Students are required to substitute an alternative subject or subjects for any subject(s) substantially covered in previous degree or diploma studies.
Subject to the approval of the Head of the Department of Information Systems, up to two subjects (12 credit points) may be included for recognition in this award chosen from other appropriate graduate subjects offered by this University.

List of Subjects
Subject to student demand, staff and resource limitations, some graduate subjects may not be available in a given year. Contact the Department of Information Systems for details.

Group A: Information Technology Studies
AICA901 Computer Hardware/Software Systems
AICA902 Structure of Programs and Data Systems
AICA921 Advanced Data Management
AICA922 Distributed Information Systems

Group B: Business Systems Studies
AICA903 Business Data Processing Systems
AICA904 Information Analysis
AICA905 Structured Systems Design
AICA926 Decision Support Systems

Group C: Organisational and Administrative Studies
AICA906 Information in Organisations
AICA923 Information Systems
ACCY901 Accounting for Managers
MGMT911 Organisational Behaviour
MGMT931 Strategic Planning and Policy
MGMT979 Decision Analysis

Group D: Applications or Specialisations
AICA907 System Development Environment
AICA908 Intelligent Tutoring Systems
AICA909 Office Automation
AICA924 System Modelling and Simulation
AICA925 Knowledge-Based Information Systems
CSCI954 Artificial Intelligence

Group E: Case Studies
AICA910 Case Studies in Business Information Systems

2. MASTER OF BUSINESS ADMINISTRATION (MANAGEMENT INFORMATION SYSTEMS)

The MBA Management Information Systems (MIS) programme is multidisciplinary in its approach, combining MIS subjects with those from the general management areas. Graduates of this course are prepared for a senior systems or information resource management role in an organisation.

Applicants are expected to have substantial experiences in the information industry prior to the commencement of the course. Opportunities also exist for MBA graduates to proceed to doctoral studies.

Details of course structure and requirements are listed under the Department of Management entry in this Handbook.

A description of subjects for 900-level AICA subjects are listed below. For descriptions of graduate subjects offered by the Departments of Accountancy, Legal Studies, Computing Science, Economics and Management, see listings under the respective departments.

3. MASTER OF COMMERCE

The purpose of this pass degree is to provide graduate students, who have completed the information systems specialisation for the BCom degree or equivalent, with the opportunity of further in-depth study of advanced topics in information systems.

The degree of 48 credit points may be studied full-time over one year, or may be studied part-time. Subjects are selected from 900 level subject offerings in the Schedule of Graduate Subjects for the Department of Information Systems after approval from the Head of Department. Entry requires a BCom degree with a specialisation in Information Systems or an equivalent degree.

Candidates who do not have a specialisation in Information Systems but have the equivalence of Information Systems to second year level in their undergraduate degree may be permitted to study for the degree provided they have first passed a programme of 24 points of 300 level Information Systems subjects approved by the Head of Department; thus the total credit points required for these candidates is 72.

4. HONOURS MASTER OF COMMERCE (BUSINESS INFORMATION SYSTEMS)

1. (a) Candidates who have completed the requirements for the award of the B Com (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 M Com (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 Information 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, Information 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.

Candidates who have completed the requirements for the B Com 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 M Com (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 Clause 5(3) of the Honours Masters Degree Regulation may have their enrolment cancelled in the event that the preliminary program or designated subjects is not completed at the appropriate standard.

SUBJECT DESCRIPTIONS

AICA901 COMPUTER HARDWARE/SOFTWARE SYSTEMS

Autumn session; 6 credit points (3 hours/week)
Assessment: Examination and assignments

This subject aims to provide a systematic framework to examine and evaluate current developments in computer and information technology, with particular emphasis in integrating data processing, office automation, and tele-communications. It covers not only traditional topics in hardware and software systems, but also those of current interests in parallel processing, fifth generation computing and system performance evaluation.

Textbook: To be advised.

AICA902 STRUCTURE OF PROGRAMS AND DATA

Autumn session; 6 credit points (3 hours/week)
Assessment: Examination and assignments

This subject examines the principle of structured programming and data structures in algorithm design and program coding. Practical programming is done in a structured language such as Pascal. Topics covered include: modularisation; recursion; string processing; sequential and linked storage allocation; linear lists; stacks; queues; arrays; linked lists; hashing; trees; and multi-linked structures.

Textbooks
AICA903 BUSINESS DATA PROCESSING SYSTEMS
Spring session; 6 credit points (3 hours/week)
Assessment: Assignments, case studies, and tutorial exercises

This subject provides an analysis of the structures and functions of computer-based business information systems particularly accounting systems, and the use of common business productivity tools. Examples of business systems include: payroll, accounts receivable, accounts payable, general ledger, inventory and order entry. Other issues considered are the integration of discrete applications into the total information systems; organisational implications of such integration and automation; the use of spreadsheets, data-base management tools and integrated software to solve data processing problems.

Textbook

AICA904 INFORMATION ANALYSIS
Autumn session; 6 credit points (3 hours/week)
Assessment: Examination, assignments and case studies

This is a study of the techniques, tools and methodologies of structured systems analysis in a business environment. It aims to assist the students to develop analytical skills in determining the information requirements of an organisation. Topics include: system development life cycle; problem identification; feasibility assessment; behaviour in the development process; tools of analysis; requirement analysis; data modelling; data flows; data architecture; file and logic specification; and a survey of systems development methodologies.

Textbook

AICA905 STRUCTURED SYSTEMS DESIGN
Autumn session; 6 credit points (3 hours/week)
Assessment: Assignments and projects

This subject is an introduction to various methodologies used in structured systems design. The intention is that the student should be able to work from the organisation's requirements to develop a fully designed business system. The subject assumes a knowledge of the tools and techniques of information analysis. Three methodologies will be covered, representative of functional decomposition, data decomposition and object-oriented design.

Textbooks

AICA906 INFORMATION IN ORGANISATIONS
Autumn session; 6 credit points (3 hours/week)
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

AICA907 SYSTEMS DEVELOPMENT ENVIRONMENT
Autumn session; 6 credit points (3 hours/week)
Assessment: Seminar papers and project

This subject examines the principles of software engineering, the developmental techniques, the automated tools and support environments that are used to improve the productivity of the software development cycle. The four environments considered are: language-centred, structure-centred, tool-based, and method-based. A range of productivity aids are considered including program generators, DBMS, 4GL and prototyping tools, CASE and 5th generation tools, with an in-depth study in at least one of these tools.

Textbook

AICA908 INTELLIGENT TUTORING SYSTEMS
Spring session; 6 credit points (3 hours/week)
Assessment: Examination, assignments and case studies

This subject examines the design, construction, and implementation of intelligent tutoring systems and adaptive instructional programs.
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**


**AICA909 OFFICE AUTOMATION**

*Spring session; 6 credit points (3 hours/week)*

**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; personnel and professional management aids; and computer-based information services.

**Preliminary Readings**


**AICA910 CASE STUDIES IN BUSINESS INFORMATION SYSTEMS**

*Spring session; 6 credit points (3 hours/week)*

**Assessment:** Seminar presentation and written report

**Pre-requisites:** 24 credit points at AICA 900 level

In this subject, the student will take part in a case study which will examine the processes of specifying, designing, costing, selecting, implementing, managing and evaluating an information system in a business setting. Particular emphasis will be given to the integration of theoretical and practical concepts introduced in the course in arriving at an effective solution, and the need to provide overall management in all phases of the design and implementation of the system.

**AICA921 ADVANCED DATA MANAGEMENT**

*Autumn session; 6 credit points (3 hours/week)*

**Assessment:** Case studies and examination

This subject aims to provide the student with an in-depth knowledge of the technical concepts, practical experience and management issues of data storage and database design in computer information systems. Topics include: file organisation, record retrieval, CODASYL, physical and logical structures, relational theory, data languages in particular SQL, survey and evaluation of DBMSs, data integrity and security, database administration.

**Textbook:** To be advised.

**AICA922 DISTRIBUTED INFORMATION SYSTEMS**

*Spring session; 6 credit points (3 hours/week)*

**Assessment:** Assignments and examination

This subject aims to familiarise the student with the concepts and terminology of data communication, network, and the regulatory, implementation and management issues of distributed information systems. Topics covered include network architectures, protocols (X.25, ISO etc), packet switching, LAN, ISDN, CCITT recommendations, network management, reliability and performance consideration, regulatory and policy issues, integrity, control and economics in distributed environments.

**Textbook:** To be advised.

**AICA923 INFORMATION SYSTEMS MANAGEMENT**

*Spring session; 6 credit points (3 hours/week)*

**Assessment:** Assignments, seminars and examination

This subject examines the many management issues, at the planning, administrative and policy levels, in matching the information system to the overall information needs of an organisation. It considers the role of senior management in information systems administration. Issues considered include structures of the information system, the planning process and planning strategies, implementation and maintenance, project management and control, user participation, training and recruitment, systems performance and evaluations, EDP audit, security and privacy, socio-technical issues, etc.

**Textbook**


**AICA924 SYSTEMS MODELLING AND SIMULATION**

*Spring session; 6 credit points (2 hours/week)*

**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

AICA925 KNOWLEDGE-BASED INFORMATION SYSTEMS
Spring session; 6 credit points (3 hours/week)
Assessment: Assignments and project

This subject examines the methods and techniques in developing business expert systems. Topics covered include knowledge acquisition and representation methods, knowledge engineering, rules and reasoning, dealing with uncertainties, inference mechanisms, building a knowledge-based information system, developing a rule set, using certainty factor algebras and manipulating fuzzy variables. The subject also considers the evaluation and selection of expert systems development tools and techniques.

Textbook

AICA926 DECISION SUPPORT SYSTEMS
Autumn session; 6 credit points (3 hours/week)
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 risks; Delphi and 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

AICA940 MANAGEMENT INFORMATION SYSTEMS PROJECT
18 credit points
Assessment: Seminar presentation and 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 seminar presentation and a written report.

The following four subjects are Master of Commerce Honours qualifying subjects consisting of a programme of course work and reading as prescribed by the Head of Department of Information Systems.

AICA981 ADVANCED INFORMATION SYSTEMS TOPIC A
6 credit points

AICA982 ADVANCED INFORMATION SYSTEMS TOPIC B
6 credit points

AICA983 ADVANCED INFORMATION SYSTEMS TOPIC C
12 credit points

AICA984 ADVANCED INFORMATION SYSTEMS TOPIC D
12 credit points

The following research subjects consist of an approved programme of study agreed with the Head of the Department of Information Systems.

AICA986 RESEARCH REPORT
24 credit points

AICA987 MASTER THESIS
48 credit points

AICA999 DOCTORAL THESIS
48 credit points
LEGAL STUDIES

INTRODUCTION

The following postgraduate diploma is available:

1. Graduate Diploma in Law

The following degrees will be offered in this area at a future date:

2. Honours Master of Arts by Coursework or Research
3. Honours Master of Commerce by Coursework or Research
4. Doctor of Philosophy

The specific requirements for each degree and the descriptions of the subjects available are set out in the pages following the schedules of subjects.

SCHEDULE OF GRADUATE SUBJECTS

HONOURS MASTER OF ARTS and HONOURS MASTER OF COMMERCE

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<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>LAW902</td>
<td>Research Project A</td>
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<td>LAW903</td>
<td>Research Project B</td>
<td>6</td>
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<tr>
<td>LAW951</td>
<td>Taxation Policy and Practice</td>
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<tr>
<td>LAW953</td>
<td>Studies in Taxation</td>
<td>6</td>
</tr>
<tr>
<td>LAW963</td>
<td>Jurisprudence</td>
<td>6</td>
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<tr>
<td>LAW964</td>
<td>Studies in Business Law</td>
<td>6</td>
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<tr>
<td>LAW965</td>
<td>Studies in Administrative Law</td>
<td>6</td>
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<tr>
<td>LAW966</td>
<td>Studies in Industrial Law</td>
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<tr>
<td>LAW967</td>
<td>Studies in Trade Practices and Consumer Law</td>
<td>6</td>
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<tr>
<td>LAW987</td>
<td>Special Topic in Law - A</td>
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<td>LAW988</td>
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<tr>
<td>LAW993</td>
<td>Research Essay</td>
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MASTER OF POLICY (SOCIAL POLICY)

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<tr>
<td>LAW904</td>
<td>Research Project C</td>
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<tr>
<td>LAW905</td>
<td>Research Project D</td>
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GRADUATE DIPLOMA IN COMMERCE (MANAGEMENT) and MASTER OF BUSINESS ADMINISTRATION

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>LAW960</td>
<td>Law for Managers</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>
</table>

COURSE DESCRIPTION

1. GRADUATE DIPLOMA IN LAW

The course is intended for those who wish to study law at postgraduate 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 Department. A student must complete subjects totalling 48 credit points to qualify for the diploma, not more than 12 credit points at the 100 level.
SUBJECT DESCRIPTIONS

Session of Offer
Subjects for the Honours Masters courses will be offered, subject to availability of staff, in a session to be determined by the Head of Department.

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

Assessment
The assessment for 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 no prescribed textbooks. Reading is required from a wide variety of references, including books and journal articles. Specific recommendations may be obtained from the Legal Studies Department.

LAW902 RESEARCH PROJECT A
Autumn or spring session; 6 credit points
Pre-requisite: LAW160 Law in Society and LAW161 Contract Law, if specialising in Commercial Law
Assessment: 8,000 word dissertation.

The student shall propose a research project for approval by the Head of Department.

LAW903 RESEARCH PROJECT B
Autumn or spring session or annual; 12 credit points
Pre-requisite: LAW160 Law in Society and LAW161 Contract Law, if specialising in Commercial Law
Assessment: 12,000 word dissertation.

The student shall propose a research project for approval by the Head of Department.

LAW904 RESEARCH PROJECT C
Autumn or spring session; 8 credit points
Pre-requisite: LAW160 Law in Society and LAW161 Contract Law, if specialising in Commercial Law
Assessment: 10,000 word dissertation.

The student shall propose a research project for approval by the Head of Department.

LAW905 RESEARCH PROJECT D
Autumn or spring session or annual; 8 credit points
Pre-requisite: LAW160 Law in Society and LAW161 Contract Law, if specialising in Commercial Law
Assessment: 10,000 word dissertation.

The student shall propose a research project for approval by the Head of Department.

LAW951 TAXATION POLICY AND PRACTICE
6 credit points

An examination of the revenue laws including income tax, sales tax, property tax, stamp duty and payroll tax. (N.B. This subject is not to count with LAW352 Advanced Taxation Law.)

LAW953 STUDIES IN TAXATION
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 LAW FOR MANAGERS
Spring session; 6 credit points

Sources of law, the common law system, the doctrine of precedent; the hierarchy of the courts, how to understand case reports, statutory interpretation and how to understand an act of parliament; constitutional structure of the federal system and separation of powers. Outlines the law relating to contracts, agency, business organisations, the employment relationship, consumer protection; and taxation of income, including the concepts of income and deductability.

LAW961 SELECTED LEGAL TOPICS IN MANAGEMENT
Session to be determined; 6 credit points

Selected legal topics in management. (N.B. 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.)
LAW963 JURISPRUDENCE  
6 credit points
A study of theories on the nature and purpose of law.

LAW964 STUDIES IN BUSINESS LAW  
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  
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  
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  
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 Law in Society
A critical examination of a selection of the following topics:
- The nature and purpose of law;
- The logics of legal reasoning; law and textual analysis; legal causation, probability, evidence, and standards of proof;
- The defeasibility of practical reason; causal explanations and reasons explanations; action, intention, and will; agency, control and responsibility; the nature of justification and excuse;
- 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 (e.g., informed consent, reproduction technology, euthanasia); concepts of property.

Issues selected will be discussed in the context of particular areas of law. The emphasis in 1990 will be on philosophical issues in Criminal Law.

LAW969 OCCUPATIONAL HEALTH AND SAFETY LAW  
6 credit points
The subject deals with the interpretation and application of the N.S.W. O.H.S. Act.

LAW987 SPECIAL TOPIC IN LAW - A  
6 credit points
A special topic to be selected from any area of commercial law. (N.B. 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.)

LAW988 SPECIAL TOPIC IN LAW - B  
6 credit points

LAW993 RESEARCH ESSAY  
12 credit points
Information may be obtained from the Head of the Department regarding the research essay.
MANAGEMENT

INTRODUCTION

The following postgraduate degrees and diplomas are available:

1. Graduate Diploma in Commerce
   - (Management)
   - (Occupational Health and Safety)
   - (Regional Administration)
2. Master of Business Administration
3. Master of Business Administration
   (Management Information Systems)
4. Master of Commerce
5. Honours Master of Arts by Coursework or Research
6. Honours Master of Commerce by Coursework or Research
7. Doctor of Philosophy

The schedule of subjects available for the Masters degree and Diplomas is set out on the following pages.

For the Doctor of Philosophy degree candidates enrol in the subject MGMT975 Thesis.

The specific requirements for each degree and diploma and the description of the subjects available are set out in the pages following the schedules of subjects.

CURRENT RESEARCH AREAS

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

- Business government relations
- Capital market investments
- Enterprise development and entrepreneurship
- Financial systems in developing countries
- Industrial marketing and organisational buyer behaviour
- Local economic initiatives
- Management of R & D
- Management training
- Management styles and creative leadership
- Manufacturing strategy
- Marketing communication and consumer behaviour
- Mergers and divestment
- Organisational politics
- Organisational behaviour and structure
- Portfolio management and capital markets
- Retailing
- Strategic management
- Technology management
- Human Resource Management
- Public Sector Management

Students are required to substitute an optional subject or subjects for any compulsory subjects substantially covered in previous degree or diploma studies. Such substitutes require the prior approval of the Head of Department.

SCHEDULE OF GRADUATE SUBJECTS

GRADUATE DIPLOMA IN COMMERCE (MANAGEMENT)

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<th>Number</th>
<th>Subject</th>
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<tbody>
<tr>
<td></td>
<td><strong>Compulsory subjects</strong></td>
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<tr>
<td>ACCY901</td>
<td>Accounting for Managers</td>
<td>6</td>
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<tr>
<td>MGMT911</td>
<td>Organisational Behaviour</td>
<td>6</td>
</tr>
<tr>
<td>MGMT912</td>
<td>Organisation Structure and Control</td>
<td>6</td>
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<tr>
<td>MGMT922</td>
<td>Marketing I</td>
<td>6</td>
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<tr>
<td></td>
<td><strong>Optional subjects</strong></td>
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<tr>
<td></td>
<td>(Subjects aggregating not less than 24 credit points required)</td>
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<tr>
<td>LAW960</td>
<td>Law for Managers</td>
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<td>LAW961</td>
<td>Selected Legal Topics in Management</td>
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<td>ACCY975</td>
<td>Special Topic in Accounting A</td>
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<td>ACCY976</td>
<td>Special Topic in Accounting B</td>
<td>6</td>
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<tr>
<td>MGMT901</td>
<td>Capital Investment</td>
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<tr>
<td>MGMT903</td>
<td>Investment Management</td>
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<td>MGMT914</td>
<td>Human Resource Development</td>
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<tr>
<td>MGMT915</td>
<td>Management of Change</td>
<td>6</td>
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<tr>
<td>MGMT921</td>
<td>Managerial Finance</td>
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<td>MGMT925</td>
<td>Selected Topics in Management A</td>
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<tr>
<td>MGMT926</td>
<td>Selected Topics in Management B</td>
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<tr>
<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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<tr>
<td>MGMT929</td>
<td>Inter-Organisational Relations</td>
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### GRADUATE DIPLOMA IN COMMERCE (MANAGEMENT) (Cont'd)

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<th>Subject</th>
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<td>MGMT931</td>
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<tr>
<td>MGMT937</td>
<td>Management of Marketing Communications</td>
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<td>MGMT940</td>
<td>Innovation and Entrepreneurship</td>
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<td>MGMT941</td>
<td>Small Business Management I</td>
<td>6</td>
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<tr>
<td>MGMT942</td>
<td>Small Business Finance</td>
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<tr>
<td>MGMT943</td>
<td>Small Business Management II</td>
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<td>MGMT944</td>
<td>Enterprise Project</td>
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<td>MGMT945</td>
<td>Technology Enterprise Project</td>
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<td>MGMT947</td>
<td>Quality Management</td>
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<td>MGMT948</td>
<td>Project in Regional Administration</td>
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<td>MGMT952</td>
<td>Production and Operations Management</td>
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<td>MGMT953</td>
<td>Human Resource Management</td>
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<td>MGMT954</td>
<td>Special Topic in Management A</td>
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<td>MGMT955</td>
<td>Special Topic in Management B</td>
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<td>MGMT956</td>
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<td>MGMT960</td>
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<td>MGMT965</td>
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<td>MGMT980</td>
<td>Business Research Methods</td>
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<td>MGMT981</td>
<td>Multinational Financial Management</td>
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<td>ECON907</td>
<td>Cost Benefit Analysis</td>
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<tr>
<td>ECON932</td>
<td>Economic Analysis of the Business Environment</td>
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<td>ECON954</td>
<td>Industrial Relations in Australia</td>
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<td>STS937</td>
<td>Management of Technology</td>
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</table>

There are a number of streams available for students undertaking the Graduate Diploma in Commerce (Management) including the general Management stream and other specialist functional streams in Marketing, Human Resource Management, Public Sector Management, and Operations Management. Suitable groupings of subjects for any of these should be agreed to by the Head of Department of Management but would normally include the following additional compulsory subjects for the different streams and further electives to make a total of 48 credit points are to be taken from the management list. Students wanting to convert to the MBA should ensure they are able to cover all necessary compulsory subjects for that program.

**Management**

To be agreed with Head of Department and to be chosen from the general list of MGMT900 subjects.

**Marketing**

Marketing II, New Product Marketing, Competitive Analysis, Management of Marketing Communications.

**Human Resource Management**


**Public Sector Management**

Australian Government Administration, Public Policy and Administration, Inter-Organisational Relations.

**Operations Management**

Production and Operations Management, Quality Management, Quantitative Methods, Decision Analysis.
GRADUATE DIPLOMA IN COMMERCE (OCCUPATIONAL HEALTH AND SAFETY)

Number | Subject | Credit Points
--- | --- | ---
**Compulsory Subjects**
LAW969 | Occupational Health and Safety Law | 6
MGMT962 | Environmental and Occupational Health | 6
MGMT963 | Ergonomics | 6
MGMT964 | Occupational Rehabilitation | 6
MGMT965 | Occupational Hazards I | 6

**Options (three of the following)**
MGMT966 | Occupational Hazards II | 6
MGMT911 | Organisational Behaviour | 6
MGMT912 | Organisational Structure and Control | 6
MGMT953 | Human Resource Management | 6
MGMT979 | Decision Analysis | 6
MGMT947 | Quality Management | 6
MGMT952 | Production and Operations Management | 6
MGMT967 | Quantitative Methods | 6
MGMT968 | Communication | 6

GRADUATE DIPLOMA IN COMMERCE (REGIONAL ADMINISTRATION)

**Compulsory Subjects**
MGMT911 | Organisational Behaviour | 6
MGMT927 | Australian Government Administration | 6
MGMT928 | Public Policy and Administration | 6
MGMT929 | Inter-Organisational Relations | 6
MGMT948 | Project in Regional Administration | 6

**Options**
These include three subjects from the Graduate Diploma in Commerce Management schedule or other approved subjects.

MASTER OF BUSINESS ADMINISTRATION

**First Year Compulsory**
ACCY901 | Accounting for Managers | 6
MGMT911 | Organisational Behaviour | 6
MGMT922 | Marketing I | 6

**Plus one of the following**
LAW960 | Law for Managers | 6
ECON932 | Economic Analysis of the Business Environment | 6

**Second and Third Year Compulsory**
MGMT912 | Organisation Structure and Control | 6
MGMT921 | Managerial Finance | 6
MGMT931 | Strategic Planning and Policy | 6
MGMT976 | Competitive Strategy and Analysis | 6
MGMT979 | Decision Analysis | 6
MGMT981 | Research Project | 24

**Options (three of the following)**
MGMT901 | Capital Investment | 6
MGMT903 | Investment Management | 6
LAW961 | Selected Legal Topics in Management | 6
ACCY975 | Special Topic in Accounting A | 6
ACCY976 | Special Topic in Accounting B | 6
MGMT914 | Human Resource Development | 6
MGMT915 | Management of Change | 6
MGMT925 | Selected Topics in Management A | 6
MGMT926 | Selected Topics in Management B | 6
MGMT927 | Australian Government Administration | 6
MASTER OF BUSINESS ADMINISTRATION (Cont'd)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>MGMT928</td>
<td>Public Policy Administration</td>
<td>6</td>
</tr>
<tr>
<td>MGMT929</td>
<td>Inter-Organisational Relations</td>
<td>6</td>
</tr>
<tr>
<td>MGMT937</td>
<td>Management of Marketing Communications</td>
<td>6</td>
</tr>
<tr>
<td>MGMT940</td>
<td>Innovation and Entrepreneurship</td>
<td>6</td>
</tr>
<tr>
<td>MGMT941</td>
<td>Small Business Management I</td>
<td>6</td>
</tr>
<tr>
<td>MGMT942</td>
<td>Small Business Finance</td>
<td>6</td>
</tr>
<tr>
<td>MGMT943</td>
<td>Small Business Management II</td>
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<tr>
<td>MGMT944</td>
<td>Enterprise Project</td>
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<tr>
<td>MGMT945</td>
<td>Technology Enterprise Project</td>
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<tr>
<td>MGMT947</td>
<td>Quality Management</td>
<td>6</td>
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<tr>
<td>MGMT948</td>
<td>Project in Regional Administration</td>
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<td>Human Resource Management</td>
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<tr>
<td>MGMT954</td>
<td>Special Topic in Management A</td>
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<tr>
<td>MGMT955</td>
<td>Special Topic in Management B</td>
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<tr>
<td>MGMT956</td>
<td>New Product Marketing</td>
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<tr>
<td>MGMT960</td>
<td>Case Study</td>
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<tr>
<td>MGMT961</td>
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MASTER OF BUSINESS ADMINISTRATION (MANAGEMENT INFORMATION SYSTEMS)

Compulsory Coursework (72 credit points):

- ACCY901  Accounting for Managers  6
- MGMT911  Organisational Behaviour  6
- MGMT922  Marketing I  6
- MGMT931  Strategic Planning & Policy  6
- MGMT976  Competitive Strategy and Analysis  6
- AICA902  Structure of Programs and Data  6
- AICA905  Structured Systems Design  6
- AICA907  Systems Development Environment  6
- AICA921  Advanced Data Management  6
- AICA922  Distributed Information Systems  6
- AICA923  Information Systems Management  6
- ACCY933  Studies in Information Systems in Accounting  6

Compulsory project (18 credit points)

- AICA940  Management Information Systems Project  18

One elective (6 credit points) to be chosen from:

- AICA906  Information in Organization  6
- AICA909  Office Automation  6
- AICA924  System Modelling & Simulation  6
- AICA925  Knowledge-Based Information Systems  6
- AICA926  Decision Support Systems  6

or a cognate subject offered by another academic unit (e.g. Accountancy, Computing Science, etc.) of the University, subject to the approval of the Heads of the Department of Management and the Department of Information Systems.
Subject descriptions for the AICA subjects are listed under the Department of Information Systems.

HONOURS MASTER OF ARTS
HONOURS MASTER OF COMMERCE

Compulsory subjects for students not holding an Honours degree in Management or similar subject 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>
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<tr>
<td>MGMT987</td>
<td>Special Topic in Management (B)</td>
<td>12</td>
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<tr>
<td>MGMT988</td>
<td>Special Topic in Management (C)</td>
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<tr>
<td>MGMT989</td>
<td>Special Topic in Management (D)</td>
<td>12</td>
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</table>

For students with an Honours degree an agreed combination of course and/or thesis work totalling 48 credit points from the list of 900 level subjects offered by Management and one of the following:

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<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>MGMT990</td>
<td>Minor Thesis</td>
<td>24</td>
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<tr>
<td>MGMT991</td>
<td>Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS

1. GRADUATE DIPLOMA IN COMMERCE:
   - (MANAGEMENT)
   - (OCCUPATIONAL HEALTH AND SAFETY)
   - (REGIONAL ADMINISTRATION)

In accordance with the general regulations 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 working experience of not less than five years may be admitted as a candidate.

Candidates are required to complete the compulsory subjects together with optional subjects selected from the schedule for the relevant Graduate Diploma, and aggregating 48 credit points. The overall course of study for the Graduate Diploma is to be approved by the Head, Department of Management.

The purpose of the Graduate Diploma in Commerce is to provide an education with an applied emphasis at postgraduate level in several functional areas of management and administration.

The Graduate Diploma will usually be studied part-time. Classes are conducted on a seminar basis, students being encouraged to participate fully, drawing on their work experience. Because of this the number of candidates in each seminar group is restricted.

2. MASTER OF BUSINESS ADMINISTRATION

The objective of this degree is to enable graduates over a period of three to four years part-time study to be introduced to the main functional areas of management and to the concepts needed by management in order to be able to manage effectively and efficiently. For this purpose, certain key concepts/disciplines need to be studied in depth.

This is achieved in eight compulsory subjects of six credit points each, plus optional subjects and a major project. The compulsory subjects embrace the main areas and there is also an opportunity to select optional subjects in areas of special interest. The project is a key part of the degree and either through an in-company assignment or more traditional research project, the candidate will be expected to interface practical experience and theory.

Specific requirements for the Master of Business Administration

Entry: University degree or equivalent. The Graduate Management Admissions Test (GMAT) may also be required to support applications.

Length: Three to four years part-time, 96 credit points. Subjects for the first year correspond to those compulsory for the Graduate Diploma in Commerce (i.e. 24 credit points) plus additional compulsory and optional subjects aggregating a further 72 credit points. In exceptional cases, limited credit from previous postgraduate study will be permitted at the discretion of the Head, Department of Management.
of the Head of the Department of Management.

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

**Course content:** Subjects are selected from the Schedule of Graduate Subjects.

3. **MASTER OF BUSINESS ADMINISTRATION (MANAGEMENT INFORMATION SYSTEMS)**

The MBA (MIS) programme allows students to specialise in management information systems, whilst keeping a core of general management subjects. It aims to provide degree graduates with suitable experience, with a course of studies which will enable them to function in the information resource management role within an organisation or business concern.

The programme requires the successful completion of 96 credit points of approved studies conforming to the following structure:

1. **Coursework totalling 78 credit points,** of which
   - (a) 72 credit points are compulsory subjects, and
   - (b) 6 credit points are elective subject(s);

2. **Project totalling 18 credit points.**

The subjects are to be chosen from the Schedule of Graduate Subjects.

Unless otherwise specified, regulations covering course approval, length, credits for previous studies, etc., are identical to those for the general MBA programme.

**Entry:** This is subject to the same general entry requirement as the MBA programme above. In addition, those seeking admission to the specialisation in Management Information Systems must also satisfy two specific requirements:

- (a) they must have at least two years of relevant experience in the information systems areas;
- (b) they must have completed at least two semester subjects of approved tertiary level courses (or equivalent) in computing with substantial content in:
  - (i) programming, and
  - (ii) systems analysis.

4. **MASTER OF COMMERCE**

The purpose of this pass degree is to provide graduate students, who have completed the management specialisation for the BCom degree or equivalent, with the opportunity of further in-depth study of advanced topics in management.

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 Honours Master of Commerce Schedule of Graduate Subjects. Entry requires a BCom degree with a specialisation in Management or an equivalent degree.

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

5. **HONOURS MASTER OF ARTS**

1. **(a)** Candidates who have completed at an acceptable standard the requirements for the award of the BA(Hons) 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 below under the Honours Master of Commerce degree, Management.

   (c) See corresponding comments below under the Honours Master of Commerce degree, Management.

2. **Candidates who have completed the requirements for the BA 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. 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 (1) to (3) above.

6. HONOURS MASTER OF COMMERCE

(1) (a) Candidates who have completed the requirements for the award of the BCom (Hons) 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 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.

or (iii) Coursework aggregating not less than 48 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 (i.e. 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 in accordance with the requirements (1) to (3) above.

(3) Candidates holding the combined BCom(Hons) degree including the compulsory 40G-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 Clause 5(3) of the Honours Master Degree Regulations may have their enrolment cancelled in the event that the preliminary program or designated subjects is not completed at the appropriate standard.

SUBJECT DESCRIPTIONS

MGMT901 CAPITAL INVESTMENT
6 credit points (2 hours lectures per week)
Assessment: seminars, essay(s) and examinations.
Pre-requisite: ACCY221 or MGMT921

An in-depth study of capital investment decision analysis. The theoretical bases of net present value and internal rate of return selection criteria. The application of investment selection criteria under diverse conditions such as capital rationing, mutually exclusive choice situations, buy/lease decisions, fluctuating rates of output and
inflation. The incorporation of risk into capital investment decision analysis, including the application of capital asset pricing models to investment evaluation.

Text to be advised.

MGMT908 INVESTMENT MANAGEMENT
6 credit points (2 hours lectures per week)
Assessment: seminars, essay(s) and examinations
Pre-requisite: ACCY221 or MGMT921


Text to be advised.

MGMT911 ORGANISATIONAL BEHAVIOUR
6 credit points (2 hours lectures per week)
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.

Text to be advised.

MGMT912 ORGANISATION STRUCTURE AND CONTROL
6 credit points (2 hours lectures per week)
Assessment: seminars, essays examination

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 conflict, new technology, organisation culture, and organisation-environment relations will also be considered.

Text to be advised.

MGMT914 HUMAN RESOURCE DEVELOPMENT
6 credit points (2 hours lectures/seminars per week)
Assessment: seminars and essays

This subject introduces the range of current issues in staff development, leading to an overview of the problems of construction, management, implementation and evaluation of staff development programs. Specific issues covered will be: relevant theories of and approaches to staff development; organisational vs individual bases for staff development; motivation or incentive based theories; specific strategies of approaches to staff development including organisational structures, incentives and rewards which increase professional commitment in employees.

Text to be advised.

MGMT915 MANAGEMENT OF CHANGE
6 credit points (2 hours lectures/seminars)
Assessment: seminars and essays

This subject examines the process of change within an organisation. Issues under discussion will be: change models; characteristics of innovative organisations; acceptance/resistance of change; factors of change; reasons for change; planning and monitoring change; sustaining change.

Text to be advised.

MGMT921 MANAGERIAL FINANCE
6 credit points (2 hours lectures per week)
Assessment: seminars, case studies, essays and examinations
Pre-requisite: ACCY901

An examination of the sources 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.

Text to be advised.

MGMT922 MARKETING I
6 credit points (2 hours lectures per week)
Assessment: Case studies, essays and 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; product life cycle analysis and new product development.

Text to be advised.

MGMT925 SELECTED TOPICS IN MANAGEMENT A
6 credit points

A special topic selected from any area of management (N.B. The selection would be made by the Head of the Department, taking into account the expertise of academic staff,
MGMT926 SELECTED TOPICS IN MANAGEMENT B
6 credit points

A special topic selected from any area of management (N.B. 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).

MGMT927 AUSTRALIAN GOVERNMENT ADMINISTRATION
6 credit points (3 hours per week lecture/seminar)
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 federation and statutory authorities. An introduction to regional government administration, including an overview of its development in Australia and the political and administrative issues raised.

MGMT928 PUBLIC POLICY AND ADMINISTRATION
6 credit points (3 hours per week 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.

MGMT929 INTER-ORGANISATIONAL RELATIONS
6 credit points (3 hours per week lectures/seminars)
Assessment: Assignments, tutorials, examinations

Relations between the different levels of Australian government, public-private sector interactions, relations between unions, government and business, and inter-departmental relations. These inter-organisational relations will be examined as bases for collaborative planning and action within regions, including processes and problems of developing such bases.

MGMT931 STRATEGIC PLANNING AND POLICY
6 credit points (2 hours lectures per week)
Assessment: Examination and essays.

The subject will use case studies as a key teaching vehicle and will examine strategy in the context of, for profit and not for profit 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.

Text to be advised.

MGMT937 MANAGEMENT OF MARKETING COMMUNICATIONS
6 credit points (2 hours lectures & seminars per week)
Pre-requisite: MGMT922 Marketing I
Assessment: case studies and essays.

The subject 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.

Text to be advised.

MGMT940 INNOVATION AND ENTREPRENEURSHIP
6 credit points (2 hours lectures per week)
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 venturing process.

Text to be advised.

MGMT941 SMALL BUSINESS MANAGEMENT I
6 credit points (2 hours lectures per week)
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 parts of the specialisation and examines this in a small business context.
through the development of business planning procedures.

Text to be advised.

**MGMT942 SMALL BUSINESS FINANCE**
6 credit points (2 hours lectures per week)
Assessment: essay(s) and examinations

Planning the structure and finances of a 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.

Text to be advised.

**MGMT943 SMALL BUSINESS MANAGEMENT II**
6 credit points (2 hours lectures per week)
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.

Text to be advised.

**MGMT944 ENTERPRISE PROJECT**
12 credit points (2 hours lectures per week)
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.

Text to be advised.

**MGMT945 TECHNOLOGY ENTERPRISE PROJECT**
6 credit points (2 hours lectures per week)
Assessment: project work.

Students will develop their own enterprise project. This will involve them in developing new product/process proposals and planning the establishment of a new enterprise. The business plan of this will form the basis of the final assessment.

Not to be taken with MGMT944.

**MGMT947 QUALITY MANAGEMENT**
6 credit points (2 hours lecture, 1 hour tutorial per week)
Assessment: Assignments and examination.

This subject examines the statistical and behavioural tools that form the basis of Total Quality Control (TQC). Specific topics will include: Japanese management practices and the impact on competitive advantage; TQC as part of corporate strategy; Kanban and JIT production management; quality circles; statistical tools and controls; Kaizen management; applications, implementation and auditing of TQC.

Text to be advised.

**MGMT948 PROJECT IN REGIONAL ADMINISTRATION**
6 credit points (3 hours per week 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.

**MGMT952 PRODUCTION AND OPERATIONS MANAGEMENT**
6 credit points (2 hours lectures per week)
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, and management of change in the production environment. 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.

Text to be advised.

**MGMT953 HUMAN RESOURCE MANAGEMENT**
6 credit points (2 hours lectures per week)
Assessment: seminars, case studies, essay(s) and examination(s).

Managing people at work, including examination of employment policies and selection, performance appraisal, training and development, financial compensation and welfare, health and safety, and related legal aspects.
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. (N.B. 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).

Text 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. (N.B. 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).

Text to be advised.

MGMT956 NEW PRODUCT MARKETING
6 credit points (2 hours lectures per week)
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. The following are examples of some of the concepts which will be studied - product life cycle, segmentation, product positioning and the product portfolio concept.

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.

Text to be advised.

MGMT960 CASE STUDY
6 credit points

An analysis of a particular managerial problem encountered in practice.

Text to be advised.

MGMT961 INTERNATIONAL BUSINESS MANAGEMENT
6 credit points (2 hours lectures & tutorials/seminars)
Assessment by examination and/or coursework

This course will deal with the identification, analysis and resolution of managerial 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.

Text to be advised.

MGMT962 ENVIRONMENTAL AND OCCUPATIONAL HEALTH
6 credit points (3 hours per week lecture/seminar)
Assessment: assignments, tutorials, examinations

This subject enables an analysis of the broad range of health problems confronting the community and the workforce, by covering issues such as factors which influence the health of a community; factors in lifestyles that affect individual and organisational well being; particular emphasis is given to the promotion of health programs in occupational settings.

MGMT963 ERGONOMICS
6 credit points (3 hours per week lecture/seminar)
Assessment: assignments, tutorials, examinations

This subject will analyze the relationship between the nature of work and the workplace environment: the design of work stations and of jobs; and the capacities and limitations of the human being.

MGMT964 OCCUPATIONAL REHABILITATION
6 credit points (3 hours per week lecture/seminar)

This subject acquaints students with methods and resources available for optimising the rehabilitation of workers affected by an industrial accident or disease.

MGMT965 OCCUPATIONAL HAZARDS I
6 credit points (3 hours per week lecture/seminar)
Assessment: assignments, tutorials, examinations
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.

**MGMT966 OCCUPATIONAL HAZARDS II**  
6 credit points (3 hours per week 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.

**MGMT967 QUANTITATIVE METHODS**  
Second session; 6 credit points (3 hours per week 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.

**MGMT968 COMMUNICATION**  
6 credit points (3 hours per week 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.

**MGMT976 COMPETITIVE STRATEGY AND ANALYSIS**  
6 credit points (2 hours lectures per week)  
Assessment: seminars, essays and examination

This subject introduces a conceptual framework for analysing competitors and competition in industry. Topics include: structural frameworks for analysis; generic strategies; strategies in fragmented emerging, declining, transitional and mature industries; global strategies, vertical integration, new entry and diversification.

Text to be advised.

**MGMT977 MARKETING II**  
6 credit points (2 hours lectures per week)  
Assessment: seminars, essays and examination

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 goods, services, or ideas. Topics include: the structure and function of research information; problem definition and research design; the measurement of consumer attitudes and preferences; collecting primary and secondary data; evaluating and interpreting result results.

Text to be advised.

**MGMT979 DECISION ANALYSIS**  
6 credit points (2 hours lectures per week)  
Assessment: seminars, assignments, essay(s), examination(s)

This subject examines the decision making process and the information systems required to make and implement decisions. Decision models and criteria for rational decision making under conditions of risk and uncertainty. Linear programming, network analysis, simulation, portfolio analysis, utility theory. Implementation issues: rationality and its limits, individual, group and organisational information processing and decision making. Cases in marketing, finance and operations management.

Text to be advised.

**MGMT980 BUSINESS RESEARCH METHODS**  
6 credit points (2 hours lectures per week)  
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:

1. Introduction to philosophy of research;  
2. Problem identification and hypotheses development;  
3. Modes of designing research;  
4. Validity and reliability problems;  
5. Techniques for measuring characteristics;  
6. Sample size and response rates;  
7. Analysis of data.

Text to be advised.
MGMT981 RESEARCH PROJECT
24 credit points
Assessment: project report

An examination and analysis of a selected management problem or issue. The project traditionally forms a link between several subjects and there will be regular integrating seminars during the project period for students to make presentations of their research questions, methods and conclusions.

MGMT986 SPECIAL TOPIC IN MANAGEMENT A
12 credit points

MGMT987 SPECIAL TOPIC IN MANAGEMENT B
12 credit points

MGMT988 SPECIAL TOPIC IN MANAGEMENT C
12 credit points

MGMT989 SPECIAL TOPIC IN MANAGEMENT D
12 credit points

Master of Commerce Honours qualifying subjects consisting of a programme of course work and reading as prescribed by the Head of the Department of Management.

MGMT990 MINOR THESIS
24 credit points

MGMT991 MAJOR THESIS
48 credit points

Approved programme of study agreed with the Head of the Department of Management.

MGMT998 MULTINATIONAL FINANCIAL MANAGEMENT
6 credit points (2 hours lectures and tutorials/seminars)
Pre-requisite: MGMT921
Assessment: by examination and/or course work

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.

Text to be advised.
FACULTY OF EDUCATION

PRINCIPAL OFFICERS

Dean: Professor Russel Linke
Sub Dean: Mr Peter J. Keeble
Faculty Officer: Ms Rosemary Cullen

MEMBERSHIP

The Faculty of Education is made up of the following Schools:

- Learning Studies
- Policy and Technology Studies in Education

COURSES

Both Schools offer the Honours Master of Arts, the Honours Master of Education and the Doctor of Philosophy degrees by research.

Major coursework programs are available in the Faculty in the following areas:

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<th>Program</th>
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<td>Graduate Diploma in Educational Studies:</td>
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<td>Master of Education:</td>
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<td>Children's Literature</td>
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<td>History of Education</td>
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Application forms may be obtained from the Student Enquiry Office on the Ground Floor of the Administration Building or by writing to the Vice-Principal (Administration), The University of Wollongong, P.O. Box 1144, Wollongong, NSW, 2500, Australia.
EDUCATION

INTRODUCTION

The following postgraduate degrees and diplomas are available:

1. Graduate Diploma in Education
2. Graduate Diploma in Educational Studies
   (a) Computers in Education
   (b) & (c) Literacy/English as a Second Language Education
3. Master of Education
4. Honours Master of Education
5. Honours Master of Arts
6. Doctor of Philosophy

The specific requirements for each degree and diploma, the schedule of subjects available for each degree and diploma, and the descriptions of the subjects are set out in the following pages.

All thesis students in the Honours Master of Education and Doctor of Philosophy degrees enrol in the major thesis subject for the School

CURRENT RESEARCH AREAS

School of Learning Studies
The School of Learning Studies has research interests in:
- Cognition and Thinking Processes
- Cultural and Environmental Studies
- Language Education
- Gender Studies
- Curriculum Development and Evaluation

School of Policy and Technology Studies in Education
The School of Policy and Technology Studies in Education conducts research in:
- Education Policy and Planning
- Computers and Information Technology in Education
- Physical and Health Education

SCHEDULE OF GRADUATE SUBJECTS

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<th>Number</th>
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<td>EDUC816</td>
<td>Professional Studies B</td>
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<td>EDUC817</td>
<td>Curriculum Studies</td>
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<td>EDUC818</td>
<td>Perspectives in Education A</td>
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<td>EDUC819</td>
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<td>EDUC820</td>
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<tr>
<td>EDUC821</td>
<td>Social Science I Method</td>
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<tr>
<td>EDUC822</td>
<td>Social Science II Method</td>
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<td>EDUC831</td>
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<td>EDUC832</td>
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<td>EDUC841</td>
<td>English as a Second Language Method</td>
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<td>EDUC842</td>
<td>French Method</td>
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<td>EDUC844</td>
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<tr>
<td>EDUC851</td>
<td>Mathematics I Method</td>
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<td>EDUC852</td>
<td>Mathematics II Method</td>
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<td>EDUC861</td>
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<td>EDUC862</td>
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<td>EDUC871</td>
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<td>EDUC872</td>
<td>Science II Method</td>
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<td>EDUC881</td>
<td>Art I Method</td>
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<td>EDUC882</td>
<td>Art II Method</td>
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<td>EDUC891</td>
<td>Music I Method</td>
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<tr>
<td>EDUC892</td>
<td>Music II Method</td>
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Number | Subject                                    | Credit Points | Session Offered |
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<th></th>
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<tbody>
<tr>
<td>EDUC861</td>
<td>Introduction to Computers in Education</td>
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<tr>
<td>EDUC862</td>
<td>Educational Theory and Information Technologies</td>
<td>8</td>
<td>A</td>
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</table>
### GRADUATE DIPLOMA IN EDUCATIONAL STUDIES (COMPUTERS IN EDUCATION) (Cont'd)

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<th>Stage</th>
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<tbody>
<tr>
<td>Stage 2</td>
<td>Educational Theory and Information Technologies (cont'd)</td>
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<tr>
<td></td>
<td>Educational Computer Programming</td>
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<tr>
<td>Year 2</td>
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<tr>
<td>Stage 3</td>
<td>Computer Resources in Teaching</td>
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<td>Computer Resources Project</td>
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<td>Stage 4</td>
<td>Computer Resources Project (cont'd)</td>
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<td>Social Implications of Information</td>
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<tr>
<td></td>
<td>Information Technologies in Specialised Educational Fields</td>
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<td>2</td>
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</tbody>
</table>

### GRADUATE DIPLOMA IN EDUCATIONAL STUDIES (LITERACY)

**Year 1 Core Studies**

**Stage 1**
- EDRE860 Language Development 1
- EDRE862 Context of Learning

**Stage 2**
- EDRE861 Language Development II
- EDRE863 Literacy Development

**Year 2 Literacy Strand**

**Stage 3**
- EDRE867 Literacy Processes

**Stage 4**
- EDRE869 Methodology & Organisation in Literacy Education

**Stages 3 & 4**
- EDRE868 Evaluation of Literacy
- EDRE870 Independent Study

Note: Students wishing to vary the 4 stage pattern are required to discuss their program with the Course Co-ordinator.

### GRADUATE DIPLOMA IN EDUCATIONAL STUDIES (ENGLISH AS A SECOND LANGUAGE)

**Year 1 Core Studies**

**Stage 1**
- EDRE860 Language Development 1
- EDRE862 Context of Learning

**Stage 2**
- EDRE861 Language Development II
- EDRE863 Literacy Development

**Year 2 ESL Strand**

**Stage 3**
- EDRE864 Foundations of ESL Education

**Stage 4**
- EDRE866 Methodology and Organisation in ESL Education

**Stages 3 & 4**
- EDRE865 Assessment of Needs of Second Language Learners
- EDRE870 Independent Study

Note: Students wishing to vary the 4 stage pattern are required to discuss their program with the Course Co-ordinator.
MASTER OF EDUCATION

Research Subjects

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<tbody>
<tr>
<td>EDSL914</td>
<td>Qualitative Evaluation</td>
<td>8</td>
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<tr>
<td>EDUC910</td>
<td>Introduction to Educational Research Methodology</td>
<td>8</td>
<td>1,2 or A</td>
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<tr>
<td>EDUC911</td>
<td>Advanced Qualitative Research Methods</td>
<td>8</td>
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<tr>
<td>EDUC912</td>
<td>Advanced Quantitative Research Methods</td>
<td>8</td>
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<tr>
<td>EDUC913</td>
<td>Minor Project in Education</td>
<td>8</td>
<td>1,2 or A</td>
</tr>
</tbody>
</table>

Subjects in the Areas of Specialisation

Children’s Literature

| EDSL900 | Children’s Literature: the Text in the Class     | 8             | 1,2 or A        |
| EDSL901 | Children’s Literature and Modern Linguistics     | 8             | 1,2 or A        |
| EDSL905 | Children’s Literature and Modern Literary Theory in Education I | 8 | 1,2 or A |
| EDSL906 | Children’s Literature and Modern Literary Theory in Education II | 8 | 1,2 or A |

Cognitive Processes

| EDSL920 | Educational Psychology I                          | 8             | 1,2 or A        |
| EDSL980 | Special Education - Contemporary Issues          | 8             | 1,2 or A        |

together with any one subject selected from the specialisations Educational Psychology and Special Education.

Curriculum

| EDSL910 | Introduction to Curriculum Theory and Development | 8             | 1,2 or A        |
| EDSL911 | Advanced Curriculum Theory and Development       | 8             | 1,2 or A        |
| EDSL912 | Curriculum Studies A                              | 8             | 1,2 or A        |
| EDSL913 | Curriculum Studies B                              | 8             | 1,2 or A        |

Educational Psychology

| EDSL920 | Educational Psychology I                          | 8             | 1,2 or A        |
| EDSL921 | Educational Psychology II                         | 8             | 1,2 or A        |
| EDSL922 | Educational Psychology III                         | 8             | 1,2 or A        |

Educational Sociology

| EDSL930 | Educational Sociology I                           | 8             | 1,2 or A        |
| EDSL931 | Educational Sociology II                          | 8             | 1,2 or A        |
| EDSL932 | Educational Sociology III                         | 8             | 1,2 or A        |

Gender Studies in Education

| EDSL940 | Gender Studies I                                  | 8             | 1,2 or A        |
| EDSL941 | Gender Studies II                                 | 8             | 1,2 or A        |
| EDSL942 | Gender Studies III                                | 8             | 1,2 or A        |

History of Education

| EDSL950 | History of Education in Australia                | 8             | 1,2 or A        |
| EDSL951 | Advanced Research in History of Education        | 8             | 1,2 or A        |

Language Education

| EDSL960 | Literacy Processes                                | 8             | 1 or 2          |
| EDSL961 | Language Development in School                   | 8             | 1,2 or A        |
| EDSL962 | Assessment and Evaluation of Literacy Development | 8             | 2               |

Physical and Health Education

| EDS900 | Management and Administration Issues in Physical and Health Education | 8             | 1,2            |
### MASTER OF EDUCATION (Cont'd)

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<th>Subject</th>
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<tbody>
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<td>Curriculum Problems and Issues in Physical and Health Education</td>
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<tr>
<td>EDS902</td>
<td>Program Development and Evaluation in Health Education</td>
<td>8</td>
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<tr>
<td>EDS903</td>
<td>Applied Curriculum in Primary School Health Education</td>
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<tr>
<td>EDS904</td>
<td>Applied Curriculum in Primary School Physical Education</td>
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<tr>
<td>EDS910</td>
<td>Studies in the Scientific Bases of Health Education and Health Promotion</td>
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<tr>
<td>EDS911</td>
<td>Discipline Studies in Health</td>
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<tr>
<td>EDS912</td>
<td>Adolescent Health Status and Behaviour</td>
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<td>EDS913</td>
<td>Adapted Physical Education</td>
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<tr>
<td>EDS914</td>
<td>Sport and the Law - Implications for Physical Education</td>
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#### Policy Studies in Education

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<tr>
<td>EDS920</td>
<td>Foundations of Policy Studies</td>
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<tr>
<td>EDS921</td>
<td>Policy Research and Policy Analysis</td>
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<td>EDS922</td>
<td>Health Policy Seminar</td>
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<td>EDS923</td>
<td>Aboriginal Education Policy Seminar</td>
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<td>EDS925</td>
<td>Education Policy in Australia</td>
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<tr>
<td>EDS926</td>
<td>A Comparative Approach to Policy in Education</td>
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<td>EDS927</td>
<td>Educational Management and Administration</td>
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<td>EDS928</td>
<td>Educational Finance</td>
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<td>EDS929</td>
<td>System Planning for Professional Development</td>
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<tr>
<td>EDS939</td>
<td>Economics of Education</td>
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#### Special Education

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<th>Number</th>
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<td>EDSL980</td>
<td>Special Education - Contemporary Issues</td>
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<tr>
<td>EDSL981</td>
<td>Special Education - Teaching Strategies</td>
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<td>EDSL982</td>
<td>Special Education - A Community Orientation</td>
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<tr>
<td>EDSL983</td>
<td>Special Education - Education of Talented and Gifted Children</td>
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#### Technology Studies in Education

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<td>EDS932</td>
<td>Computers, Curriculum and Pedagogy</td>
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<td>EDS933</td>
<td>Computers and Learning Processes</td>
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<td>EDS934</td>
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<td>Computers in Specialised Educational Areas</td>
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<td>EDS936</td>
<td>Alternative Systems of Delivery in Education</td>
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<td>EDS937</td>
<td>Independent Learning Systems</td>
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<td>EDS938</td>
<td>Advanced Teaching/Learning Modules</td>
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#### Electives

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<td>EDUC949</td>
<td>School Administration</td>
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<td>EDSL964</td>
<td>Approaches to ESL Education</td>
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<td>1, 2 or A</td>
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<td>EDSL965</td>
<td>Developing School Language Programs</td>
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<td>EDSL966</td>
<td>The Sociology of Language in Education</td>
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<td>EDSL967</td>
<td>Theory and Practice of Reviewing Literature Research</td>
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<td>EDSL968</td>
<td>Teachers as Change Agents: Staff Development in Literacy Education</td>
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### HONOURS MASTER OF EDUCATION

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HONOURS MASTER OF EDUCATION (Cont'd)

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HONOURS MASTER OF ARTS

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<td>Thesis (School of Policy and Technology Studies in Education)</td>
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COURSE DESCRIPTIONS

1. GRADUATE DIPLOMA IN EDUCATION

The Graduate Diploma is a professional course in education for graduates of this or another approved university who seek teacher qualifications. It also serves as an introduction to the research disciplines of education for those who will later pursue higher studies in the field.

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 degree to teaching requirements. Students are advised to consult staff and the course handbook before purchasing textbooks.

The main aim of the course is to provide a professional course of preservice 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 the students in professional aspects, including classroom practice, at the beginning of the course. Underpinning the professional aspects are curriculum studies, integrated with theoretical aspects.

The three strands offered (Professional, Curriculum and Perspectives in Education) are intended to develop concepts and skills relating to the development of knowledge and competence in teaching. It is hoped that prospective teachers will develop their own self esteem and will be competent, innovative and capable of contributing to the formulation of curriculum in schools.

The course is for one year full-time. The various subjects involve lectures, seminars, tutorials, individual assignments and group exercises. Demonstrations of teaching methods and practice teaching are provided in cooperation with local schools.

Students are advised that the structure of the course makes it more difficult for students to pursue the course part-time. Students who have enrolled part-time prior to 1989 will be accommodated on an individual basis so as to take their particular circumstances into account wherever possible.

Assessment: Assessment for all subjects in the Graduate Diploma in Education will vary according to the type of program offered by individual lecturers. Students must satisfactorily complete every subject in their program of study before the Diploma will be awarded. More specific details of assessment will be given in individual subject outlines.

Attendance: Each session is divided into three blocks, one for practice teaching, and the other two concentrating on different aspects of professional teacher training. 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:

For those students pursuing secondary school methods:

EDUC800 Professional Studies A
8 credit points
EDUC816 Professional Studies B
8 credit points
EDUC817 Curriculum Studies  
8 credit points
EDUC818 Perspectives in Education A  
8 credit points
EDUC819 Perspectives in Education B  
8 credit points
and 8 credit points of Secondary Methods

For those students pursuing primary school methods:
EDUC800 Professional Studies A  
8 credit points
EDUC816 Professional Studies B  
8 credit points
EDUC817 Curriculum Studies  
8 credit points
EDUC818 Perspectives in Education A  
8 credit points
EDUC820 Perspectives in Education  
4 credit points
and 12 credit points of Primary Methods

Methods Subjects: Students are required to complete successfully two methods (Secondary), or two methods (Primary). Assessment procedures will be outlined by the lecturer concerned.

(1) These subjects will:

(a) examine the implications of the conceptual frameworks, and

(b) apply the knowledge, strategies and skills, established in the other strands of the course, to

(c) the study of the specific school curricula in the areas of specialisation chosen by the students, and

(d) the implementation of these curricula in the schools.

(2) The topics studied will include:

(a) the aims of the curriculum and their relationship to the aims of education,

(b) educational perspectives relevant to the subject area,

(c) the establishment of an appropriate learning environment,

(d) teaching styles, strategies and skills as they apply to the presentation of the curriculum,

(e) programming, unit writing and lesson planning as they apply to the curriculum,

(f) student assessment and evaluation of the learning programs and teacher performance in relation to the presentation of the curriculum, and

(g) classroom management, relevant to the presentation of the curriculum, and

(h) the survey and evaluation of contemporary resources.

Teaching Methods on offer will differ from year to year. Students are advised to check with the Faculty regarding the availability of specific Methods subjects. Students are also advised to check with the Faculty through the Professional Officers, Ms Jan James and Ms Debbie McGavin, regarding the correct combination of methods which will satisfy requirements of the NSW Department of Education.

2. GRADUATE DIPLOMA IN EDUCATIONAL STUDIES

(a) Computers in Education
This course is designed to enable teachers holding at least a Diploma in Teaching to extend their knowledge of the use of computer technology in teaching.

There are numerous practical computer based activities relevant to educational settings, together with a study of broader principles associated with teaching, learning, curriculum and information technologies.

The six subjects in the course are taught by part-time study over two academic years.

(b) Literacy

(c) English as a Second Language Education (Part-Time External)
This course is designed for teachers and others who are concerned either with literacy education (i.e. reading, writing, spelling, oral language) or with teaching English as a second language. The needs of all learners are catered for, from kindergarten to year 12 and beyond.

The course is divided into two sections. Work in the first two stages (first year) looks at the nature of language and at patterns of both oral and written language development for first and second language learners. There is also a subject which looks at the social and cultural contexts of learning. All students in the course take these subjects, which are intended to provide essential background to later, more specialised work.
In stages 3 and 4 (second year) students choose to specialise in either literacy education for English speakers, or in teaching English as a second language. In both strands the themes of literacy education for English speakers and non-English speakers will be treated, but with different emphases.

In the Literacy strand students will study topics such as the reading process, the writing process, remediation and diagnosis of reading and writing problems; children's literature, classroom organisation and strategies for teaching the skills of literacy.

The ESL strand looks at the foundations of ESL education; the assessment of needs; program design; and approaches, methods and techniques in ESL education.

The course is designed to be practical in its emphasis, building on teachers' expertise wherever possible, and working towards the development of a methodology which is applicable to teachers' own classrooms.

Appropriate arrangements will be made to cater for the needs of students not proceeding through the original program at the normal rate, as defined in the schedule following. Such students will need to consult with the course co-ordinator at the time of enrolment.

3. MASTER OF EDUCATION

Rationale: The Master of Education is an introductory higher degree allowing two alternative patterns of study. One pattern focuses on the professional development of educators and the other pattern has a research orientation for candidates interested in pursuing study beyond this degree.

Patterns of Study:
Either the professional development program

EDUC910 Introduction to Educational Research Methodology (8 credit points) and
24 credit points in an area of specialisation and
16 credit points of electives.

Or the research orientation program, for students wishing to proceed to M Ed (Hons)

EDUC910 Introduction to Educational Research Methodology (8 credit points) and
8 credit points of advanced studies in qualitative or quantitative research methods, and
24 credit points in the area of specialisation and EDUC913 Minor Project in Education in the area of specialisation (8 credit points).

Normal Progression Patterns: The Master of Education degree will normally be completed in two Sessions of full-time study, or in four Sessions of part-time study. The typical patterns of part-time study are outlined below. The first two Sessions of part-time study are the same for both the professional development and research orientation programs.

Professional Development
Session 1 EDUC910 (Double Session (A)) Specialisation 1
Session 2 EDUC910 (Double Session (A)) Specialisation 2
Session 3 Specialisation 3 Elective 1
Session 4 Elective 2

Research Orientation
Session 1 EDUC910 (Double Session (A)) Specialisation 1
Session 2 EDUC910 (Double Session (A)) Specialisation 2
Session 3 Specialisation 3
Session 4 One advanced research methods subject EDUC913

Requirements for the Degree Program: Please refer to the Pass Master Degree Regulations 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 should be chosen from those areas listed below.

2. A candidate for the Master of Education degree, may, with the approval of the appropriate 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 Master of
Education (Honours) degree will normally be expected:
(a) to satisfactorily complete those subjects in the research orientation strand of the Master of Education Degree, and
(b) to have achieved results averaging credit level or better in the Master of Education Degree.

Areas of Specialisation:

From the School of Learning Studies
1 Children's Literature
2 Cognitive Processes
3 Curriculum
4 Educational Psychology
5 Educational Sociology
6 Gender Studies in Education
7 History of Education
8 Language Education
9 Special Education

From the School of Policy and Technology Studies in Education
1 Physical and Health Education
2 Education Policy and Planning
3 Computers and Information Technology in Education

Prospective students should discuss their program of study with the lecturer responsible for the area of specialisation in which they are interested. These and other details are in the Faculty Postgraduate Degree Handbook, available from the Office of the Dean.

Details of the specific subjects available in each specialisation are set out in the Schedule of Graduate Subjects at the beginning of this chapter. The following specialisations have particular requirements:

Specialisation in the School of Learning Studies: Specialisations in the School of Learning Studies comprise two core subjects within the specialisation, plus a third core subject or a third subject in a related area chosen in consultation with the Head of School and the academic co-ordinator for the specialisation.

Specialisation in Physical and Health Education: Specialisations within this area are available to students with an approved undergraduate degree in Primary and/or Secondary Physical and Health Education, and cover:
- Applied curriculum studies in physical and health education;

Management and administration of physical and health education programs; and

Discipline studies in physical and health education.

Specialisation in Education Policy and Planning: Specialisation in this field requires students to complete a minimum of 24 credit points by selecting at least one applied curriculum/applied management subject (EDSP900 to EDSP904) together with at least one subject from the discipline studies (EDSP910 to EDSP914).

Specialisation in Computers and Information Technology in Education: Students entering this program will be required to complete two foundation subjects (EDSP930 and EDSP932) before opting for at least one elective subject from specialised areas dealing with Applications of Computers to Teaching (EDSP933, EDSP934 and EDSP935) and Advanced Information Technology (EDSP936, EDSP937 and EDSP938).

Electives: All 900 level subjects listed in the Subject Descriptions may be taken as elective subjects.

4. HONOURS MASTER OF EDUCATION

Rationale: The Master of Education (Honours) 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.

Pattern of Study:
Either EDSL999 48 credit point thesis
or EDSP999 48 credit point thesis
Each Directed Study subject is an 8 credit point individualised program of study in an area supporting the area of the 24 credit point thesis. Students may replace a Directed Study subject with subject(s) chosen from the Master of Education schedule, in consultation with their supervisor(s).

Requirements for the Degree Program: The degree of Honours Master of Education (MEd(Hons)) in the Faculty of Education shall be subject to the University's requirements 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 in accordance with, Section 3(a) of the requirements for that degree, with results averaging credit level or better; or

   (c) completed qualifications deemed by the Board of Research and Postgraduate Studies to be the equivalent of the University's Master of Education Degree, in accordance with Section 3(a) of the requirements for that degree, with results averaging credit level or better; or

   (d) completed such other qualifications as might be approved by the Board of Research and Postgraduate Studies on the recommendation of the appropriate Head of School provided that in the view of the Board of Research and Postgraduate Studies any such person shall:

      (i) have accumulated the equivalent of 48 credit points beyond a Pass degree; and

      (ii) completed a total of 24 credit points of research orientated subjects, including research methods and a minor research project.

2. The degree program will normally be completed in two sessions of full-time study or four sessions of part-time study.

3. 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 Directed Study subjects to the value of 24 credit points.

4. 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.

5. The Board of Research and Postgraduate Studies shall appoint supervisor/s for each candidate on the recommendation of the appropriate Head of School.

5. **HONOURS MASTER OF ARTS**

Candidates for the degree who have completed an Honours Degree in Education at the level of II(2) or higher will enrol in a 48 credit point Thesis. Candidates enrolled in the School of Learning Studies will enrol in EDSL999. Candidates in the School of Policy and Technology Studies in Education will enrol in EDSP999.
SUBJECT DESCRIPTIONS

EDRE860 LANGUAGE DEVELOPMENT I
Autumn session; 6 credit points (3 hours per week)
Assessment: Students will be required to complete three written assignments all of equal value.

This subject will introduce students to the theoretical perspective that underpins much of the course. This will be done through the study of first and second language development, and a study of the nature of language, with specific reference to notions of text, context and register.

EDRE861 LANGUAGE DEVELOPMENT II
Spring session; 6 credit points (3 hours per week)
Assessment: Students will be required to complete three written assignments all of equal value.
Pre-requisite: EDRE860

This subject develops more fully some of the themes introduced in Language Development I. It focuses on the relationship between language and learning and explores this relationship through the study of register. The register variables of field, mode and tenor will be discussed and their educational implications for literacy development and ESL Education will be studied.

Textbook

EDRE862 THE CONTEXT OF LEARNING
Autumn session; 6 credit points (3 hours per week)
Assessment: Students will be assessed on the basis of three written assignments of equal value

In order that teachers fully understand the language needs of their students they must develop an awareness of the social, cultural and linguistic contexts within which their students live and grow. Australia is a pluralist society and therefore contains many minority groups. Teachers need to be sensitive to the needs of the children from such groups in order to plan learning programs which will guarantee equal educational opportunities for all students. This subject aims at developing these essential attitudes and skills through the study of cultural and linguistic differences and their educational consequences.

EDRE863 LITERACY DEVELOPMENT
Spring session; 6 credit points (3 hours per week)
Assessment: 3 assignments 40%, 30%, 30%.

This subject is designed to develop the students' knowledge of literacy so that they can make appropriate decisions about teaching reading and writing to learners from all types of cultural and socio-economic backgrounds. Topics to be treated will include: the nature of literacy; the literacy processes; and early literacy development.

EDRE864 FOUNDATIONS OF ESL EDUCATION
Autumn session; 6 credit points (3 hrs per week)
Assessment: Students will be required to complete three written assignments all of equal value.
Pre-requisite: Completion of the core program.

In this subject students will be expected to draw together the understandings and knowledge gained in previous subjects about the nature of language, the process of language development and the importance of the social context in which language occurs. The general principles arising from study of the above areas will begin to be applied in ESL Education in Australia.

Textbooks

EDRE865 ASSESSMENT OF NEEDS OF SECOND LANGUAGE LEARNERS
Double Session (A) 6 credit points (3 hrs per week)
Assessment: Students will be required to complete three written assignments all of equal value.
Co-requisite: Completion of core program

In order to be able to plan effective teaching programs students first need to be able to assess the needs of the second language learner. This subject aims to develop in students the ability to relate proficiency assessment of the learner to perceived language demands of the situation within the context of relevant background information, in order to identify the learner's needs and allocate priorities for program design.

Textbook

EDRE866 METHODOLOGY AND ORGANISATION IN ESL EDUCATION
Spring session; 6 credit points (3 hrs per week)
Assessment: Students will be required to complete three written assignments of equal value
Pre-requisite: Completion of the core program, EDRE864

In order to be effective language teachers students must be able to translate theory into good teaching. The emphasis in this subject will be on the practical implementation of the student's own philosophy of ESL education. Thus the student will be expected to develop an awareness of the direct links between classroom methodology and teaching strategies and their own understanding of language learning. Further, in order to be able to plan and implement language programs effectively students need to understand the relationship between ESL education and the whole school curriculum in terms of the range of organisational models for language teaching; this subject aims to develop such an understanding.

Textbooks

EDRE867 LITERACY PROCESSES
Autumn session; 6 credit points (3 hrs per week)
Assessment: Practical exercises, essay, seminar paper/reaction papers
Pre-requisite: Completion of the core program.

In the first part of this course students will have gained a general understanding of the nature of language, language acquisition and literacy development. This provided a necessary foundation for both strands of the course. It is necessary, however, for those students wishing to follow the literacy strand to engage in detailed studies which view the literacy process from a variety of perspectives. As a result of these studies the students will be expected to be able to develop, articulate and defend their personal philosophy of literacy education, and to demonstrate what that philosophy means in terms of classroom practice.

EDRE868 THE EVALUATION OF LITERACY
Double Session (A); 6 credit points (3 hrs per week)
Assessment: 4 assignments of equal value
Co-requisite: Completion of the core program.
Students who elect to follow the literacy strand of this course will need to acquire a comprehensive knowledge of approaches to the evaluation of literacy development so that they will be able to plan effective literacy programs.

This subject is designed to provide students with the knowledge and skills they will need to successfully evaluate literacy development, in order that they might develop programs of instruction which will meet the needs of their pupils.

EDRE869 METHODOLOGY AND ORGANISATION IN LITERACY EDUCATION
Spring Session; 6 credit points (3 hrs per week)
Assessment: 3 assignments 20%, 30%, 50%
Pre-requisite: Completion of the core program.
To develop a literacy curriculum in the school setting teachers must take into account the individualised literacy needs and cultural backgrounds of the children, the available human and material resources, the appropriate teaching strategies and the physical setting of the classroom. Orchestrating these factors so that meaningful literacy learning experiences occur for all children in their classrooms, requires teachers to have a sound knowledge of current thinking in these areas and the ability to use this information to plan a suitable literacy curriculum.

EDRE870 INDEPENDENT STUDY
Double Session (A); 6 credit points (3 hrs per week)
Assessment: Study proposal, final report total 100%
Pre-requisite: Completion of the core program.
Co-requisite: EDRE864 and EDRE865 or EDRE867 and EDRE868

Students engaged in this postgraduate subject are expected to acquire a comprehensive understanding of the theoretical basis of language education and be able to apply that knowledge to educational practice in Literacy Education or ESL Education. A mandatory requirement of the subject is, therefore, that all students should undertake an individual independent study through which they can demonstrate their theoretical and practical mastery of the subjects studied. They are expected to conduct a study based on an interest area, analyse the results and submit a substantial report on the study.

EDSL900 CHILDREN'S LITERATURE: THE TEXT IN THE CLASS
Autumn or spring session; 8 credit points (3 hrs per week, seminar format)
Assessment: 1 seminar, 2 essays each of equal value

This subject through examining aspects of reading, interpretation and criticism aims to
make students aware of the codes upon which textual production depends, with a view to encourage their own textual practice rather than be intimidated with a single critic's supposedly superior textual production. The point of the subject is to open the way between the literary text and the social text in which we live. Students will be expected to develop methods applicable to their own classroom practices and so contribute to curriculum development in the literacy area. 

Textbooks
Students will be asked to read a representative selection of children's books.

EDSL901 CHILDREN'S LITERATURE AND MODERN LINGUISTICS
*Autumn or spring session; 8 credit points (3 hrs per week, seminar format)*
*Assessment:* 1 seminar, 2 essays of equal value.

Linguistics in the twentieth century has evolved in a direction that has increased enormously its explanatory potential for literary studies. This subject aims to apply aspects of linguistics to literature to provide new and fruitful ways of discussing the specifically literary properties of texts. The understandings reached about this will have implications for using texts in the classroom.

*Textbooks*
A representative selection of children's books will need to be read.

EDSL905 CHILDREN'S LITERATURE AND MODERN LITERARY THEORY IN EDUCATION I
*Autumn or spring session; 8 credit points (3 hrs per week, seminar format)*
*Assessment:* 1 seminar, 2 essays of equal value.

This subject makes a critical examination of some modern developments in literary theory which have taken place in the twentieth century in Europe and North America. In each case a theory is linked to a novel for children and is examined to establish what answers it can suggest for classroom practice to further promote literacy education. Formalist, Linguistic, New Criticism, Reader-Response, and Structuralist theory will be emphasised in this subject.

*Textbooks*
A representative selection of children's books will need to be read.

EDSL906 CHILDREN'S LITERATURE AND MODERN LITERARY THEORY IN EDUCATION II
*Autumn or spring session; 8 credit points (3 hrs per week, seminar format)*
*Assessment:* 1 seminar, 2 essays of equal value.

This subject follows on the work begun in Children's Literature and Modern Literary Theory I, linking current literary theory to novels for children. Emphasis will be on *Post Structuralist, Psycho-analytic, Feminist and Marxist* theory and the implication these theories have for literacy education.

*Textbooks*
A representative selection of children's books will need to be read.

EDSL910 INTRODUCTION TO CURRICULUM THEORY AND DEVELOPMENT
*Autumn or spring or double session; 8 credit points (1 hour lecture and 2 hour tutorial per week).*
*Assessment:* 1 major assignment 40%, 2 minor assignments 20% each, short tasks and exercises 20%.

Origins of the Curriculum in Public School systems.
The Socio-philosophical bases of the curriculum.
General methods of developing, implementing, and evaluating curriculum at the school and classroom level.

*Textbooks*
None specified - students will draw from an extensive bibliography of primary and secondary literature.

EDSL911 ADVANCED CURRICULUM THEORY AND DEVELOPMENT
*Autumn or spring or double session; 8 credit points (1 hour lecture and 2 hour tutorial per week).*
*Assessment:* 1 major assignment 40%, 2 minor assignments 10% each, class test 20%, short tasks and exercises 20%.

Modelling procedures in curriculum design; analysis of educational contexts defining a curriculum design: e.g. teaching, learning, organisational, philosophical, sociological, political, and economic.

*Textbooks*
None specified - students will draw from an extensive bibliography of primary and secondary literature.
EDSL912 CURRICULUM STUDIES A
Autumn or spring or double session; 8 credit points (1 hour lecture and 2 hour tutorial per week)
Assessment: 1 major assignment 40%, 2 minor assignments 20% each, short tasks and exercises 20%.
(a) Survey of the origins of the curriculum in public school systems - historical, political, economic, and philosophical antecedents to the development of the modern public school curriculum.
(b) Methods of designing curricula for a variety of educational environments and socio political philosophies.
(c) Curriculum construction, implementation, and evaluation at the local school level.
(d) Transitional concepts of curriculum development in relation to the contemporary relocation in the locus of control over educational outcomes.

Textbook
None specified: students will draw from an extensive bibliography of selected primary and secondary literature.

EDSL913 CURRICULUM STUDIES B
Autumn or spring or double session; 8 credit points (1 hour lecture and 2 hours tutorial per week)
Assessment: 1 major assignment 40%, 2 minor assignments 20% each, short tasks and exercises 20%.
(a) Advanced topics in curriculum theory, planning and instructional design.
(b) Humanistic, pragmatic, and rationalistic approaches to curriculum theory.
(c) The 'systems' approach to curriculum planning and instructional design.
(d) Selected topics from (i) curriculum development for primary schools, (ii) curriculum development for secondary schools, (iii) curriculum development for senior secondary schools, (iv) curriculum development for higher educational programs.

Textbooks
None specified: students will draw from an extensive bibliography of selected primary and secondary literature.

EDSL914 QUALITATIVE EVALUATION
Spring session; 8 credit points (2 hours lecture and 1 hour seminar/tutorial per week)
Pre-requisite: EDUC910 (or equivalent)
Assessment: 2 short papers 30% total; 1 seminar presentation 30% and 1 project 40%.
The subject will examine the rationale and knowledge base of qualitative research and evaluation. A number of evaluation models will be examined through their contribution of the improvement of programs in a variety of organisational settings. Topics will include: program negotiation and design, evaluator roles, data collection strategies, analysis procedures, ethical issues, client negotiation and the communication of program findings.

Textbooks

Subject Co-ordinator: Dr T. Booth
Lecturer: Dr T. Booth

EDSL920 EDUCATIONAL PSYCHOLOGY I
Autumn or spring or double session; 8 credit points (3 hrs per week on a single session basis: average of 1 hour lecture, 1 hour seminar & 1 hour tutorial)
Assessment: 2 assignments 20% each, including associated project work; major assignment 60% or major assignment 30% plus oral examination 30%.

EDSL921 EDUCATIONAL PSYCHOLOGY II
Autumn or spring or double session; 8 credit points (3 hrs per week: on a single session basis, average of 1 hour lecture, 1 hour seminar & 1 hour tutorial)
Assessment: 2 assignments 20% each, including associated project work, major assignment 60% or major assignment 30% plus oral examination 30%.

EDSL922 EDUCATIONAL PSYCHOLOGY III
Autumn or spring or double session; 8 credit points (3 hrs per week on a single session basis: average of 1 hour lecture, 1 hour seminar and 1 hour tutorial)
Assessment: 2 assignments 20% each, including associated project work, major assignment 60%
or major assignment 30% plus oral examination 30%.

An intensive study of contemporary issues in learning in a formal educational context. Opportunity will be provided for students to specialise in early and middle childhood learning or learning of adolescents.

EDSL930 EDUCATIONAL SOCIOLOGYI
Autumn or spring session; 8 credit points (3 hrs per week; lecture/seminar format)

This subject will examine theoretical perspectives in the Sociology of Education. A critique of these perspectives will be offered. Part of the subject will examine the usefulness of following a practical/action approach towards solving problems associated with teachers and teaching.

Textbooks

Journals: Australian Journal of Education
The Australian and New Zealand Journal of Sociology

EDSL931 EDUCATIONAL SOCIOLOGYII
Autumn or spring session; 8 credit points (3 hrs per week; lecture/seminar format)
Pre-requisites: EDSL930
Assessment: Seminar paper, practical report (Field Survey, Action Research or research report), essay.

Research methodologies in Sociology range from a form of data collecting which is quantitative, employing statistical analyses, to that which is more qualitative in nature (e.g. participant observation and ethnomethodology). These approaches will be examined as well as the links between particular theoretical perspectives and the methodologies used. In recent years action research is seen to be of considerable importance. The relevance of this approach in the context of the school will be assessed.

Textbooks:

Journals: Australian Journal of Education
The Australian and New Zealand Journal of Sociology

EDSL932 EDUCATIONAL SOCIOLOGYIII
Autumn or spring session; 8 credit points (3 hrs per week, lecture/seminar format)
Pre-requisite: EDSL931
Assessment: Seminar Paper/Practical Report (Field Survey, Action Research and or Research Report), Essay

This subject follows on from EDSL931. It continues to examine various methodological approaches that have been used in research of students and teachers in the context of the classroom, as well as in the wider context of the education system. Students will be encouraged to develop research strategies appropriate for implementation in school classrooms.

Textbooks:

Journals: Australian Journal of Education
The Australian and New Zealand Journal of Sociology

EDSL940 GENDER STUDIES I
Autumn or spring session; 8 credit points (1.5 hour lecture and 1.5 hour seminar per week)
Assessment: critical analysis of 2 set readings 40%, seminar paper 20%, major assignment 40%.

A critical analysis of the social construction of gender and the issue of patriarchy. The subject will introduce relevant and challenging social theory as an important aspect of this critique. A major focus will be the understanding and analysis of feminist paradigms for changing Australian education.

Textbooks:

EDSL941 GENDER STUDIES II
Autumn or spring session; 8 credit points (1.5hr lecture and 1.5hr seminar per week)
Pre-requisite: EDSL940 or equivalent as approved by the Head of School.
Assessment: Seminar presentation and paper 35%, minor research assignment (two options: biographical study or minor essay) 20%, major research assignment 45%.

Gender differentiation in schooling will be explored in greater depth building on the social theory introduced in EDSL940. The relationship between gender, power and schooling will form a major focus for study. In -
addition, various ideologies which impinge on education generally and on the schooling of girls in particular, will be outlined and discussed.

Textbook:

EDSL942 GENDER STUDIES III
Autumn or spring session; 8 credit points (1.5 hour lecture and 1.5 hour seminar per week)
Pre-requisite: EDSL941
Assessment: Seminar presentation and paper 35%, minor research assignment 20%, major research assignment 45%.

Students will use critical perspectives developed in EDSL940 and EDSL941 to examine the role of the teacher in the reproduction of gender inequality in schools. Students will extend their knowledge of differentiation which is based on race, class and gender. A thorough analysis of the assumptions underlying traditional, feminist and revisionist critiques of the education and social role of women will be examined.

Textbook:
No set text but reference will be made to a variety of texts, journals, (e.g. Signs: Journal of Women in Culture and Society, Australian Journal of Education) and reports (e.g. Girls and Tomorrow).

EDSL943 WOMEN AND AUSTRALIAN EDUCATION: HISTORICAL AND COMPARATIVE PERSPECTIVES
Autumn or spring session; 8 credit points (1.5 hour lecture and 1.5 hour seminar per week)
Assessment: Critical analysis of 2 set readings 20%, seminar presentation 30%, research project 50%.

The emphasis of the subject will be on methods and materials appropriate to the history of women and education. Students will be introduced to historical research, in the first instance through an examination of the history of education for girls in the colony and state of New South Wales c.1788 c. 1988. The wider themes of the provision for and theories about the education of women, the employment and changing role of women, women as teachers and the effects of increased availability of formal schooling on the self image and status of women will also be explored.

Some emphasis will be placed on theories about the education of women in different times as a background to the Australian developments.

Textbook

EDSL950 HISTORY OF EDUCATION IN AUSTRALIA
Autumn or spring session. 8 credit points (3 hrs per week lectures, seminars and tutorials)
Assessment: minor paper 30%, seminar 25%, major project 45%.

An introduction to the historical analysis of education. Students will examine traditional, revisionist and other new approaches to educational questions and explore epistemological arguments as they relate to critical points in Australian educational history.

Textbooks

EDSL951 ADVANCED RESEARCH IN HISTORY OF EDUCATION
Autumn or spring session; 8 credit points (3 hrs per week lectures, seminars and tutorials)
Assessment: seminar 20%, major project 40%, local history project 40%.

Considerable emphasis will be placed on the use of historical methodology, particularly the use of primary sources, relevant historiography and new methodology such as oral history, local history, family history, biography and new approaches in social history. Students will examine the theory and practice of historical research and writing, the genres of Australian history of education and critically review the new and emerging methodologies available for historical inquiry.

EDSL960 LITERACY PROCESSES
Autumn or spring session; 8 credit points (3 hrs per week lectures, seminars and tutorials)
Assessment: 2 major assignments 30% each, minor weekly assignments 40%.

This subject examines the psycholinguistic processes that underlie reading and writing. It will focus on issues such as the reading-writing connections, the role of spelling in literacy, what it means to be literate in our society. A contributing theme will be learning to read, write and spell, and the implications for classroom practice of K-12 and beyond. Finally, the area of 'whole language' or holistic learning/teaching will be discussed.
Textbooks
Cambourne, B. The Whole Story: Natural Learning and the Acquisition of Literacy in the Classroom, Ashton Scholastic, 1989.

EDSL961 LANGUAGE DEVELOPMENT IN SCHOOL
Autumn or spring session; 8 credit points (3 hrs per week lecture/workshop and seminars)
Assessment: Journal 60%, assignment 40%.
Pre-requisite: EDSL960

The development of language from early childhood into adulthood and the implications of this for the learner and teacher are examined within the framework of a functional approach to language. The increasing control of a range of registers/genres central to success in school will be a major concern. Other themes will include the role of the teacher in language development, language programming, teaching/learning activities for language development, assessment of student's written work, and the place of spoken and written language in the learning process.

Textbooks
Students will be required to read from an extensive bibliography of research articles and journal materials.

EDSL962 ASSESSMENT AND EVALUATION OF LITERACY DEVELOPMENT
Autumn or spring session; 8 credit points (3 hrs per week lectures, seminars, tutorials)
Assessment: 2 assignments 30% each, minor assignments 40%
Pre-requisite: EDSL960, EDSL961

Issues in assessment and evaluation in literacy education will be examined. These include: the place of standardised testing; the notion of "responsive evaluation"; evaluation protocols in "whole language" classrooms and the issue of reporting to parents.

Textbooks
None specified - students will draw from an extensive bibliography of selected literature.

EDSL963 LANGUAGE ACROSS THE CURRICULUM
Autumn or spring or double session; 8 credit points (3 hrs per week on a Autumn or spring session basis: lectures and tutorials)
Assessment: 2 assignments 60% and 40%
Pre-requisite: EDSL960, EDSL961

This subject examines from a functional point of view how language operates in a number of subject areas across the curriculum. In particular it will look at the ways in which texts vary according to their purpose, their subject matter, the channel of communication (written/spoken) and the participants in the interaction (speaker/listener; writer/reader). Implications for classroom practice will be drawn, including issues such as equity in education, programming across the curriculum; effective teaching/learning activities; evaluation of classroom language, student texts and teaching materials.

Textbooks
Students will be required to read from an extensive bibliography of research articles and journal materials.

EDSL964 APPROACHES TO ESL EDUCATION
Autumn or spring session; 8 credit points (3 hours per week)
Pre-requisite: EDSL960
Co-requisite: EDSL961
Assessment: major assignment 60%, minor assignment 40%.

General issues concerning ESL education at all levels (primary, secondary, post-secondary) will be examined, including the similarities and differences between first and second language learning; the needs of ESL students; programming on the basis of this needs analysis; language for specific purposes; teaching/learning activities; materials; the classroom context; cultural and affective issues; and assessment.

Textbooks:
Students will be required to read from an extensive bibliography of research articles and journal materials.

EDSL965 DEVELOPING SCHOOL LANGUAGE PROGRAMS
Autumn or spring session; 8 credit points (2 hours workshop and 1 hour lecture per week)
Pre-requisite: EDSL960, EDSL961
Assessment: Report 40%, position paper 30%, unit of study 30%.

This subject, in focusing on the needs of K-6 and 7-12 learners, examines some curriculum responses to these needs in the light of models of language development. Further issues to be examined include recent reports on language programs and the issues involved in designing units and programs at class, school and system level. There will also be a study of various approaches to the development, trialing and evaluation of language programs.

Textbooks:
EDSL966 THE SOCIOLOGY OF LANGUAGE IN EDUCATION
Autumn or spring or double session; 8 credit points (2 hours seminar and 1 hour lecture per week)
Pre-requisite: EDSL960, EDSL961
Assessment: Field study 40%, essay 40%, seminar presentation 20%.


EDSL967 THEORY AND PRACTICE OF REVIEWING LITERATURE/RESEARCH
Autumn or spring or double session; 8 credit points (3 hrs per week on a single session basis)
Assessment: Major review 50%/60% depending on how undertaken, seminar (optional) 10%, 2 minor assignments 20% each.

The aims of this subject are:

(i) To study the nature, purpose, function and structure of various types of research review;
(ii) To critically evaluate a range of models of research review;
(iii) To examine the assumptions underlying different forms of review (e.g. "state of art review", "reviews for policy workers", "reviews for theory - building", "the thesis review").

In the course of pursuing these aims students shall undertake a review of research in a field germane to their research interests, and produce a review article.

Textbook

EDSL968 TEACHERS AS CHANGE AGENTS: STAFF DEVELOPMENT IN LITERACY EDUCATION
Autumn or spring session; 8 credit points (3 hrs per week: lectures/seminars format)
Assessment: Essay, seminar presentation and weekly readings. Weightings to be determined.
Prerequisite: EDSL960
Co-requisite: EDSL961

This subject is designed to prepare teachers to take on the role of change agents in the school setting. Models of staff development, issues in school based curriculum and 'action-research' methodology will be examined and discussed in the light of literacy education.

EDSL980 SPECIAL EDUCATION - CONTEMPORARY ISSUES
Autumn or spring or double session; 8 credit points (3 hrs per week on a single session basis: lectures, seminars, practical work)
Assessment: seminar presentation 40%, minor assignment 20%, major assignment 40%.

This subject examines a number of significant contemporary issues in the area of special education. Issues are considered under the following headings: Special education - a changing field; historical perspectives; normalisation; the law and special education; parents and families of exceptional children; discipline and the exceptional child; mainstreaming; secondary education and the exceptional child, integration issues for the regular teacher.

Textbooks
None specified - students will draw from an extensive bibliography of primary and secondary literature.

EDSL981 SPECIAL EDUCATION - TEACHING STRATEGIES
Autumn or spring or double session; 8 credit points (3 hrs per week on a single session basis: lectures, seminars, practical work)
Assessment: seminar presentation 40%, minor assignment 20%, major assignment 40%.

This subject offers theoretical and practical work in the area of teaching the exceptional individual. Topics to be covered include: Applied behaviour analysis (precision teaching, behavioural objectives, task analysis, pre-requisite behaviour); programming for generalisation and maintenance outcomes; cognitive behavioural techniques; direct instruction.

Textbooks
None specified - students will be required to read from an extensive list of references.

EDSL982 SPECIAL EDUCATION - A COMMUNITY ORIENTATION
Autumn or spring or double session; 8 credit points (3 hrs per week on a single session basis: lectures, seminars, practical work)
Assessment: seminar presentation 40%, minor assignment 20%, major assignment 40%.

This subject treats the community context of special education paying particular attention to community attitudes, community education,
the use of volunteers, community resources; and effective implementation of the principle of normalisation.

Textbooks
None specified - students will be required to read from an extensive list of references.

EDSL983 SPECIAL EDUCATION - EDUCATION OF GIFTED AND TALENTED CHILDREN
Autumn or spring or double session; 8 credit points (3 hrs per week on a single session basis); lectures, seminars, practical work
Assessment: seminar presentation 40%, minor assignment 20%, major assignment 40%.

This subject is concerned with:
- contemporary issues in the education of gifted and talented children
- theoretical frameworks for the development of learning environments for gifted and talented children
- the occasional and psychological problems encountered by gifted children
- learning characteristics of gifted and talented children
- teaching skills appropriate to the needs of gifted and talented children
- selection and preparation of instructional materials for individual children

Textbooks
None specified; students will be required to use a range of literature sources and reference books.

EDSL998 MINOR THESIS (SCHOOL OF LEARNING STUDIES)
Double Session (A); 24 credit points

This is the major research component of a combined coursework/thesis program in the M.Ed (Hons) course, undertaken by a candidate supervised in the School of Learning Studies. A thesis must be submitted and assessed in line with University Regulations for Honours Masters' candidates. No thesis work should be commenced without approval from an appropriate academic supervisor and the Head of School.

EDSL999 MAJOR THESIS (SCHOOL OF LEARNING STUDIES)
Double Session (A); 48 credit points

This is the major thesis subject for candidates enrolled in M.Ed(Hons) or Ph.D in Education, supervised in the School of Learning Studies. Candidates are required to submit a research thesis in line with the relevant University Regulations. No thesis work should be commenced without approval from an appropriate academic supervisor and the Head of School.

All students enrolled in this subject are required to participate in the Double Session (A) postgraduate colloquium and the seminar program organised by the School as part of its research program.

EDSP861 INTRODUCTION TO COMPUTERS IN EDUCATION
Autumn session; 8 credit points (1 hour lecture, 2 hours seminar/workshop per week)
Assessment: 3 computer based activities 20% each, 2 essays 20% each.

This subject examines a range of educational software, enhances student skills in selecting educational software, considers the use of a wide range of computer based technologies. It provides students with a broad introduction to the educational uses of a wide range of information technologies and studies alternative in curriculum content, teaching strategies and classroom organisations.

Textbook

Subject Co-ordinator: Alison Elliott
Lecturer: Alison Elliott, Neil Hall

EDSP862 EDUCATIONAL THEORY AND INFORMATION TECHNOLOGIES
Double Session (A); 8 credit points (1 hour lecture, 2 hours seminar/workshop per fortnight)
Co-requisite: EDSP860
Assessment: 2 essays 25% each, 1 action research report 50%.

In this subject students develop their knowledge of a number of learning theories and models of cognitive development, and consider a broad range of curriculum issues that relate to the educational applications of computer based information technologies. Essential elements of the subject include using students' practical experiences in teaching and learning as a base for further work in these areas, and establishing a broad theoretical justification for the use of information technologies in education.

Textbooks
Either
or
and either
Brady, L. *Methods and Models of Teaching.* Sydney: Prentice-Hall, 1986

or


**Subject Co-ordinator:** Neil Hall  
**Lecturer:** Neil Hall

**EDSP863 EDUCATIONAL COMPUTER PROGRAMMING**  
**Spring session:** 8 credit points (1 hour lecture, 2 hours seminar/workshop per week)  
**Co-requisite:** EDSP860  
**Assessment:** 2 essays 15% & 20%, 1 action research project 30%, 2 programming activities 15% & 20%

This subject examines computer programming activities appropriate to educational settings, by linking programming activities to educational theory. Programming activities will be selected from Logo, MicroProlog, Hypercard, Authoring Languages, Expert System shells and other technologies available from time to time. Selection will be based on student background, needs and demand.

**Textbook(s)**  
Choice of text will depend on programming activities selected.

**Subject Co-ordinator:** Neil Hall  
**Lecturer:** Neil Hall

**EDSP864 COMPUTER RESOURCES IN TEACHING**  
**Autumn session:** 8 credit points (1 hour lecture, 2 hours seminar/workshop per week)  
**Pre-requisite:** EDSP863  
**Assessment:** 2 essays 50%, 1 seminar presentation 25%, 1 computer based activity 25%

This subject extends students' present knowledge of the ways in which computer based information technologies may be used in educational contexts. Within the subjects, students will have the opportunity to specialize in specific curriculum areas. A key focus of the subject will be identifying and evaluating a wide range of resources, including the sharing of participants experiences in computer education.

**Textbook**  
No set text.

**Subject Co-ordinator:** Alison Elliott  
**Lecturer:** Alison Elliott, together with visiting lecturers.

**EDSP865 COMPUTER RESOURCES PROJECT**  
**Double Session (A):** 8 credit points (2 hours per week for five weeks, then individual study)  
**Pre-requisite:** Completion of all three subjects in first year of part-time study  
**Co-requisite:** must be taken either concurrently with or following completion of EDSP864  
**Computer Resources in Teaching.**  
**Assessment:** Project 100%

Students will be involved in an individual project involving major aspects of the course as a whole. Selection of the actual topic will grow out of discussion between student and supervising lecturer. Projects may be practical in nature but must have a theoretical component that justifies their educational validity.

**Textbook**  
No set text.

**Subject Co-ordinator:** Neil Hall  
**Lecturer:** Neil Hall, together with a team of supervisors.

**EDSP866 SOCIAL IMPLICATIONS OF INFORMATION TECHNOLOGIES**  
**Spring session:** 8 credit points (1 hour lecture, 2 hours seminar/workshop per week)  
**Pre-requisite:** EDSP861, EDSP862, EDSP863  
**Assessment:** 1 essay 25%, 1 action research 50%, 1 seminar presentation 25%

A study of the broad range of computer based applications within and outside educational settings, and the implications of these applications for the individual and for society at large. Topics will be selected from a broad range of literature including issues related to privacy, unemployment, deskillling, the human-machine interface, psychological aspects of computer usage and technological determinism.

**Textbook**  

**Subject Co-ordinator:** Neil Hall  
**Lecturers:** Neil Hall, Alison Elliott

**EDSP867 INFORMATION TECHNOLOGIES IN SPECIALISED EDUCATIONAL FIELDS**  
**Spring session:** 8 credit points (1 hour lecture, 2 hours seminar/workshop per week)  
**Pre-requisite:** EDSP861, EDSP862, EDSP863  
**Assessment:** 1 essay 25%, 1 computer based action research activity 50%, 1 seminar presentation 25%

The purpose of this subject is to allow students to study in greater detail computer applications in one of the traditional curriculum areas typical of school curriculum...
structure, for example, computers in music education or in a field of interest such as early childhood education of special education. The areas of specialization will alter from year to year according to the availability of staff with the appropriate expertise and to student need and demand.

Textbooks
Selection of texts will depend on areas of specialization chosen.

Subject Co-ordinator: Neil Hall
Lecturers: A team of lecturers. Membership will vary from year to year.

EDSP900 MANAGEMENT AND ADMINISTRATION ISSUES IN PHYSICAL AND HEALTH EDUCATION
Autumn or spring session; 8 credit points (3 hrs per week)
Assessment: Full details to be determined.

The subject offers specialised study in administration, organisational change, staff development and motivation, leadership and conflict resolution. Topics will be applied directly to the operations of school departments and school settings with emphasis on Physical and Health Education.

EDSP901 CURRICULUM PROBLEMS AND ISSUES IN PHYSICAL AND HEALTH EDUCATION
Autumn or spring or double session; 8 credit points (3 hrs per session on a single session basis; lectures, seminars, workshops)
Assessment: Assignments, school based practical work, examination.

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.

EDSP902 PROGRAMME DEVELOPMENT AND EVALUATION IN HEALTH EDUCATION
Autumn or spring session; 8 credit points (3 hrs per week)
Assessment: Full details to be determined.

Major concepts of health planning to be reviewed are programme development, implementation and evaluation within and across agencies. Topics include: planning structures; problem identification and analysis; formulation and implementation of plans, evaluation designs, instrumentation development; and data collection and analysis.

EDSP903 APPLIED CURRICULUM IN PRIMARY SCHOOL HEALTH EDUCATION
Autumn or spring session; 8 credit points (3 hr lecture per week)
Assessment: 1 major assignment 40%, 2 minor assignments 15% each, 1 examination 30%.

In recent years, health education in the primary school has undergone a period of rapid growth and change. This situation, while positive in nature, has placed greater demands on the primary school teacher, in the application of curriculum theory and process to health education programmes.

Subject content, therefore, will include an appraisal of curriculum models in health education, an evaluation of specific curriculum guides in health education and an analysis of key issues and problems peculiar to health education in the primary school.

EDSP904 APPLIED CURRICULUM IN PRIMARY SCHOOL PHYSICAL EDUCATION
Autumn or spring session; 8 credit points (3 hrs per week)
Assessment: Full details to be determined.

Curriculum design and implementation of physical education at the primary school levels form the most important part of the curriculum process. Major problems associated with physical education in the primary school will be looked at together with current issues which affect present and future curriculum planning.

Textbook

EDSP910 STUDIES IN THE SCIENTIFIC BASES OF HEALTH EDUCATION AND HEALTH PROMOTION
Autumn or spring or double session; 8 credit points (3 hrs per session on a single session basis)
Assessment: 1 examination 50%, 2 assignments 20% each, probes 10%.

Health promotion has progressed through its infancy and is here to stay. The literature on the value of 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.

EDSP911 DISCIPLINE STUDIES IN HEALTH
Autumn or spring or double session; 8 credit points (3 hrs per week on a single session basis; lectures, seminars, workshops)
Assessment: Full details to be determined.

The goal of the professional in the field of health education includes the development of processes which effectively inform and motivate society to practise healthful and safe living patterns. This subject will examine the various elements of health as they relate to the quality of living. Those factors which influence individual health patterns need to be identified. A comprehensive understanding of the inter-relationships within and between these factors will give direction to the total concept of health.

Textbooks
None specified - students will draw from an extensive bibliography of selected primary and secondary literature.

EDSP912 ADOLESCENT HEALTH STATUS AND BEHAVIOUR
Autumn or spring session; 8 credit points (3 hrs per week)
Assessment: Full details to be determined.

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 adolescent groups will be examined.

EDSP913 ADAPTED PHYSICAL EDUCATION
Autumn or spring or double session; 8 credit points (3 hrs per week on a single session basis; lectures, seminars, workshops)
Assessment: 3 assignments 25% each, class participation 25%.

The concept of mainstreaming has led to many handicapped individuals being placed in the regular physical education class. The need to understand the various handicapping conditions is important to the regular physical education teacher and the adapted physical educator. This course will look at program design and current problems and issues in adapted physical education.

Textbooks
Sherrill, C. Adapted Physical Education and Recreation. Iowa: Brown, 1981.

EDSP914 SPORT AND THE LAW - IMPLICATIONS FOR PHYSICAL EDUCATION
Autumn or spring session; 8 credit points (3 hrs per week)
Assessment: Full details to be determined.

Legal liability has become a contemporary issue for Physical Educators, coaches and administrators involved with the sporting scene. Sport generates important legal problems, litigation and legislation. This subject analyses some of the important legal issues such as liability for sporting injury or damage, Law and Order in the Sporting Arena, Sport and the Law of Business and Sports Law in the International arena.

Textbook

EDSP920 FOUNDATIONS OF POLICY STUDIES
Autumn or spring session; 8 credit points (3 hrs per week seminar alternating fortnightly with 3 hours per week workshop)
Assessment: 4 minor assignments 20%, 1 major assignment 30%, 1 examination 30%, policy simulation 20%.

Concepts dealing with common usage and common definitions of policy, formal models and real events in policy development, key elements in real life policy processes. Elements of Policy theories. Critical examination of rationalist models, incrementalist models, grounded theories, critical theories. Cost/benefit approaches to policy making.
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 - the tools of the trade of policy analysts and researchers - is indispensable to understand how and why Australian educational policies take on their specific outlook.

Textbooks

**EDSP921 POLICY RESEARCH AND POLICY ANALYSIS**
*Autumn or spring session; 8 credit points (3 hrs per week seminar alternating fortnightly with 3 hours per week workshop)*
*Assessment: 4 minor assignments 20%, 1 major assignment 30%, 1 examination 30%, policy simulation 20%.*
*Pre-requisite: EDSP920*

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 analysed from an 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.

**EDSP922 HEALTH POLICY SEMINAR**
*Autumn or spring session; 8 credit points (3 hrs per week)*
*Assessment: Full details to be determined.*
*Pre-requisite: EDSP920*

Health Policy issues and specific examples of health policies will be examined. Topics include policy formation and analysis; issues of implementation; the organization of policy practices; policy planning responsibilities. These issues will be examined in the light of existing policies.

**EDSP923 ABORIGINAL EDUCATION POLICY SEMINAR**
*Autumn or spring session; 8 credit points (3 hrs per week)*
*Assessment: 1 critical evaluation essay 40%, 1 seminar presentation and report 35%, 1 seminar reaction paper 25%.*
*Pre-requisite: EDSP920 or equivalent approved by Head of School.*

Overview and critical evaluation of state and federal government initiatives in the area of Aboriginal education policy. In the context, in particular, of developments during the past decade, topics will include: theoretical constructs for descriptive analysis of policy; examination of policy process; development of policy statement taxonomies; review of policy documents and models for evaluation; comparison of state and federal governments' roles and responsibilities; Aboriginal involvement in policy formulation and implementation; interpretation of outcomes; Aboriginal perspectives.

**EDSP925 EDUCATION POLICY IN AUSTRALIA**
*Autumn or spring session; 8 credit points (3 hrs per week seminar alternating fortnightly with 3 hours per week workshop)*
*Assessment: 4 minor assignments 20%, 1 major assignment 30%, 1 examination 30%, policy simulation 20%.*
*Pre-requisite: EDSP920*

Reference to policies from overseas is a frequent component of the formulation and evaluation of educational policy in Australia. This subject explores the strengths and weaknesses of the comparative approach from various disciplinary points of view. These will include the identification of quantitative and qualitative indicators in education, nationally and internationally, and their analysis against the background of their relevant historical, political, cultural and institutional contexts. The subject will also focus on the role and function of international comparisons in the shaping of educational debates in Australia and on the consequent influence on educational policy making in this country.
EDSN27 EDUCATIONAL MANAGEMENT AND ADMINISTRATION
Autumn or spring session; 8 credit points (2 hours lectures and 1 hour seminar per week)
Pre-requisite: EDSN920 and EDSN921
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

Subject Co-ordinator: Professor K. Gannicott
Lecturer: Professor K. Gannicott

EDSN28 EDUCATIONAL FINANCE
Autumn or spring session; 8 credit points (2 hours lectures and 1 seminar per week)
Pre-requisite: EDSN920 and EDSN921
Assessment: 3 seminar papers (15% each), final examination (55%).

This subject examines some of the basic issues in financing education. The pattern and sources of educational expenditure in Australia and overseas are examined, and a study is made of cost concepts and their measurement in education. Particular attention is paid to the policy options for improving the flow of financial resources to education systems.

Textbook

Subject Co-ordinator: Associate Professor M. Harris
Lecturer: Associate Professor M. Harris

EDSN29 SYSTEM PLANNING FOR PROFESSIONAL DEVELOPMENT
Autumn or spring session; 8 credit points (1 hour lecture, 1 hour seminar, 1 hour workshop per week)
Pre-requisite: EDSN920
Co-requisite: EDSN921
Assessment: Minor (20%) and major (30%) written assignment and a field-based project and report (50%).

This subject is designed to provide education planners with the knowledge and skills needed to facilitate the effective use of human resources in the implementation of policies and programs at state, regional and school levels. The content will include an examination of planning strategies, analysis of professional development models and current practices in the context of adult learning theory, leadership models in an educational setting, and problem solving and decision making strategies together with studies of project design, implementation and evaluation.

Textbooks

Subject Co-ordinator: Associate Professor M. Harris
Lecturer: Associate Professor M. Harris

EDSN30 COMPUTERS AND THE CURRICULUM
Autumn or spring session; 8 credit points (1 hour lecture and 2 hours seminar/ workshop per week)
Assessment: 1 essay (40%), 1 seminar presentation (20%), 2 computer-based activities (20% each).

This subject provides a broad introduction to computers in education. It assumes students have either no knowledge or very little knowledge of computers or their educational applications. In this subject students will use and evaluate educational computer software, and design and evaluate computer based learning activities.

Textbook

EDSN32 COMPUTERS, CURRICULUM AND PEDAGOGY
Autumn or spring session; 8 credit points (1 hour lecture and 2 hours seminar/workshop per week)
Assessment: 2 essays (60%), 2 seminar papers (20% each)
Pre-requisites: EDSN930 or permission of lecturer.

In this subject students will study aspects of curriculum theory to supplement their existing knowledge and experience in this area, enabling them to implement more effectively the use of computers in education. A variety of models of teaching will be examined so as to extend students' knowledge in this area and to enable them to apply more effectively computer applications in educational settings.
EDSP933 COMPUTERS AND LEARNING PROCESSES
*Autumn or spring session; 8 credit points (1 hour lecture and 2 hours seminar/workshop per week)*

**Assessment:** 1 essay (50%), 1 seminar presentation (20%), 1 computer-based activity (30%).

**Pre-requisites:** EDUC932 or permission of lecturer

In this subject students will study information processing, both human and machine, and apply this knowledge to the learning environment. Topics to be studied will include information technology, learning and cognition, artificial intelligence and expert systems; all in an education context.

EDSP934 COMPUTERS IN EARLY CHILDHOOD EDUCATION
*Spring session; 8 credit points (1 hour lecture, 2 hours seminar/workshop associated field work per week)*

**Pre-requisite:** EDSP932

**Assessment:** 1 paper (30%), 1 action research project (50%), 1 seminar presentation (20%).

The use of computer based information technologies in early childhood education opens the door to many important ideas about the development and education of young children (0-8 years). This subject offers students the opportunity to explore the impact of information technologies on early childhood and to consider the role of computer based information technologies in supporting the special learning and development needs of young children. An important focus in the subject will be on using computer based technologies to support the educational needs of children with a variety of developmental disabilities.

**Textbook**

**Subject Co-ordinator:** Alison Elliott

**Lecturer:** Alison Elliott

EDSP935 COMPUTERS IN SPECIALISED EDUCATIONAL AREAS
*Spring session; 8 credit points (1 hour lecture, 2 hours seminar/tutorial associated field work per week)*

**Pre-requisite:** EDSP932

**Assessment:** 1 paper (30%), 1 action research project (50%), 1 seminar presentation (20%).

The purpose of this subject is to enable educators from a variety of backgrounds (for example, music education, TAFE, nursing, training, special education etc.) to extend their knowledge and expertise of applications of information technologies within their own areas of professional responsibility and interest. A major focus of study will be on the relationships between theoretical 2 of teaching and learning and the applications of a range of information technologies (e.g. CD and Videodisk technologies and electronic mail). An important emphasis throughout the subject will be on contemporary research and development work within the specific educational contexts in which subject participants are employed.

The areas of specialization will alter from year to year according to student need and demand and the availability of staff with appropriate expertise.

**Textbook**
Selection of texts will depend on the specializations selected by students.

**Subject Co-ordinator:** Alison Elliott

**Lecturers:** A team of lecturers, the membership of which will vary from year to year. Visiting lecturers with expertise in specialist areas.

EDSP936 ALTERNATIVE SYSTEMS OF DELIVERY IN EDUCATION
*Autumn session; 8 credit points (1 hour lecture, 2 hours laboratory workshop)*

**Pre-requisite:** EDSP932

**Assessment:** 2 essays (25% each), 2 laboratory tasks (25% each)

This subject offers students the opportunity to examine a large range of educational technology available for the production and delivery of learning materials. This subject also examines how this technology is produced and implemented. It focuses on the conceptual and theoretical frameworks, instructional design and development, distribution and organisation of resources and knowledge utilization. There is a specific emphasis, in the context of learning environments, on distribution and reception of television and radio, videotex and electronic mail systems, computer technology and communication, information storage and retrieval, terrestrial telecommunications networks, satellite services, microforms and videodisc and CD technologies.

**Textbook**

**Subject Co-ordinator:** Dr Barry Harper
Lecturer: Dr Barry Harper (and a small involvement of visiting specialised lecturers to present component modules).

EDSP937 INDEPENDENT LEARNING SYSTEMS
Autumn session; 8 credit points (1 hour lecture, 2 hours of laboratory workshop)
Pre-requisite: EDSP932
Assessment: 2 essays (25% each), 2 laboratory tasks (25% each)

This subject offers students the opportunity to examine the implications of advanced information technology for independent learning systems. It focuses on supportive learning environments emphasising interactivity and individual learning networks, communication and data highways, open learning agencies and distance education systems. In the context of learning environments, there will be specific emphasis on the conceptual and theoretical underpinning of independent learning system components such as intelligent tutoring systems and artificial intelligence.

Textbooks

Subject Co-ordinator: Dr Barry Harper
Lecturers: Dr Barry Harper, Professor Carla Fasano (and a small involvement of visiting specialised lecturers to present component modules).

EDSP938 ADVANCED TEACHING/LEARNING MODULES
Autumn session; 8 credit points (1 hour lecture, 2 hours laboratory workshop per week)
Pre-requisite: EDSP936 or EDSP937
Assessment: 1 review of Interactive Multimedia Presentation (25%), 1 project (75%)

This research subject offers students the opportunity to design, produce and evaluate teaching/learning modules for a variety of instructional settings. Theory driven approaches to Interactive Multimedia and telecommunication based educational delivery systems will be used as a basis for prototyping educational environments for schools, the tertiary sector and the community in general. The subject will focus on approaches to design and development, assessment of needs and objectives, instructional design and issues related to adult and independent learning. It will be offered as a specialised alternative to the subject Minor Project in Education EDUC913.

Textbooks

Subject Co-ordinator: Dr Barry Harper
Lecturers: Dr Barry Harper, Professor Carla Fasano (and a small involvement of visiting specialised lecturers to present component modules).

EDSP939 ECONOMICS OF EDUCATION
Autumn or spring session; 8 credit points (2 hours lectures, 1 hour seminar per week)
Pre-requisite: EDSP920 and EDSP921
Assessment: 3 seminar papers (15% each), final examination (55%)

Educators who have little acquaintance with the discipline of economics will be introduced to those principles and concepts which help them understand the nature and consequences of decision making behaviour. Topics include the contribution of economics to educational policy making, investment in human capital, benefits from education and issues in educational economics in the current climate of public expenditure constraints.

Textbook

Subject Co-ordinator: Professor K. Gannicott
Lecturers: Professor K. Gannicott and Mr J. Scarlett

EDSP998 MINOR THESIS (SCHOOL OF POLICY AND TECHNOLOGY STUDIES IN EDUCATION)
Double Session (A), 24 credit points

This is the research component of a combined coursework/thesis program in the M.Ed (Hons), supervised in the School of Policy and Technology Studies in Education. The 24 credit point thesis will be assessed in accordance with university regulations for Honours Masters' candidates.

EDSP999 MAJOR THESIS (SCHOOL OF POLICY AND TECHNOLOGY STUDIES IN EDUCATION)
Double Session (A); 48 credit points

This is the thesis subject for candidates enrolled in M.Ed (Hons), MA (Hons), or Ph.D, supervised in the School of Policy and
Technology Studies in Education. Candidates are required to submit a research thesis which will be assessed in accordance with university regulations.

All candidates in this subject are required to participate in the postgraduate seminar/workshop/conference programs organised by the School. Details of student participation are to be organised with supervisors and Head of School.

EDUC903 SPECIAL TOPIC IN EDUCATION
Autumn or spring or double session; 8 credit points (3 hrs per week on a single session basis: tutorials and seminars)
Pre-Requisite: Permission of Head of School.
Assessment: Project
This subject exists to enable study in an area not presently covered by any other 900 level subject offered by the Faculty of Education.

EDUC905 DIRECTED STUDY IN EDUCATION I

EDUC906 DIRECTED STUDY IN EDUCATION II

EDUC907 DIRECTED STUDY IN EDUCATION III
Autumn or spring or double session; 8 credit points
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 successful completion of the Minor Thesis. Subjects may be selected from the Master of Education schedule of subjects, or negotiated on an individual basis to suit the student's specialisation.

EDUC910 INTRODUCTION TO EDUCATIONAL RESEARCH METHODOLOGY
Autumn or spring session; 8 credit points (3 hrs per week 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 (quantitative and qualitative)
- Ethics in Education Research.

Textbooks

EDUC911 ADVANCED QUALITATIVE RESEARCH METHODS
Autumn or spring session; 8 credit points (2 hours lecture and 1 hour seminar per week)
Assessment: 5 assignments (20% each) or negotiated assessment.
An examination of the rationale for the use of the qualitative research paradigm will be undertaken before 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

EDUC912 ADVANCED QUANTITATIVE RESEARCH METHODS
Autumn or spring session; 8 credit points (2 hours lecture and 1 hour laboratory per week)
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.

Textbooks

EDUC913 MINOR PROJECT IN EDUCATION
Autumn or spring or double session; 8 credit points (3 hrs per week on a single session basis: lectures & seminars)
Co-requisite: three subjects from the students area of specialisation.
Assessment: Research oriented project.

GRADUATE DIPLOMA IN EDUCATION

The subjects EDUC800 - EDUC892 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 practice and for this reason the timetabling and assessment requirements vary over the teaching year. 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: Attendance 100%

This is the practice teaching component of the course. Students will be required to complete successfully three practice teaching periods. Students will be required to attend field experience days; to observe lessons; be involved in peer assessment; undertake micro teaching and undertake those aspects of communication skills useful for the practising teacher. Students are advised that they will be expected to carry out their practice teaching experience in the Wollongong area. There will be 11 weeks total practice teaching experience.

EDUC816 PROFESSIONAL STUDIES B
Double Session (A); 8 credit points
Assessment: Essay

Autumn session:
This subject covers several aspects and is designed to relate directly to the practice teaching experience. It will include those courses such as Physical Education, Health and Communication Skills deemed necessary by the New South Wales Department of Education to fulfil professional requirements. Health and Physical Education may be offered either in Session One or Session Two. Teaching techniques and classroom dynamics will be included in this course.

Spring session:
Those aspects of the subject covered in Session One will be pursued. Following the final practice teaching session, group discussions will be held. This part of the course is designed to assist the student in his/her professional development as a teacher. Current policy documents as they affect the lives of pupils, teachers and the community will be discussed. There will also be an attempt to draw together the practical and theoretical aspects of the course. It is hoped that students will by this time feel more able to solve problems relating to pupils, teachers and teaching. Examples of topics for discussion are: preparation for a career in teaching; self assessment of practical experiences during the year; teacher evaluation and accountability.

EDUC817 CURRICULUM STUDIES
Double Session (A); 8 credit points (3 hours per week)
Assessment: Essays, tutorial work, exercises.

This subject examines the processes of curriculum construction and instructional design. The intention is to equip beginning teachers with a range of instructional strategies which may be employed in developing classroom teaching programs. This component will help underpin work carried out in the Methods subjects.

Content could include the following:
- Aims
- Spectrum of Styles
- Setting objectives
- Taxonomies of Learning
- Domains
- Principles of Assessment and Evaluation
- Content Selection Resource Assessment
- Matching Instruction to Client Attributes and Needs

EDUC818 PERSPECTIVES IN EDUCATION A
Double Session (A); 8 credit points (3 hours per week)
Assessment: Test, tutorial paper, essay

Theme: School and Society.
In Session One, this subject seeks to introduce students to the History of Australian Education; Sociology of Education; Psychology of Education and Philosophy of Education. This section of the course will include blocks of lectures in the various discipline areas, together with tutorials. In Session Two, group discussions and seminars will be held on Australian Education as it affects pupils, teachers and communities. This section is intended to provide a link with perspectives introduced in Session One.

EDUC819 PERSPECTIVES IN EDUCATION B
Double Session (A); 8 credit points (2 hours per week)
Assessment: Essay, tutorial paper.

Secondary students enrol in this subject.

EDUC820 PERSPECTIVES IN EDUCATION C
Double Session (A); 4 credit points (1 hour per week)
Assessment: Essay, project.
Primary students enrol in this subject.

Secondary students will choose two topics and Primary students one, from the variety which will be offered depending on staff availability. These subjects are designed to give students flexibility and to allow them to pursue in depth area(s) of their choice following on from EDUC818. It is strongly recommended that students choose topics outside the core areas of their undergraduate degrees. Examples of topics which may be offered are: Society and the School; Methods and Philosophies of Teaching; Language and English as a Second Language; The Education of the Exceptional Child; The Slow Learner; Testing and Evaluation - values and value judgments; Education of Minority Groups; Computers in Education; Individual Differences; the growth of Mass Schooling in Australia.

EDUC821 SOCIAL SCIENCE I METHOD
Double Session (A); 4 credit points

EDUC822 SOCIAL SCIENCE II METHOD
Double Session (A); 4 credit points

There are three alternatives, one of which qualified students must select at the time of enrolment. At the successful completion of the Graduate Diploma in Education Course the student's academic transcript will indicate the strand undertaken. (For example, EDUC822 Social Science Method IIA or EDUC822 Social Science Method IIB).

A. Senior Geography and Economics
To qualify to select this subject, students must meet minimum requirements of at least two years undergraduate study in either Geography or Economics and at least one year of the other subject.

B. Senior Geography and Social Science
To qualify to select this subject students must have a minimum of two years successful undergraduate study of Geography and at least one year of another acceptable Social Science (For example, Anthropology or Economic History or Political Science or Sociology).

C. Economics and Social Science
To qualify to select this subject, students must have a minimum of two years successful undergraduate study of Economics and at least one year of another acceptable Social Science (For example, Political Science or Demography or Archaeology).

EDUC831 ENGLISH METHOD
Double Session (A); 4 credit points

EDUC832 HISTORY METHOD
Double Session (A); 4 credit points

EDUC841 ENGLISH AS A SECOND LANGUAGE METHOD
Double Session (A); 4 credit points

EDUC842 FRENCH METHOD
Double Session (A); 4 credit points

EDUC844 ITALIAN METHOD
Double Session (A); 4 credit points

EDUC851 MATHEMATICS I METHOD
Double Session (A); 4 credit points

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 both of these subjects successfully.

EDUC861 PRIMARY I METHOD
Double Session (A); 6 credit points

EDUC862 PRIMARY II METHOD
Double Session (A); 6 credit points

Students who wish to teach at the primary school level will need to complete both of these subjects successfully.

EDUC871 SCIENCE I METHOD
Double Session (A); 4 credit points

EDUC872 SCIENCE II METHOD
Double Session (A); 4 credit points

Students who wish to teach science at the secondary school level will need to complete both of these subjects successfully.

EDUC881 ART I METHOD
Double Session (A); 4 credit points

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 both of these subjects successfully.

EDUC891 MUSIC I METHOD
Double Session (A); 4 credit points

EDUC892 MUSIC II METHOD
Double Session (A); 4 credit points

Students who wish to teach music at the secondary school level will need to complete both of these subjects successfully.
FACULTY OF ENGINEERING

PRINCIPAL OFFICERS

Dean: Associate Professor Noel Kennon
Sub Dean: Dr Maxwell Lowrey
Faculty Officer: Ms Lynne Short

MEMBERSHIP

The Faculty of Engineering is made up of the following Departments:

Civil and Mining Engineering
Electrical and Computer Engineering
Materials Engineering
Mechanical Engineering

COURSES

All Units offer Honours Master of Engineering & Doctor of Philosophy degrees by research.

Major coursework programs are available in the Faculty in the following areas:

Civil Engineering 197
Electrical Engineering 204
Materials Engineering 211
Mechanical Engineering 215
Mining Engineering 219
Public Works 197
Telecommunications Engineering 204

Application forms may be obtained from the Student Enquiry Office on the Ground Floor of the Administration Building or by writing to the Vice-Principal (Administration), The University of Wollongong, P.O. Box 1144, Wollongong, NSW, 2500, Australia.
CIVIL ENGINEERING

INTRODUCTION

The following postgraduate degrees and diplomas are available:

1. Graduate Diploma in Engineering (Public Works)
2. Honours Master of Engineering by Coursework or Research
3. Doctor of Philosophy

The schedule of subjects available for the Masters degree and the diploma is set out on the following pages.

For the Doctor of Philosophy degree candidates enrol in the subject CIVL952.

The specific requirements for the degree and the diploma and the descriptions of the subjects available are set out in the pages following the schedules of subjects.

SCHEDULE OF GRADUATE SUBJECTS

GRADUATE DIPLOMA IN ENGINEERING (PUBLIC WORKS)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIVL971</td>
<td>Environmental Engineering</td>
<td>6</td>
</tr>
<tr>
<td>CIVL972</td>
<td>Water Engineering</td>
<td>6</td>
</tr>
<tr>
<td>CIVL973</td>
<td>Roads and Streets</td>
<td>6</td>
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<tr>
<td>CIVL974</td>
<td>Traffic and Transportation</td>
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<tr>
<td>CIVL975</td>
<td>Environmental Planning</td>
<td>6</td>
</tr>
<tr>
<td>CIVL976</td>
<td>Power, Duties and Financial Management</td>
<td>6</td>
</tr>
<tr>
<td>CIVL977</td>
<td>Management and Industrial Relations</td>
<td>6</td>
</tr>
<tr>
<td>CIVL978</td>
<td>Asset Maintenance Management</td>
<td>6</td>
</tr>
</tbody>
</table>

HONOURS MASTER OF ENGINEERING

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIVL901</td>
<td>Project</td>
<td>5</td>
</tr>
<tr>
<td>CIVL902</td>
<td>Reliability in Geotechnical Engineering</td>
<td>5</td>
</tr>
<tr>
<td>CIVL903</td>
<td>Concrete Technology</td>
<td>5</td>
</tr>
<tr>
<td>CIVL904</td>
<td>Highway Materials</td>
<td>5</td>
</tr>
<tr>
<td>CIVL905</td>
<td>Transportation Engineering</td>
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<tr>
<td>CIVL906</td>
<td>Traffic Engineering</td>
<td>5</td>
</tr>
<tr>
<td>CIVL907</td>
<td>Civil Engineering Computations</td>
<td>5</td>
</tr>
<tr>
<td>CIVL908</td>
<td>Advanced Soil Mechanics</td>
<td>5</td>
</tr>
<tr>
<td>CIVL909</td>
<td>Advanced Foundation Engineering</td>
<td>5</td>
</tr>
<tr>
<td>CIVL910</td>
<td>Vibration of Structures</td>
<td>5</td>
</tr>
<tr>
<td>CIVL911</td>
<td>Finite Element Methods</td>
<td>5</td>
</tr>
<tr>
<td>CIVL912</td>
<td>Engineering Hydrology</td>
<td>5</td>
</tr>
<tr>
<td>CIVL913</td>
<td>Estuary and Coastal Engineering</td>
<td>5</td>
</tr>
<tr>
<td>CIVL914</td>
<td>Analysis and Design of Bridge Structure</td>
<td>5</td>
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<tr>
<td>CIVL915</td>
<td>Numerical Methods in Civil Engineering</td>
<td>5</td>
</tr>
<tr>
<td>CIVL916</td>
<td>Research Topics in Civil Engineering</td>
<td>5</td>
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<tr>
<td>CIVL917</td>
<td>Environmental Engineering</td>
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</tr>
<tr>
<td>CIVL918</td>
<td>Steel Structures</td>
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</tr>
<tr>
<td>CIVL919</td>
<td>Earth Structures</td>
<td>5</td>
</tr>
<tr>
<td>CIVL920</td>
<td>Civil Engineering Hydraulics</td>
<td>5</td>
</tr>
</tbody>
</table>

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 and wastewater treatment
- Road construction materials
- Roads engineering
- Traffic engineering
- Microcomputer applications in analysis and design
- Computer-aided design and drafting
HONOURS MASTER OF ENGINEERING (Cont'd)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIVL921</td>
<td>Wastewater Engineering</td>
<td>5</td>
</tr>
<tr>
<td>CIVL922</td>
<td>Water Supply Engineering</td>
<td>5</td>
</tr>
<tr>
<td>CIVL923</td>
<td>Advanced Reinforced Concrete</td>
<td>5</td>
</tr>
<tr>
<td>CIVL924</td>
<td>Advanced Studies in Computer Aided Design Draughting</td>
<td>5</td>
</tr>
<tr>
<td>CIVL950</td>
<td>Thesis</td>
<td>8</td>
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<tr>
<td>CIVL951</td>
<td>Thesis</td>
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<tr>
<td>CIVL952</td>
<td>Major Thesis</td>
<td>48</td>
</tr>
<tr>
<td>CIVL999</td>
<td>Advanced Topics in Engineering</td>
<td>48</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS

1. GRADUATE DIPLOMA IN ENGINEERING (PUBLIC WORKS)

Aims
The course is intended to provide specialised work in the areas of importance to Public Works and Local Government engineers. The areas covered will include:

(1) Acts, regulations and codes of practice.
(2) Financial analysis.
(3) Civil Engineering Practice.

Each subject offered will be rated at 6 credit points, and a total of 8 subjects (48 credit points) are required to fulfil the requirements.

Entry Requirements
The course is of 1 year's full-time or 2 years part-time study for those candidates who hold a Bachelor Degree.

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:

(1) Honours Master of Engineering Degree by coursework.
(2) Honours Master of Engineering Degree by research thesis.
(3) Honours Master of Engineering Degree by combinations of coursework and research thesis.

(a) The Honours Master of Engineering Degree by Coursework

The Honours Master of Engineering Degree by coursework is intended for engineers who have had some professional experience after graduating. It consists of lecture courses together with a project. The lectures and projects will be closely related where possible to the professional interests of those taking part.

(b) 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.

(c) 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.
Entry Requirements
Normally the course is of 1 year full-time or 2 years part-time study for those candidates who hold a Bachelor Degree with Honours Class II, Division 2 or higher. Applicants holding a Bachelor degree of a standard less than Honours Class II, Division 2 will have their program approved by the Board of Research and Postgraduate Studies after consultation with the Head of the Department of Civil and Mining Engineering.

SUBJECT DESCRIPTIONS

Credit Points
Each subject below, except where otherwise stated, has a credit point value of 5.

CIVIL901 PROJECT
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 an 8 credit point thesis. It will not be available to those students who enrol in a 28 credit point thesis.

CIVIL902 RELIABILITY IN GEOTECHNICAL ENGINEERING

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 probability of failure propagation and initiation, most probable extent of embankment or slope failure.

CIVIL903 CONCRETE TECHNOLOGY

Mix design theories; design of high strength and lightweight concrete, elastic behaviour; strength, creep, shrinkage; significance of tests and properties of constituent materials; analysis of results; non-destructive tests; special concrete applications.

CIVIL904 HIGHWAY MATERIALS

Soil and roadmaking aggregate surveys; compaction of soil; road construction with soil and low-grade aggregates; mechanical, cement, bituminous, and resinous stabilisation; constructional methods in soil stabilisation.


Pavement design and evaluation - a review of current Australian, European and North American Practice.

CIVIL905 TRANSPORTATION ENGINEERING

Transport problems; urban travel demands; the transport planning process; travel-demand forecasting; trip generation analysis; model split analysis; trip distribution analysis; 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.

CIVIL906 TRAFFIC ENGINEERING

Characteristics of vehicles, drivers and pedestrians; vehicle speeds, volumes, journey times; accident studies; traffic management; parking; traffic prediction; economic analysis.

CIVIL907 CIVIL ENGINEERING COMPUTATIONS

(i) The use of problem oriented languages in solving Civil Engineering problems, including ICES STRUDL, COGO, ROADS, TRANSET, PROJECT, BRIDGE, SEPOL, LEASE, TRAVOL. In general these subsystems can be applied to Structural systems, co-ordinate geometry, roadway analysis, transportation networks, project engineering, bridge design, settlement problems, stability of slopes and traffic volume problems.

(ii) The development of general user programs using ICES Command Definition Language, Command Interpreter System, ICETRAN.

This subject will concentrate on STRUDL which is designed for application to a wide range of structural types, both two and three dimensional, including trusses, frames, plates and shells. Any combination of these components 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. Input data includes member and structure boundary conditions, prismatic or variable section members, any number of loading conditions consisting of any number of uniform, linear, or concentrated member loads, uniform or concentrated member distortions and temperature loads, and joint loads and joint displacements.

CIVL908 ADVANCED SOIL MECHANICS

The principle of effective stress and its implications; stress paths in soil mechanics; problems of shear 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.

CIVL909 ADVANCED FOUNDATION ENGINEERING

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.

CIVL910 VIBRATION OF STRUCTURES


CIVL911 FINITE ELEMENTS METHODS

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.

CIVL912 ENGINEERING HYDROLOGY

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.

CIVL913 ESTUARY AND COASTAL ENGINEERING

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.

CIVL914 ANALYSIS AND DESIGN OF BRIDGE STRUCTURES

Types of bridges; similarities between bridges and some plate- and shell-type building structures; loadings; 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 superstructures; design of foundations.

CIVL915 NUMERICAL METHODS IN CIVIL ENGINEERING


CIVL916 RESEARCH TOPICS IN CIVIL ENGINEERING

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.

CIVL917 ENVIRONMENTAL ENGINEERING

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.

CIVL918 STEEL STRUCTURES

Steel behaviour. Hot rolled and cold-formed

CIVL919 EARTH STRUCTURES

Location of earth structures such as embankments and earth 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 sub-surface erosion and piping; risk studies; maintenance and improvement of earth structures.

CIVL920 CIVIL ENGINEERING HYDRAULICS


CIVL921 WASTEWATER ENGINEERING

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.

CIVL922 WATER SUPPLY ENGINEERING

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.

CIVL923 ADVANCED REINFORCED CONCRETE

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.

CIVL924 ADVANCED STUDIES IN COMPUTER AIDED DESIGN AND DRAUGHTING

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 database, bill of materials; structural detailing; CADD management.

CIVL950 THESIS

Double session (A); 8 credit points

CIVL951 THESIS

Double session (A); 28 credit points

CIVL952 MAJOR THESIS

Double session (A); 48 credit points

CIVL971 ENVIRONMENTAL ENGINEERING

6 credit points

Aspects of public health; water supply and sewerage systems investigation and design; water treatment plant design; municipal wastewater treatment plant design; atmospheric pollution.

CIVL972 WATER ENGINEERING

6 credit points

Urban drainage design; design flood estimation techniques; culvert design; floodway design; detention basin design; erosion and scour protection; flood mitigation practice; coastal engineering.

CIVL973 ROADS AND STREETS

6 credit points

Pavement design, maintenance and construction; geometric design of roads, road capacity, aesthetics, sociological impact, and landscaping; road structures.

CIVL974 TRAFFIC AND TRANSPORTATION

6 credit points

Traffic management including analysis, signals, parking; traffic engineering including future projections, accidents and prevention, pedestrians, intersections and street lighting; transportation planning, including land use, impact on environmental land use, land values and community activities. Economics and cost benefit analysis of transportation proposals. Transportation Policies.
CIVL975 ENVIRONMENTAL PLANNING
6 credit points
Town and country planning; N.S.W. environmental planning legislation and processes; neighbourhood planning; development control processes and the Civil Engineer; national, state and regional planning; environmental impact assessment and traffic.

CIVL976 POWERS DUTIES AND FINANCIAL MANAGEMENT
6 credit points
The local government act 1919; ordinance; legal responsibilities and liabilities of councils; administration of government finances; accounting and cost control in local government; management statistics, collection, tabulation, statistical analysis and presentation.

CIVL977 MANAGEMENT AND INDUSTRIAL RELATIONS
6 credit points
Elements of management and industrial relations; corporate management; council committees and operation; financial management and budgets; words management and operations research; policies and delegation of authority; review processes, use of resources, accountability and effectiveness.

CIVL978 ASSET AND MAINTENANCE MANAGEMENT
6 credit points
Maintenance goals, policy, philosophy statistics and strategies; risk and loss potential; benefit cost analysis; criteria for evaluation and comparison of projects; management of assets and liabilities; sensitivity analysis; interest rates, inflation, taxation and depreciation.

CIVL999 ADVANCED TOPICS IN ENGINEERING
Double session (A); 48 credit points
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.
ELECTRICAL AND COMPUTER ENGINEERING

INTRODUCTION

The following postgraduate degrees and diplomas are available:

1. Graduate Diploma in Engineering - Electrical and Computer Engineering
2. Honours Master of Engineering by Coursework or Research
3. Honours Master of Engineering in Telecommunications Engineering
4. Doctor of Philosophy

The schedule of graduate subjects available is set out below. The specific requirements for awards and the subject descriptions appear under the appropriate course description.

The Regulations governing the Doctor of Philosophy degree are detailed under the section called 'Graduate Degree and Diploma Regulations' within this Handbook. For the Doctor of Philosophy degree, candidates enrol in the subject ELEC951, Thesis.

SCHEDULE OF GRADUATE SUBJECTS

HONOURS MASTER OF ENGINEERING

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tr>
<td>ELEC901</td>
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<tr>
<td>ELEC911</td>
<td>Reliability Engineering</td>
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<tr>
<td>ELEC921</td>
<td>Matrix Analysis of Electrical Machines</td>
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<td>ELEC922</td>
<td>Machines in Control Systems</td>
<td>6</td>
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<tr>
<td>ELEC923</td>
<td>Static Converters</td>
<td>6</td>
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<tr>
<td>ELEC924</td>
<td>Advanced Power Systems</td>
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<td>Control Computing</td>
<td>6</td>
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<td>ELEC941</td>
<td>Control System Analysis and Design</td>
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<td>ELEC942</td>
<td>Optimal Control Systems</td>
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<td>Nonlinear Control Systems</td>
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<td>Sampled-Data Control Systems</td>
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<td>ELEC961</td>
<td>Noise and Information Theory</td>
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<td>Electromagnetic Fields and Antennas</td>
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<td>ELEC972</td>
<td>Air Pollution Control Techniques</td>
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<td>Mathematical Methods in Electrical Engineer II</td>
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</tr>
<tr>
<td>ELEC999</td>
<td>Advanced Topics in Engineering</td>
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</tr>
</tbody>
</table>
COURSE DESCRIPTION

1. GRADUATE DIPLOMA IN ENGINEERING - ELECTRICAL AND COMPUTER ENGINEERING

The Regulations governing the Graduate Diploma are detailed under the section called 'Graduate Degree and Diploma Regulations' within this Handbook.

For the Graduate Diploma in Engineering, candidates enrol in the following subject:

ELEC999 Advanced Topics in Engineering

Details of this subject are presented in the Subject Descriptions below.

2. HONOURS MASTER OF ENGINEERING

Under the Regulations for the degree of Honours Master of Engineering, candidates may meet the major requirements by satisfactorily completing:

(i) a thesis embodying the results of an investigation; or
(ii) a study comprising formal coursework; or
(iii) study comprising formal coursework and a minor thesis.

For 1990, unless demand warrants it, graduates wishing to undertake additional formal studies in electrical engineering will only be able to do so by following the prescription in Item (i) above.

The majority of engineering graduates seeking entry to the Honours Masters program will have qualifications which fall within one of four main categories, namely:

(1) A nominal 6 year, part-time pass degree e.g. BSc(Eng).
(2) A nominal 4 year, full time pass degree e.g. BE.
(3) A nominal 6 year, part time degree with Merit.
(4) A nominal full time, 4 year degree with Honours.

Those in categories (3) and (4) qualify for entry under Section 10(2) of the Honours Masters Degree Regulations, while those in categories (1) and (2) must seek entry under Section 10(3).

Entry Under Section 10(2) - Graduates with an Honours Degree at a standard of Class II, Division 2 or higher or approved equivalent qualification.

Under Section 10(2) of the Honours Masters Degree Regulations, candidates must accumulate a total of not less than 48 credit points by the successful completion of subjects from the Schedule of Graduate Subjects, which are described below.

Entry Under Section 10(3) - Graduates with a Degree below a standard of Class II, Division 2

Under Section 10(3) of the Honours Masters Degree Regulations, 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. Graduates in category (1) above could take a selection of 400-level subjects from the Engineering Schedule in the Undergraduate Calendar. However, it is expected that graduates in categories (1) and (2) will enrol in ELEC999 Advanced Topics in Engineering.

From 1990, the Department requires that candidates who qualify for entry under Section 10(3) enrol in the Graduate Diploma in Engineering and gain a result equivalent to that of Honours Class II, Division 2 or higher to be admitted to the Honours Master of Engineering program.

For 1990, unless demand warrants it, no formal postgraduate course work subjects will be offered. In any year a restricted range of topics only will be offered in ELEC999 Advanced Topics in Engineering. Graduates intending to enrol should arrange to discuss their desired program with the Department as soon as possible in order to ensure that an appropriate selection of topics will be offered. Lectures normally begin at the end of February.

Subject to the approval of the Head of the Department and the Board of Research and Postgraduate Studies, courses offered by other Departments will be acceptable for the Honours Masters course in Electrical Engineering.

3. HONOURS MASTER OF ENGINEERING IN TELECOMMUNICATIONS ENGINEERING

Introduction

This course is being offered jointly by the Department of Electrical and Computer Engineering at The University of Wollongong and the School of Electrical Engineering at the University of Technology, Sydney. It 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.

Qualified students may register at either institution and will take coursework subjects at both universities. Students will have their research supervised at the university at which they register, and from which they will graduate. It should be noted that the two universities have established a collaborative research agreement in the telecommunications field and thus it is not likely that the nature of the research will differ dramatically between the two institutions.

**Entrance Requirements**

The entrance requirements for this course are the same as that for the Honours Master of Engineering Degree.

**Entry Under Section 10 (2) - Graduates with an Honours Degree at a Standard of Class II, Division 2 or higher or approved equivalent qualification.**

Under Section 10 (2) of the Honours Masters Degree Regulations, candidates must accumulate a total of not less than 48 credit points by the satisfactory completion of subjects as indicated below:

(a) five subjects, worth four credit points each, from the Schedule of Graduate Subjects, listed below and for which details appear under Subject Descriptions in the following pages:

- ELEC964 Integrated Service Networks
- ELEC965 Communication Protocols
- ELEC966 Telecommunications Signal Processing
- ELEC967 Teletraffic Engineering; and
- ELEC968 Transmission Systems;

(b) one elective subject, worth not less than four credit points, chosen with the approval of the Head of Department; and

(c) ELEC952 Thesis.

Exemption from any subjects listed in (a) or (b) may be granted by the Head of Department upon satisfactory completion of nominated equivalent subjects at the University of Technology, Sydney.

**Entry Under Section 10 (3) - Graduates with a degree below a standard of Class II, Division 2.**

From 1990, the Department requires that candidates who qualify for entry under Section 10(3) enrol in the Graduate Diploma in Engineering and gain a result equivalent to that of Honours Class II, Division 2 or higher to be admitted to the Honours Master of Engineering in Telecommunications Engineering program. Having satisfied these requirements, the programme of study is as set out above.

**SUBJECT DESCRIPTIONS**


Unless otherwise stated each subject comprises 56 hours of lectures and tutorials, is worth six credit points and may be offered in the first or second session or throughout the year.

There are no set textbooks or recommended reading but each year reading lists will be set from the published literature.

**ELEC901 COMPUTER AIDED ANALYSIS AND DESIGN**


**ELEC911 RELIABILITY ENGINEERING**

Methods of analysis, modelling, probabilistic system analysis and design. Redundant systems, computer techniques and reliability optimisation. Fault identification techniques.

**ELEC921 MATRIX ANALYSIS OF ELECTRICAL MACHINES**

Derivation of mathematical models, properties and applications of transformations, solution methods; non-ideal machines.

**ELEC922 MACHINES IN CONTROL SYSTEMS**

Stability and transient performance, heating and ratings, simplified models, converter-fed a.c. and d.c. machines as control system elements.
ELEC923 STATIC CONVERTERS
Properties, protection and control of high power solid state switching elements. Characteristics of rectifiers, inverters, pulse and cycloconverters and their application to a.c. and d.c. variable speed drives.

ELEC924 ADVANCED POWER SYSTEMS
An advanced course on industrial and high voltage power systems dealing with load flow, faults, stability, transients, insulation co-ordination, economic evaluations and application of computers.

ELEC931 CONTROL COMPUTING

ELEC941 CONTROL SYSTEM ANALYSIS AND DESIGN
A unified approach using "classical" and "modern" methods to treat the control problems of identification, representation and solution, stability, design and optimisation.

ELEC942 OPTIMAL CONTROL SYSTEMS
Problem formulation and methods of solution including advanced optimisation techniques, variational, dynamic programming and Pontryagin’s Maximum Principle.

ELEC943 NONLINEAR CONTROL SYSTEMS
Analysis of nonlinear control systems including numerical, series approximation, graphical and describing function methods. Stability investigation using Lyapunov's methods and extensions, and functional methods.

ELEC944 SAMPLED-DATA CONTROL SYSTEMS
Topics related to the use of digital equipment in control systems. Analysis and synthesis of control systems using sampling techniques.

ELEC951 THESIS
48 credit points.

ELEC952 THESIS
24 credit points.

ELEC953 REPORT
12 credit points

ELEC961 NOISE AND INFORMATION THEORY
Principles of coding, channel capacity, redundancy; application of information theory to engineering systems.

ELEC962 ELECTROMAGNETIC FIELDS AND ANTENNAS
Analysis of biconical and cylindrical antennae, aperture radiating systems. Obstacles and mounts in waveguides, numerical methods for solution of field problems.

ELEC963 MICROWAVE DEVICES AND ELECTRONICS
Scattering matrix analysis; structures and mounts; transistor amplifiers; parametric amplifiers; Impatt and Gunn devices; electron beam devices.

ELEC964 INTEGRATED SERVICE NETWORKS
Autumn or spring session: 4 credit points (42 hours lectures and tutorials)
Assessment: Continuous Assessment (based on tutorials) worth 20% and written examination worth 80%.
Pre-requisite: ELEC965 Communication Protocols (or UTS subject number 41865 Communication Protocols)
Co-requisite: ELEC968 Transmission Systems (or UTS subject number 41868 Transmission Systems)

Textbooks
For the ISDN part of the subject:
For the LAN and MAN part of the subject:
For additional reference:
ELEC965 COMMUNICATION PROTOCOLS
Autumn or spring session: 4 credit points (42 hours lectures, tutorials and practical work)
Assessment: Assignments worth 20%, practical work worth 30% and final closed book written examination worth 50%.
Co-requisite: ELEC967 Teletraffic Engineering (or UTS subject 41867 Teletraffic Engineering)


Textbook

Reference Books

ELEC966 TELECOMMUNICATIONS SIGNAL PROCESSING
Autumn or spring session: 4 credit points (42 hours lectures and tutorials)
Assessment: Design assignment worth 20% and written examination worth 80%.

Synopsis
The subject covers the hardware, the software and the algorithms needed for DSP implementation of communications systems building blocks. Particular emphasis is placed on coding algorithms for voice and images and on adaptive filtering techniques as applied to equalisation and echo cancellation.

Subject Outline

Textbooks

ELEC967 TELETRAFFIC ENGINEERING
Autumn or spring session: 4 credit points (42 hours lectures and tutorials)
Assessment: Continuous Assessment (based on tutorials) worth 20% and written examination worth 80%.
Co-requisite: ELEC965 Communication Protocols (or UTS subject number 41865 Communication Protocols)

Objectives
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.

Subject Outline

Textbooks

Reference Books


ELEC968 TRANSMISSION SYSTEMS

*Autumn or spring session: 4 credit points (42 hours lectures and tutorials)*

**Assessment:** Design assignment worth 20% and written examination worth 80%.

**Pre-requisite:** ELEC966 Telecommunications Signal Processing (or UTS subject 41866 Telecommunications Signal Processing)

**Synopsis**

The subject covers all aspects of digital transmission systems at an advanced level: modulation, coding, synchronization, and multiple access. Case studies of optical and satellite links demonstrate how the effects of performance degradations are incorporated into the link budget.

**Subject Outline**

- Analog Transmission
- Baseband Digital Transmission
- Digital Carrier Modulation
- Synchronization
- Effect of Timing Error
- Sensitivity of various modulation types to carrier phase and timing errors
- Introduction to Channel Coding
- Cyclic Codes
- Convolutional Codes
- Link Budgets
- Optical Link Case Study
- Satellite Link Case Study
- Spread spectrum and Multiple Access

**Textbooks**


ELEC971 HIGH VOLTAGE PROPERTIES OF MATERIALS

Electrical conduction and breakdown in gases, liquids and solids. Advanced application of ionised gases. Generation and measurement of high voltages and non-destructive dielectric test techniques.

ELEC972 AIR POLLUTION CONTROL TECHNIQUES

Surface, dynamic, optical and adhesive properties of particulates, effects of particulates and gases on air quality, basic theory of particulate collection using electrostatic, inertial and gravitational forces, filtration and measurement methods.

ELEC981 MATHEMATICAL METHODS IN ELECTRICAL ENGINEERING 1

Transform methods applied to analysis and synthesis problems arising in electrical engineering, properties and applications of Fourier, Laplace and Z transforms.

ELEC982 MATHEMATICAL METHODS IN ELECTRICAL ENGINEERING 2

Time domain methods applied to analysis and synthesis problems arising in electrical engineering, state variable methods, linear and nonlinear systems, input-output and convolution.

ELEC999 ADVANCED TOPICS IN ENGINEERING

*Double session (A) subject: 48 credit points 24 hrs per week, including seminars and some project work*

**Assessment:** Formal examinations, tests, assignments and associated (if any) experimental work.

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.

The subject may include topics from:

- Adjustable speed drives
- Air, noise and water pollution
- Air pollution control techniques
- Anisotropic elasticity
- Analogue and digital filters
- Antennas
- Artificial intelligence
- Boiling heat transfer
- Boundary layer theory
- Circuit theory
- Communications
- Compilers
- Computer aided analysis and design
- Computer communications
- Computer methods
- Computer systems
- Computing science
- Conformal mapping
- Control
- Control computing
- Data bases
Digital signal processing
Economic and social evaluation of engineering projects
Electric energy systems
Electrical properties of materials
Electronics and computers
Energy from the environment
Field theory
Finite element techniques
Heat and mass transfer
Machine dynamics
Microscopic thermodynamics
Microwave electronics
Modern control systems theory
Noise and information theory
Non-linear and time-varying systems
Numerical techniques
Operating systems
Optimal control
Power electronics
Power system, analysis and design
Process control
Programming languages
Propagation
Real-time computing
Refrigeration and air conditioning
Robotics
Signal processing
Signal transmission
Simulation
Static converters
Structural dynamics
Structural topology
Transient performance of machines
Variational methods
MATERIALS ENGINEERING

INTRODUCTION

The following postgraduate degrees are available:

1. Honours Master of Engineering by Coursework or Research
2. Doctor of Philosophy

The schedule of subjects available for the Masters degrees is set out on the following pages.

For the Doctor of Philosophy degree candidates enrol in the subject MATL990 Thesis.

The specific requirements for the Masters degrees and the descriptions of the subjects available are set out in the pages following the schedule of subjects.

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 at elevated temperatures of multiphase materials particularly high strength low alloy steels
- Influence of hot deformation on the structure and properties of high strength low alloy steels
- Fatigue of ferrous alloys
- Fatigue and fatigue crack propagation in metals, ceramics and polymers
- Fatigue-creep interactions
- High temperature behaviour of engineering materials
- Fracture
- Lifetime prediction under complex stressing conditions
- 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
- Metallurgy of culturally significant artefacts
- Metallography of commercially important alloys
- Electron metallography of precipitation modes in ferrous alloys
- Development of structures in metals by recrystallization with particular reference to rapid recrystallization
- Microstructural effects and material deterioration
- Particle size segregation in granular materials
- Screening kinetics and permeability of particulate materials
- Flow of granular materials from bins and hoppers
- Reduction of iron ore aggregates
- Gasification of carbonaceous materials
- Solidification
- Structure and properties of metallic glasses
- Development of galvanising alloys
- Structure and properties of ceramic materials
- Ceramic coatings
- Electrical properties of metal oxides
- Molecular structure and properties of polymeric materials
- Degradation of polymers
- High temperature polymers
- Adhesives

SCHEDULE OF GRADUATE SUBJECTS

HONOURS MASTER OF ENGINEERING

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<tr>
<th>Number</th>
<th>Subject</th>
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<td>MATL903</td>
<td>Ceramic Materials</td>
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<td>MATL904</td>
<td>Polymeric Materials</td>
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<td>MATL914</td>
<td>Recent Developments in Materials</td>
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<td>Prescription and Selection of Materials</td>
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</table>
HONOURS MASTER OF ENGINEERING (Cont'd)

Number | Subject |
---|---
MATL906 | Chemical Reaction Engineering |
MATL941 | Materials Analysis A |
MATL942 | Materials Analysis B |
MATL961 | Special Topic A |
MATL962 | Special Topic B |
MATL990 | Major Thesis |
MATL991 | Dissertation |
MATL999 | Advanced Topics in Materials |

COURSE DESCRIPTION

1. HONOURS MASTER OF ENGINEERING

Entry under Section 10(2) - Graduates with an Honours degree at a standard of Honours Class II, Division 2 or higher.

A candidate who enters under Section 10(2) of the Honours Masters Degree Regulations (i.e. who has qualified for the degree of Bachelor of Engineering with Honours at Class II, Division 2 or higher or the equivalent) will be required to satisfactorily complete subjects from the Schedule of Graduate Subjects with an aggregate of not less than 48 credit points. Programmes with a value of 48 credit points provided by the Department of Materials Engineering are:

(i) a major thesis (MATL990);

(ii) a dissertation (MATL991) plus six subjects, each with a value of 6 credit points.

The subjects MATL902, MATL903 and MATL904 normally will be compulsory in the coursework programme (ii). For any particular year the availability of subjects offered will be determined by student numbers and demand.

Entry may be approved for a candidate with the qualification of Graduate Diploma in Metallurgy and who has satisfactorily completed any additional work specified by the Head of the Department of Materials Engineering.

Entry under Section 10(3) - Graduates with a degree below a standard of Honours Class II, Division 2.

A candidate who enters under Section 10(3) of the Honours Masters Degree Regulations, i.e. who has qualified for the degree of Bachelor of Engineering with Honours at Class III or lower, or the equivalent, is required to complete satisfactorily subjects from the Schedule of Graduate Subjects with an aggregate of not less than 96 credit points. Study under this section normally will consist of the subject MATL999 Advanced Topics in Materials (48 credit points) plus one of the programs, i.e. (i) or (ii), provided for entry under Section 10(2) (above).

SUBJECT DESCRIPTIONS

Each of the subjects described below, with the exception of MATL955, MATL956, MATL957 and MATL958, is valued at 6 credit points and may be offered over one or two sessions.

Coursework subjects offered by other departments may be included in programme (ii) subject to the approval by the Head of Department and the Board of Research and Postgraduate Studies.

MATL902 METALLIC MATERIALS


MATL903 CERAMIC MATERIALS


MATL904 POLYMERIC MATERIALS

Polymers, formation and classification. Effects of structure and additives on properties. Composite materials with polymeric matrices.

MATL914 RECENT DEVELOPMENTS IN MATERIALS

Considerations of the structures, properties, technology and applications of advanced materials with emphasis on materials important to the Australian economy.
MATL915 PRESCRIPTION AND SELECTION OF MATERIALS


MATL921 PERFORMANCE OF MATERIALS A


MATL922 PERFORMANCE OF MATERIALS B


MATL931 MATERIALS PROCESSING A


MATL932 MATERIALS PROCESSING B

Approaches to industrial shaping of metals and non-metals. Effects of processing upon microstructure and properties. Casting, mechanical forming, machining and joining. Application to different material types.

MATL933 PROCESS METALLURGY 1

Review of basic thermodynamic relations and thermochemistry; solutions; slag-metal equilibria, activity and activity coefficients; Gibbs-Duhem relations; multicomponent systems; interaction parameters; gases in metals; pressure and temperature effects; calculations in iron and steelmaking; partition of elements between slag and metal; deoxidation.

MATL934 PROCESS METALLURGY 2

Review of homogeneous kinetics; heterogeneous kinetics; rate expressions; pressure and temperature effects; mass transfer with chemical reaction; pore diffusion; gas-solid; liquid-liquid and gas-liquid systems; rate enhancement; contacting pattern, catalysis; calculations in iron and steelmaking.

MATL935 PROCESS METALLURGY 3

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 refining; vacuum methods; alloy recovery; deoxidation; continuous casting; solidification.

MATL936 CHEMICAL REACTION ENGINEERING

Single and multiple reactions, elementary and non-elementary reactions; kinetic models; reactions of shifting order; reactor design; mixed flow reactors, design for multiple reactions; temperature and pressure effects; packed bed and fluidised bed reactors.

MATL941 MATERIALS ANALYSIS A


MATL942 MATERIALS ANALYSIS B


MATL961/MATL962 SPECIAL TOPICS IN MATERIALS

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.

MATL990 MAJOR THESIS

48 credit points
MATL991 DISSERTATION
12 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.

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.
MECHANICAL ENGINEERING

INTRODUCTION

The following postgraduate degrees are available:

1. Honours Master of Engineering by Coursework or Research
2. Doctor of Philosophy

The schedule of subjects available for the Masters degree is set out on the following pages.

For the Doctor of Philosophy degree candidates enrol in the subject MECH952 Thesis.

The specific requirements for the Masters degree and the descriptions of the subjects available are set out in the pages following the schedule of subjects.

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:

- Advanced manufacturing processes, technologies & systems
- Automatic assembly
- Coal technology
- Computation of non-linear water waves
- Computer-aided design
- Computer-integrated manufacturing
- Computer modelling of flow separation
- Data capture and analysis
- Design for manufacture/assembly
- Flexible manufacturing systems
- Intelligent scheduling systems
- Manufacturing information systems
- Mechanical engineering design
- Mechanics of multiple bodies in contact
- Modelling and computer animation of robotic systems
- On-line monitoring of manufacturing systems
- Pneumatic conveying
- Precision engineering
- Quality engineering systems and management
- Robotics: kinematics/dynamics
- Simulation/animation of manufacturing systems
- Solar thermal system analysis and design
- Solid mechanics of elastic and magneto-elastic bodies
- Sports mechanics
- Storage and feeder design
- System identification and control
- Tribology
- Turbulent flows
- Wind energy

SCHEDULE OF GRADUATE SUBJECTS

HONOURS MASTER OF ENGINEERING

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<td>MECH909</td>
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<tr>
<td>MECH911</td>
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<tr>
<td>MECH912</td>
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<td>MECH913</td>
<td>Pneumatic and Hydraulic Transport of Bulk Solids</td>
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<td>Air Pollution</td>
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<td>MECH915</td>
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<td>MECH920</td>
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<td>MECH921</td>
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<td>MECH922</td>
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<tr>
<td>MECH923</td>
<td>Coal Energy Technology II</td>
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<tr>
<td>MECH924</td>
<td>Continuum Mechanics</td>
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<tr>
<td>MECH928</td>
<td>Finite Element Techniques in Mechanical Engineering</td>
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<td>MECH929</td>
<td>Advanced Topics in Mechanical Engineering II</td>
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<tr>
<td>MECH930</td>
<td>Mechanical Vibration and Condition Monitoring</td>
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<td>MECH931</td>
<td>Friction Lubrication and Wear</td>
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<td>MECH933</td>
<td>Solar Energy</td>
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<td>MECH934</td>
<td>Advanced Manufacturing Processes</td>
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<td>MECH944</td>
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<td>MFCH950</td>
<td>Advanced Robotics</td>
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<td>MFCH952</td>
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<tr>
<td>MECH999</td>
<td>Advanced Topics in Engineering</td>
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COURSE DESCRIPTION

1. HONOURS MASTER OF ENGINEERING

Entry under Section 10(2) - Graduates with an Honours Degree at a standard of Class II, Division 2 or higher

Students entering the course under Section 10(2) of the Honours Masters Degree Regulations are required to complete subjects from the Schedule of Graduate Subjects with an aggregate of not less than 48 credit points. Programs of study provided by the Department of Mechanical Engineering include a dissertation/thesis with a credit point rating of 24 (MECH951), or 48 (MECH952), depending on whether the course chosen is by a combination of dissertation and formal subject matter (6 subjects) or entirely by dissertation.

Entry under Section 10(3) - Graduates with a Degree below a standard of Honours Class II, Division 2

Students entering the course under Section 10(3) of the Honours Masters Degree Regulations are required to complete subjects with an aggregate of not less than 96 credit points. Study under this section will normally consist of the subject MECH999 Advanced Topics in Engineering (48 credit points) plus one of the programs provided under Section 10(2) (above).

SUBJECT DESCRIPTIONS

Each of the subjects described below, with the exception of MECH951, 955 and 999, are valued at 4 credit points and have a total contact of 3 hours per week for one session, although in certain cases they may be offered over two sessions.

Similar 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 and the Board of Research and Postgraduate Studies.

MECH905 ADVANCED DYNAMICS

Kinematics and dynamics of particles and rigid bodies in three-dimensional motion; fixed and moving reference frames; Newtonian dynamics; inertia tensor; Euler's equations of motion; general motion of gyroscopes and rigid bodies in space.

Calculus of variations; Functions and functionals; stationary values of integrals; Euler-Lagrange equations; constraints and Lagrange multipliers; fixed and variable end points; problems of Lagrange, Mayer and Bolza. Variational dynamics; Performance optimization; generalised co-ordinates; Lagrange equation; Hamilton's principle; impulsive motion; oscillatory motion.

MECH906 EXPERIMENTAL AND ANALYTICAL MODELLING

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.

MECH908 COMPUTER AIDED DESIGN

The application of computers to design; standards for documentation and checking of computer aided engineering computations; computer simulation and optimising techniques.
MECH909 WASTEWATER TREATMENT AND DISPOSAL

Developments and trends in wastewater engineering; wastewater characteristics; physical unit operations; chemical unit processes; biological unit processes; design of facilities for physical and chemical treatment of wastewater; design of facilities for biological treatment of wastewater; advanced wastewater treatment; water-pollution control and effluent disposal; wastewater treatment studies; legal requirements.

MECH911 BULK SOLIDS HANDLING SYSTEMS 1

Flow patterns of bulk solids constrained by bins and hoppers; theory of flow; determination of flow properties; hopper design; bin loads; design of feeder.

MECH912 BULK SOLIDS HANDLING SYSTEMS 2

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.

MECH913 PNEUMATIC AND HYDRAULIC TRANSPORT OF BULK SOLIDS

Classification and selection of transport systems; flow patterns; pressure drop, minimum operating velocities; design parameters and examples; feeding and withdrawal methods.

MECH914 AIR POLLUTION

Elements of the air pollution problem; Origin and fate of air pollutants; Air pollution meteorology; Air pollution chemistry; Micrometeorology; Atmospheric diffusion; Combustion processes and the formation of gaseous and particulate pollutants; Air pollution control principles.

MECH915 NOISE POLLUTION

The behaviour of sound waves; Levels, decibels and spectra; Sound transducers; Field measurements; equipment and techniques; Data analysis; The measurement of power levels and directivity patterns of noise sources; Sound propagation outdoors. Sound in small spaces; Sound in large rooms; Acoustical properties of porous materials; Interaction of sound waves with solid structures; Noise operation in industry; Noise of gas flows: Damage-risk criteria for hearing; Criteria for noise in communities, buildings and vehicles.

Formulation of the optimal control problem: performance criteria; solution of the optimal control problem using calculus of variations, dynamic programming and the maximum principle; applications.

MECH917 AIR CONDITIONING AND REFRIGERATION

Air conditioning of buildings; design heat load calculation; plant sizing and design; refrigeration plant components; thermodynamic analysis and design.

MECH919 ADVANCED TOPICS IN MECHANICAL ENGINEERING I

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.

MECH920 NUMERICAL METHODS IN MECHANICAL ENGINEERING

This subject involves 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.

MECH921 HYDRODYNAMICS

Applications of complex potential; unsteady fluid flows; foil theory and applications; cavitations and discontinuous flows; body hydrodynamics.

MECH922 COAL ENERGY TECHNOLOGY I

Coal formation, constituents, properties extraction, transportation, preparation and benefication, coal storage; stockpiling; blending and reclaiming; coal utilization, coal combustion for steam generation, combustion products, properties, ash collection and disposal, coal utilization economics.

MECH923 COAL ENERGY TECHNOLOGY

Carbonization, by-products; fluidized bed combustion, hybrid generation plants, cogeneration; co-production; generation plant simulation; coal conversion, pyrolysis, hydrogenation, gasification, liquefaction, by-products; MHD generation; economics of new coal technology; methane extraction; spontaneous combustion; advanced coal beneficiation.
MECH924 CONTINUUM MECHANICS
An introduction to tensor analysis, classical theory of elasticity, fluid mechanics, thermodynamics of solids, thermoelasticity, viscoelasticity, plasticity, finite deformation theory.

MECH928 FINITE ELEMENT TECHNIQUES IN MECHANICAL ENGINEERING

MECH929 ADVANCED TOPICS IN MECHANICAL ENGINEERING II
As for MECH919.

MECH930 MECHANICAL VIBRATION AND CONDITION MONITORING

MECH931 FRICTION, LUBRICATION AND WEAR

MECH933 SOLAR ENERGY
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.

MECH934 ADVANCED MANUFACTURING PROCESSES
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.

MECH935 INTEGRATED MANUFACTURING SYSTEMS
CIM concept and applications; FMS; computer-process interfacing, monitoring and control; computer-aided quality control; material handling systems; human interface in the manufacturing system; future trends.

MECH936 SYSTEMS MODELLING AND SIMULATION IN MANUFACTURING
Autumn or Spring session: 4 credit points (3 hours lecture/laboratory per week). Assessment: Continuous assessment based on tutorials 50 per cent; examination 50 per cent.

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.

MECH937 MANUFACTURING INFORMATION SYSTEMS
Autumn or Spring session: 4 credit points. Assessment: Continuous assessment based on tutorials 50 per cent; examination 50 per cent.

Theories of management and organisation; general systems model of a firm; database; management information systems; concepts; decision support systems; marketing information systems; production information systems; financial information systems.

MECH939 ADVANCED TOPICS IN MECHANICAL ENGINEERING III
As for MECH919.

MECH942 EXPERT SYSTEMS IN MANUFACTURING
Autumn or Spring session: 4 credit points (28 hours lectures; 14 hours laboratory and tutorials). Assessment: Final examination 60 per cent; assignment 20 per cent; short examination 20 per cent.

Design knowledge-based systems; knowledge representations; shell development; decision support systems; dealing with uncertainty; mechanical reasoning; consulting systems; intelligent process automation and management; future trends.
MECH944 HEAT TRANSFER II  
*Autumn or Spring session: 4 credit points (28 hours lectures; 14 hours laboratory and tutorials).*  
*Assessment:* Final examination 50 per cent; short examinations and assignments 30 per cent; laboratory reports 20 per cent.

Conduction: review of one-dimensional heat conduction and fin theory; analysis of two-dimensional and transient heat conduction using analytical and numerical methods. Convection: 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.

MECH949 ADVANCED COMPUTER CONTROL OF MACHINES AND PROCESSES  
*Autumn or Spring session: 4 credit points (28 hours lectures; 14 hours tutorial).*  
*Assessment:* Final examination 60 per cent; assignments 30 per cent; short examinations 10 per cent.


MECH950 ADVANCED ROBOTICS  
*Autumn or Spring session: 4 credit points (28 hours lectures; 14 hours tutorials).*  
*Assessment:* Final examination 60 per cent; assignments 30 per cent; short examinations 10 per cent.

Synthesis, analysis and implementation of computer control systems of integrated machines and processes. Selected topics include discrete modelling, discrete controller design, analysis and design using transform methods, process modelling, computer interfacing, hierarchial computer control concept.

MECH951 DISSERTATION  
24 credit points.

MECH952 THESIS  
48 credit points.

MECH999 ADVANCED TOPICS IN ENGINEERING  
*Double session subject; 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.
MINING ENGINEERING

INTRODUCTION

The following postgraduate degrees are available:

1. Honours Master of Engineering by Coursework or Research
2. Doctor of Philosophy

The schedule of subjects available for the Masters degree are set out on the following pages.

For the Doctor of Philosophy degree candidates enrol in MECH952.

The specific requirements for the Masters degree and the descriptions of the subjects available are set out in the pages following the schedules of subjects.

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
- Surface mining
- Mine simulation, planning and design
- Mine safety
- Geostatistics
- Coal strength
- Mainframe and microcomputer applications
- Expert systems development

SCHEDULE OF GRADUATE SUBJECTS

HONOURS MASTER OF ENGINEERING

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<tr>
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<td>MINE901</td>
<td>Transportation of Minerals and Personnel</td>
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<tr>
<td>MINE902</td>
<td>Advanced Studies in Mining Engineering</td>
<td>5</td>
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<tr>
<td>MINE903</td>
<td>Simulation of Underground Mining Operations and Problems</td>
<td>5</td>
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<td>MINE904</td>
<td>Rock Mechanics</td>
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<tr>
<td>MINE905</td>
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<tr>
<td>MINE906</td>
<td>Mining Engineering Techniques</td>
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<td>MINE907</td>
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<td>MINE908</td>
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<td>MINE909</td>
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<td>MINE910</td>
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<td>MINE950</td>
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COURSE DESCRIPTION

1. 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) Honours Master of Engineering Degree by coursework.

(b) Honours Master of Engineering Degree by research thesis.
(b) 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.

(c) The Honours Master of Engineering Degree by Combinations 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 introductions 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

Normally the course is of 1 year full-time or 2 years part-time study for those candidates who hold a Bachelor Degree with Honours at Class II, Division 2 or higher. Applicants holding a Bachelor degree of a standard less than Honours Class II, Division 2 will have their program approved by the Board of Research and Postgraduate Studies after consultation with the Head of the Department of Civil and Mining Engineering.

SUBJECT DESCRIPTIONS

Credit Points

Each of the subjects listed below, except where otherwise stated, has a credit point value of 5.

MINE901 TRANSPORTATION OF MINERALS AND PERSONNEL

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.

MINE902 ADVANCED STUDIES IN MINING ENGINEERING

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.

MINE903 SIMULATION OF UNDERGROUND MINING OPERATIONS AND PROBLEMS

Including coal reserves, mining dimensions, surface effects, cost benefit effects of operation and management and economic evaluation and feasibility of a mining enterprise.

MINE904 ROCK MECHANICS


MINE905 ENVIRONMENTAL CONTROL IN MINES

Energy considerations in mine ventilation; sources of heat in mines; control of atmospheric conditions in deep mines; fan design, installation, operation and safety; ventilation planning; computer applications.

MINE906 MINING ENGINEERING TECHNIQUES

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.

MINE907 GASES IN MINES

Natural occurrence and prediction of rockbursts; collection of mine gases; mine atmospheres, gases, dusts; fires, rescue and recover; computer analysis.
MINE908 MINE FIRES AND EXPLOSIONS


MINE909 MINE SUBSIDENCE


MINE910 WATER IN MINES

Sources of water in mines. Ground water hydrology for mining. Sump design and planning of drainage system for underground mining. Mining under waterlogged areas.

Investigation for mine drainage and dewatering in surface mining. Seepage control in tailing dams. Water quality control and disposal. Acid water mine drainage.

MINE950 THESIS

Double session (A); 8 credit points

MINE951 THESIS

Double session (A); 28 credit points

MINE952 MAJOR THESIS

Double session (A); 48 credit points

MINE999 ADVANCED TOPICS IN ENGINEERING

Double session (A); 48 credit points

Computer aided analysis and design; computer methods; concrete design; civil engineering materials; finite element techniques; hydrology; hydraulics; numerical techniques; reliability; rock mechanics; simulation; structural analysis and design; structural topology; town planning; traffic engineering; transportation; highway engineering; urban investigations; structural dynamics; continuum mechanics.
FACULTY OF HEALTH AND BEHAVIOURAL SCIENCES

PRINCIPAL OFFICERS

Dean: Associate Professor Christine Ewan
Sub Dean: Dr Graham Ward
Faculty Officer: Vacant

MEMBERSHIP

The Faculty of Health and Behavioural Sciences is made up of the following Departments:

- Human Movement Science
- Nursing
- Psychology
- Public Health and Nutrition

COURSES

All Units offer Honours Master of Science & Doctor of Philosophy degrees by research. In addition, the Honours Master of Arts is offered in the Departments of Human Movement Science and Psychology.

Major coursework programs are available in the Faculty in the following areas:

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<tr>
<td>Mental Health</td>
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<td>Nutrition</td>
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<tr>
<td>Nutrition and Dietetics</td>
<td>244 &amp; 246</td>
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</tbody>
</table>

Application forms may be obtained from the Student Enquiry Office on the Ground Floor of the Administration Building or by writing to the Vice-Principal (Administration), The University of Wollongong, P.O. Box 1144, Wollongong, NSW, 2500, Australia.
HUMAN MOVEMENT SCIENCE

INTRODUCTION

The following postgraduate degrees are available:

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

The schedule of subjects available for the Masters degrees is set out on the following pages.

For the Doctor of Philosophy degree candidates enrol in the subject HSHM999 Thesis.

The specific requirements for the Masters degrees and the descriptions of the subjects available are set out in the pages following the schedules of subjects.

SCHEDULE OF GRADUATE SUBJECTS

HONOURS MASTER OF ARTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>HSHM903</td>
<td>Issues and Trends in Leisure and Recreation</td>
<td>8</td>
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<td>HSHM904</td>
<td>Management Principles in Sport and Leisure Services</td>
<td>8</td>
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<tr>
<td>HSHM999</td>
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HONOURS MASTER OF SCIENCE

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<tr>
<td>HSHM901</td>
<td>Assessment and Training Procedures for Sports Psychology</td>
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<td>HSHM902</td>
<td>Advanced Studies in Sports Psychology</td>
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<tr>
<td>HSHM905</td>
<td>Exercise in Special Populations A</td>
<td>8</td>
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<tr>
<td>HSHM906</td>
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<td>HSHM907</td>
<td>Skilled Performance and Information Processing</td>
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<td>Movement Re-Education, An Information Processing</td>
<td>8</td>
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<td>HSHM909</td>
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<td>HSHM910</td>
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<tr>
<td>HSHM911</td>
<td>Special Topic in Human Movement Science A</td>
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<td>HSHM912</td>
<td>Special Topic in Human Movement Science B</td>
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<tr>
<td>HSHM913</td>
<td>Special Topic in Human Movement Science C</td>
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<tr>
<td>HSHM914</td>
<td>Advanced Studies in the Biophysical Bases of Movement</td>
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<td>HSHM915</td>
<td>Sport and Social Problems</td>
<td>8</td>
</tr>
<tr>
<td>HSHM920</td>
<td>Occupational Biomechanics</td>
<td>8</td>
</tr>
<tr>
<td>HSHM999</td>
<td>Major Thesis</td>
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</tbody>
</table>

COURSE DESCRIPTIONS

1. HONOURS MASTER OF ARTS

There is an increasing need in the community for graduates in the field of Human Movement Science with more advanced and extensive knowledge of the discipline than is commonly attained by the undergraduate degree holder. Such a need can be attended to by students undertaking more advanced coursework and an additional research component.
The degree of Honours Master of Arts (MA(Hons)) in Human Movement shall be subject to the University regulations 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, specialising in the following field:

Recreation and Sports Management

(2) Students entering the program with a recognised pass degree in Human Movement Science or a related area will be required to complete an approved program of 48 credit points of coursework, together with a thesis embodying the results of and investigation of an approved topic to the value of 48 credit points. Students must consult the Graduate Co-ordinator, Human Movement Science, for approval of their proposed choice of subjects.

(3) Students entering the degree program with a recognised honours degree at a standard of Class II, Division 2 or above will be required to complete a thesis embodying the results of an investigation of an approved topic to the value of 48 credit points and/or such courses as deemed necessary by the Department of Human Movement Science.

SUBJECT DESCRIPTIONS

HSHM901 ASSESSMENT AND TRAINING PROCEDURES FOR SPORTS PSYCHOLOGY
Spring session; 8 credit points (52 hours of consultation and field work)
Pre-requisite: Undergraduate degree in psychology, or two undergraduate courses in sport psychology, or one graduate course in sport psychology, or approval by course co-ordinator.
Assessment: The quality of two research studies or one relatively sophisticated (i.e. publishable) study and manuscripts.

This course is designed to promote research and writing skills in applied sport psychology. Two research studies or one relatively sophisticated (i.e. publishable) study will be undertaken, the topic of which will be jointly determined by the instructor and student. Examples of topics include: (a) psychological factors or cognitive strategies that influence motor performance, (b) effects of coaching techniques on the performer's attitude and subsequent sport performance, (c) determining psychophysiological ramifications of motor performance, or other issues that have been identified in the literature. The end product will include a literature review, hypothesis, methods, results (perhaps requiring computerized data analysis), discussion, conclusions and reference list. Writing style will be commensurate with standards of the Australian Psychological Society.

Textbooks
No textbook required. Students will draw from published research journals.

Subject Co-ordinator: M. Anshel
Lecturer: M. Anshel
HSHM902 ADVANCED STUDIES IN SPORT PSYCHOLOGY
Autumn session; 8 credit points (52 hours lectures/seminars)
Pre-requisite: Undergraduate major in psychology, two undergraduate courses in sport psychology, or instructor's permission.
Assessment: laboratory and field experiments, oral report, written report, and final exam.

This course deals with issues concerned with the psychological factors that underlie sport performance. This area of study covers three primary components: (1) environmental factors which include the effects of external events and situations on sport performance such as the effects of spectators, competition, and the group (team) on the performer's emotions and performance; (2) individual and personal factors such as motivation, anxiety, arousal, and the use of mental strategies; and (3) leadership/coaching style and techniques. Course content is obtained through lecture, laboratory experimentation and documentation, and seminar exchanges. In addition, students will develop skills in academic writing style in preparation for the graduate thesis.

Textbooks

Subject Co-ordinator: M. Anshel
Lecturer: M. Anshel

HSHM904 MANAGEMENT PRINCIPLES IN SPORT AND LEISURE SERVICES
Autumn or Spring or double session; 8 credit points (lectures, seminars and field experience)
Pre-requisite: Permission of Subject Co-ordinator
Assessment: Assignments, project and research reports

This course is concerned with the extension of conceptual frameworks for recreation, sport administration and management, the practical application of management principles to leisure and sport delivery systems, and compares administrative practices in various recreation and sporting agencies.

Textbooks
None specified - students will draw from an extensive bibliography of primary and secondary literature.

Subject Co-ordinator: to be advised
Lecturer: staff

HSHM903 ISSUES AND TRENDS IN LEISURE AND RECREATION
Autumn session; 8 credit points (52 hours lectures, seminars and field experience)
Pre-requisite: Permission of Subject Co-ordinator
Assessment: weekly seminar presentations, major paper and presentation

Each student will be required to research and prepare topics dealing with current issues and trends in leisure and recreation for weekly presentation, and to critically analyse and discuss topics presented by others. Students will also be required to produce a major research paper on a leisure issue that is topical, and to present that paper in a seminar situation.

Textbooks
None specified - students will draw from an extensive bibliography of primary and secondary literature.

Subject Co-ordinator: M. Anshel
Lecturer: M. Anshel

HSHM905 EXERCISE IN SPECIAL POPULATIONS A
Autumn or Spring session; 8 credit points (3 hours per week)
Assessment: Seminar presentations by students, annotated bibliographies and reports

This subject deals with the application of exercise, prevention, rehabilitation and disease in various aspects of medicine, injury, work, sport and leisure pursuits.

Textbooks
None specified - students will draw from an extensive bibliography of primary and secondary literature.

Subject Co-ordinator: Dr Graham R. Ward

HSHM906 EXERCISE IN SPECIAL POPULATIONS B
Autumn or Spring session; 8 credit points (52 hours lectures/seminars/clinical experience)
Assessment: Two seminar presentations by students, annotated bibliographies and reports

Normal responses to physical activity are modified in a number of special populations. This course will examine various disorders or disabilities for which regular physical activity programs have been recommended. These may include ischaemic heart disease, chronic chest disease, and disabilities such as paraplegia, amputations, blindness and other disorders.

Textbooks
None specified - students will draw from an extensive bibliography of primary and secondary literature.
HSHM907 SKILLED PERFORMANCE AND INFORMATION PROCESSING
Autumn or Spring session; 8 credit points (52 hours seminars)
Assessment: Assignments, reports, and research project

The control of skilled performance may be viewed from an information processing perspective. The demands of information processing, and the intent of such processing changes as the performer changes status from the novice to the expert. The neurological concomitants of the information processing model will be studied through this course. Practical applications of the models developed through exposure to the theoretical constructs will be considered.

Textbooks
None specified - students will draw from an extensive bibliography of primary and secondary literature.

HSHM908 MOVEMENT RE-EDUCATION, AN INFORMATION PROCESSING PERSPECTIVE OF THERAPY
Autumn or Spring session; 8 credit points (52 hours seminars)
Assessment: Assignments and periodical reports.

Musculo-skeletal or neurological deficits can respond to certain types of therapy. This course outlines ways in which an information processing perspective to movement and movement control can enhance the therapy and quality of life.

Textbooks
None specified - students will draw from an extensive bibliography of primary and secondary literature.

Subject Co-ordinator: Mr Owen Curtis

HSHM909 ADVANCED STUDY IN EXERCISE PHYSIOLOGY
Autumn or Spring session; 8 credit points (52 hours seminars)
Assessment: Major and minor seminar presentations and written reports, laboratory project report, examination.

This course will cover the cardio-respiratory and metabolic adjustments to exercise, and physical training and various environmental influences such as heat, cold, altitude and air pollution. It will involve the students in seminar presentations of the research literature available on selected topics and in group laboratory projects associated with measurement of the physiological responses to various modes of exercise or physical training.

Textbooks

HSHM910 BIOMECHANICS
Autumn or Spring session; 8 credit points (4 hours per week on single session basis; lectures, seminars, practical work)
Assessment: Assignments and laboratory projects, optional examination

Biomechanics is the application of mechanical laws to living structures, specifically to the human locomotor system.

This course emphasises the methods used to quantify the underlying principles of human motion, to determine their relationship to the movement outcome, and to examine the means by which their information can be applied to the health and physical education professions.

Textbooks

HSHM911 SPECIAL TOPIC IN HUMAN MOVEMENT SCIENCE A

HSHM912 SPECIAL TOPIC IN HUMAN MOVEMENT SCIENCE B

HSHM913 SPECIAL TOPIC IN HUMAN MOVEMENT SCIENCE C
Autumn or Spring or double session; 8 credit points (3 hours/week on a single session basis; tutorials and seminars)
Pre-requisite: Demonstrated expertise in a special area of Human Movement Science as determined by the Graduate Studies Co-ordinator
Assessment: Presentations and/or assignment(s) and/or major paper

The special subject topics in Human Movement Science exist to enable advanced studies to be taken by students who have demonstrated an advanced level of understanding and performance in the area concerned.

HSHM914 ADVANCED STUDIES IN THE BIOPHYSICAL BASES OF MOVEMENT
Autumn or Spring or double session; 8 credit points (3 hours/week on a single session basis; lectures, tutorials and laboratories)
Assessment: Written examination, project work and assignments

Lecture topics are drawn from anatomy, biomechanics, exercise physiology, exercise therapy and motor behaviour. The material
available in any given session will reflect student interest and available staff expertise.

Textbooks
None specified - students will draw from an extensive bibliography of primary and secondary literature.

HSHM915 SPORT AND SOCIAL PROBLEMS
Autumn or Spring session; 8 credit points (2 hours lectures 2 hours seminars).

Assessment: Library research and seminar presentation of a specific topic in sport sociology. Written review of 2 research articles from a (non-sport) journal and description of the relevance and application of that research in the context of sport.

This course examines sport from a sociological perspective. Topics for discussion include the social functions of sport, sport as an expression of social norms and social deviance, sport and the experience of minority groups, sexism and racism reflected in sport, the causes and symbolic significance of player and crowd violence.

Textbooks
No recommended text. A reading list of appropriate journal articles will be provided.

HSHM920 OCCUPATIONAL BIOMECHANICS
Spring session; 8 credit points (4 hours per week)

Assessment: Assignments, laboratory projects, written examination

This subject applies biomechanical concepts to the evaluation and design of manual work in industry. Topics covered include anthropometry, functional anatomy, biomechanical modelling techniques, mechanical work capacity evaluation and bioinstrumentation applicable to human performance evaluation. It is intended this subject will complement a student's understanding of the psychological and physiological foundations of ergonomics.

Textbooks
Chaffin, D.B. and Andersson, G.B.J.  

Subject Co-ordinator: Dr Peter Milburn
Lecturer: Dr Peter Milburn

HSHM999 MAJOR THESIS
Multi-session subject; 48 credit points
NURSING

INTRODUCTION

The following postgraduate degrees are available:

1. Honours Master of Science by Research
2. Doctor of Philosophy

The schedule of subjects available for the Masters degrees is set out on the following pages.

For the Doctor of Philosophy degree candidates enrol in the subject HSNS999 Thesis.

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours

SCHEDULE OF GRADUATE SUBJECTS

HONOURS MASTER OF SCIENCE

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<tr>
<th>Number</th>
<th>Subject</th>
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<tr>
<td>HSNS999</td>
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</table>

COURSE DESCRIPTION

1. HONOURS MASTER OF SCIENCE

The Honours Masters by research (and Doctor of Philosophy) degree program provides students with the opportunity to enrol in a research program which is designated a nursing program. Interdisciplinary supervision will be encouraged so that a student may have (for instance) a supervisor who is a nurse and another with expertise in an appropriate associated discipline. The degree shall be subject to the Honours Master of Science degree regulations in this Handbook.

SUBJECT DESCRIPTION

HSNH999 MAJOR THESIS

48 credit points
The following postgraduate degrees are available:

1. Graduate Diploma in Arts
2. Honours Master of Arts
   - Applied Psychology
   - Clinical Psychology
3. Honours Master of Arts by Research
4. Doctor of Philosophy (Clinical Psychology)
5. Doctor of Philosophy

The schedule of subjects available for each of these degrees is set out on the following pages.

For the Doctor of Philosophy degree and the Honours Master of Arts by Research degree candidates enrol in the subject PSYC999 Major Thesis.

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:

- Action research and organisational development in industry and other organisations
- Ageing
- Applications of phenomenology in

Schedule of graduate subjects

Graduate Diploma in Arts

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<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>PSYC952</td>
<td>Theory Seminar</td>
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<tr>
<td>PSYC953</td>
<td>Health Psychology</td>
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<tr>
<td>PSYC954</td>
<td>Psychology and Women</td>
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</tr>
<tr>
<td>PSYC955</td>
<td>Psychology of Information Processing</td>
<td>8</td>
</tr>
<tr>
<td>PSYC956</td>
<td>Occupational Psychology</td>
<td>8</td>
</tr>
<tr>
<td>PSYC957</td>
<td>Behavioural Medicine*</td>
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</tr>
<tr>
<td>PSYC958</td>
<td>Human Communication</td>
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<tr>
<td>PSYC959</td>
<td>Advanced Course in Developmental Psychology*</td>
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<tr>
<td>PSYC960</td>
<td>Biofeedback*</td>
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<tr>
<td>PSYC961</td>
<td>Topics in Data Analysis</td>
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<tr>
<td>PSYC962</td>
<td>Selected Topics in Conditioning and Learning</td>
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<tr>
<td>PSYC963</td>
<td>Research Project</td>
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<tr>
<td>PSYC970</td>
<td>Psychology of Reading and Reading Disabilities</td>
<td>8</td>
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<tr>
<td>PSYC971</td>
<td>Topics in Applied Psychology</td>
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<tr>
<td>PSYC972</td>
<td>Assessment and Counselling</td>
<td>8</td>
</tr>
<tr>
<td>PSYC973</td>
<td>Contemporary Issues in Psychology*</td>
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* Not offered in 1990.
COURSE DESCRIPTIONS

1. GRADUATE DIPLOMA IN ARTS

The Graduate Diploma in Arts (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 Graduate Diploma enables pass students to update or extend their psychological studies into an A.P.S. 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 regulations governing the award of Graduate Diploma.

(1) the subject PSYC963 Research Project (8 credit points)

(2) at least 40 other credit points in psychology at the 900-level, chosen from the following:

- PSYC952 Psychology Honours Theory Seminar
- PSYC953 Health Psychology
- PSYC954 Psychology and Women
- PSYC955 Psychology of Information Processing
- PSYC956 Occupational Psychology
- PSYC957 Behavioural Medicine
- PSYC958 Human Communication
2. HONOURS MASTER OF ARTS

(a) Applied Psychology

The degree of Honours Master of Arts (MA(Hons)) by coursework in the field on Applied Psychology will be subject to the Honours Masters Degree Regulations together with the following conditions:

1. Entry to the degree program will normally be from an Honours degree in psychology or from a pass degree with a three year (or its part-time equivalent) sequence in psychology.

2. Where entry to the degree is from an Honours degree at a standard below Honours Class II, Division 2, it will normally involve four sessions of full-time study or 8 sessions of part-time study. It will require the successful completion of 96 credit points from the Schedule of Graduate Subjects in Psychology as follows:

   (i) 24 credit points of core subjects; PSYC911 Principles of Clinical Psychology; PSYC912 Interpersonal Skills for Clinical Psychologists; and PSYC913 Assessment for Clinical Psychologists;

   (ii) 16 credit points in two areas of specialization, that is, two of PSYC923 Clinical Psychology; PSYC924 Organizational Psychology; PSYC925 Child Clinical Psychology or any PSYC92X subject.

   (iii) at least 16 credit points in Supervised Practicums in PSYC937 Practicum I and PSYC938 Practicum 2, or any PSYC93X subject.

   (iv) 24 credit points in the subject PSYC989 Research Project; and

   (v) the remaining 16 credit points to be made up from 300-level, 400-level or graduate subjects in psychology or related disciplines and/or more practicum experience in other practicum areas or in PSYC939; other Practicum Work and/or individual work in PSYC901 Psychology Report.

(b) Clinical Psychology

The degree of Honours Master of Arts in Clinical Psychology will be subject to the Honours Master Degree Regulations together with the following conditions:

1. Entry to the MA(Hons) degree programme will be from an Honours degree in Psychology at a standard of Class II, Division 2 or its equivalent.
2. The programme will involve four sessions of full-time study or their equivalent part-time. Candidates will be considered eligible for entry to the programme only if some of their earlier preparatory work is considered to be relevant to Clinical Psychology. The programme for such candidates will require the successful completion of at least 98 credit points from the Schedule of Graduate Subjects in Psychology as follows:

(a) 30 credit points in basic subjects: PSYC911 Principles of Clinical Psychology; PSYC912 Interpersonal Skills for Clinical Psychologists; PSYC913 Assessment for Clinical Psychologists; and PSYC914 Research Skills for Clinical Psychologists.

(b) 32 credit points in four areas of advanced study, that is, PSYC923 Clinical Psychology; PSYC925 Child Clinical Psychology; PSYC928 Clinical Neuropsychology; and PSYC929 Psychotherapy for Individuals and Groups.

(c) at least 12 credit points in supervised practicums PSYC937 Practicum 1 and PSYC938 Practicum 2;

(d) 24 credit points of independent but supervised research in the subject PSYC989 Research Project.

3. DOCTOR OF PHILOSOPHY (CLINICAL PSYCHOLOGY)

To qualify for entry candidates must have an Honours Bachelor Degree of at least II(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 PhD (Clinical Psychology) candidates will require successful completion of:

(1) a supervised research program on a topic which is in the field of Clinical Psychology. The research program will be written up as a thesis and its evaluation will contribute fifty percent toward the final assessment;

(2) at least 76 credit points from the Schedule of Graduate subjects in Psychology as follows:

A. 24 credit points in the following subjects:
   PSYC911 Principles of Clinical Psychology
   PSYC912 Interpersonal Skills for Clinical Psychology
   PSYC913 Assessment in Clinical Psychology

B. 32 credit points made up from the following subjects:
   PSYC923 Clinical Psychology
   PSYC925 Child Clinical Psychology
   PSYC928 Clinical Neuropsychology
   PSYC929 Psychotherapy for Individuals and Groups

C. at least 12 credit points in supervised practical clinical experience.

D. at least 8 credit points in PSYC927 Clinical Research Methods coursework.

Coursework will be graded in the same manner as coursework completed by candidates for the degree of M.A.(Honours) in Clinical Psychology.

These courses are described elsewhere in this calendar.

Award of the degree of Doctor of Philosophy (Clinical Psychology) is governed by the university regulations for the award of Doctor of Special Areas as described elsewhere.

SUBJECT DESCRIPTIONS

PSYC901 PSYCHOLOGY REPORT
6 credit points
Refer to Department for details

PSYC902 PSYCHOLOGY REPORT A
6 credit points
Refer to Department for details

PSYC903 PSYCHOLOGY REPORT B
6 credit points
Refer to Department for details

PSYC904 PSYCHOLOGY REPORT C
6 credit points
Refer to Department for details

PSYC911 PRINCIPLES OF CLINICAL PSYCHOLOGY
Double session; 8 credit points (52 hours)
Chairperson: Dr N. Mackay
Assessment: Major assignment, presentations and participation
The general aim of the subject is to introduce a variety of settings in which psychology is practised, and look at ourselves in practice: what is it that we do in particular settings and why; what is it that guides our interventions?

Students will collect and present material from various settings, especially those in which they are working or on placement, looking at major features of psychological practice:

- the client characteristics (what are the typical problems brought by the clients to the psychologist in that particular setting, what are the anxieties, their aetiology and peculiar difficulties);
- the clinical psychologist's characteristics (appropriate training, personal qualities and skills, problems, relationships with other personnel on the field);
- the aims and expectations of parties involved (what does the client, the client's parents or family, involved agencies, the law, medics and the psychologist want from the process);
- the setting characteristics (what is the appropriate physical and social setting for the practice, what is done in that practice).

The major assignment will be (1) to present examples of a selected psychological practice (where possible in the form of a video-recording), (2) give a detailed history of the particular case(s) under consideration, and (3) give a theoretical and practical rationale for the practice.

There is no set text.

**PSYC912 INTERPERSONAL SKILLS FOR CLINICAL PSYCHOLOGISTS**

*Double session; 8 credit points (52 hours)*  
*Chairperson: Associate Professor L.L. Viney*

This subject will require the personal involvement of students meeting regularly in a group with the aim of facilitating their work as applied psychologists through exploration of their personal capacities. The group will serve as a "laboratory" for personal and interpersonal "experiments" through such means as dyad and triad exercises, group work, meditation, fantasy, painting, dream work, and encounters, and psychodrama will be encouraged. 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. Which particular means will be used to achieve this expanded sense of personal and professional responsibility and better interpersonal skills will be decided, naturally, only when the students have entered the programme.

**PSYC913 ASSESSMENT FOR CLINICAL PSYCHOLOGISTS**

*Double session; 8 credit points (52 hours)*  
*Chairperson: Dr S. Srinivasan*

*Assessment: Assignments and examination*

This course assumes that students have a knowledge of the theory of psychological testing and measurement. Competence in the areas included in PSYC346 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 work shops, including peer and video feedback regarding assessment skills.

The specific objectives of the course are that participants demonstrate:

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) M.M.P.I. (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; and
7. the ability to choose assessment procedures appropriate to particular cases.

Reference lists will be distributed during the course. There will be considerable use of test manuals and accompanying texts.

**PSYC914 RESEARCH SKILLS FOR CLINICAL PSYCHOLOGISTS**

*Double session; 6 credit points (40 hours)*  
*Chairperson: Associate Professor Linda L. Viney*

*Assessment: Seminar presentations*
The aim of this subject is to prepare students for the research involved in their Clinical Project. The part of this presentation shared by all students consists of a 2 hour seminar in which the participants review the current research literature in Clinical Psychology by topics and by methods. They also present their own proposals for research. The other part of this preparation differs according to the needs of the students. They will develop their research tools, through seminars with Assoc. Prof. Viney and other departmental staff members on research design, computing and analyses of quantitative and qualitative data.

**PSYC923 CLINICAL PSYCHOLOGY**
Spring session; 8 credit points (52 hours)
Chairperson: Dr J. de Wet
Assessment: Practical and written examinations

During the introduction and orientation phase various theoretical, methodological and philosophical issues will be examined. The major component of the course consists of systematic examination of adult psychopathology. The mental disorders will be discussed with reference to clinical picture and diagnosis, aetiology, therapeutic approaches, methods of intervention and case management.

Additional topics include problems associated with special populations (the aged, physically and mentally handicapped) and clinical psychology and the law. A refresher course in human genetics will be provided. There will be the opportunity to review systems of psychotherapy.

**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.

**PSYC924 ORGANIZATIONAL PSYCHOLOGY**
Single session; 52 hours of lectures, seminars and practical work, 8 credit points.
Assessment: Practical work and assignments and/or written examination.

The major elements of this subject are the areas in which a psychologist practicing in industry as a consultant or working in personnel management may be involved. Topics to be dealt with may include action research and organizational development, communication within organizations, job satisfaction and employee motivation, demoralization and worker participation in management, problems of personnel selection and training and the role of the psychologist in industrial relations. A textbook and other readings will be recommended.

**PSYC925 CHILD CLINICAL PSYCHOLOGY**
Autumn session: 8 credit points (4 class hours per week for 1 session)
Chairperson: Mr J. Wragg
Assessment: Seminar presentations, assignments and/or examination.

This subject will focus on a range of assessment and treatment strategies in relation to child and adolescent psychopathology. Specific topics will be addressed in order to develop an understanding of aetiology, assessment and treatment approaches relevant to child and family problems.

These topics will include:
- conduct disorders and oppositional disorders
- attention deficit disorders and hyperactivity
- delinquency
- grief and separation
- learning disabilities
- anxiety and depression

Treatment approaches employing behaviour modification, cognitive therapies, art and play therapy, social skills training group work and individual therapy, parenting courses and family work will be examined. In addition the course will focus on understanding the implications of a range of handicapping disabilities and childhood illnesses. Ethical and professional issues concerned with treating minors will also be examined.

No set text.

**PSYC927 CLINICAL RESEARCH METHODS**
Double session; 8 credit points (52 hours of lectures and seminars)
Chairperson for Subject: Associate Professor Linda L. Viney
Assessment: Assignments to be determined

The candidate shall pursue course work, approved by the Departmental Head, the nature of which will take the form of preparation for completion of the doctoral thesis (for the degree of Doctor of Philosophy (Clinical Psychology)). The subjects may include topics such as:
- Research design
- Advanced statistics
- Computing
The study of experience  
Behavioural medicine  
Biofeedback research  
Research in developmental psychology  
Research in health psychology  
Information processing

PSYC928 CLINICAL NEUROPSYCHOLOGY  
Double session; 8 credit points (52 hours)  
Chairperson: Dr S. Srinivasan  
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, with an emphasis on Luria’s theory of functional systems.  
3. The causes of brain dysfunction.  
4. Approaches to neuropsychological assessment.  
5. The use of neuropsychological tests.  
7. Treatment and rehabilitation of the brain damaged.

Textbooks

PSYC929 PSYCHOTHERAPY WITH INDIVIDUALS AND GROUPS  
Double session; 8 credit points (52 hours)  
Chairpersons: Associate Professor Linda L. Viney, Dr Nigel Mackay  
Assessment: Seminar papers, case work.

The aim is to provide students with both an integrated theoretical and practical grounding in psychotherapy. The course offers a specialised training in one of a restricted number of psychotherapies with individuals or groups. The kinds of specializations available will vary from year to year, depending on staff availability. However, the choices open to students will normally include a major therapy from each of the cognitive-behavioural, psychoanalytic, and family approaches.

The subject consists of clinical reading and seminars in the selected areas, and supervision of work (therapeutic programmes, therapy cases etc) which students will be required to undertake. Where it is appropriate to the selected approach, there will also be workshop demonstrations of technique, or other exercises.

PSYC937 PRACTICUM 1  
Double or single sessions; 6 credit points (field work plus 30 hours of university-based case conference)  
Chairperson: Dr J. de Wet  
Assessment: Reports by field supervisors and university consultants; field notebooks and case presentations.

In addition to discussions of the problems associated with diagnosis, therapy and case management encountered in the field, attention will be devoted to clinical history taking and formulation of child, adolescent, adult and elderly cases.

Students are required to carry out some of their practicum work in the Psychological Services Unit.

PSYC938 PRACTICUM 2  
Double or single sessions; 6 credit points (field work plus 30 hours of university based case conference)  
Chairperson: Mr J. Wragg  
Assessment: As for PSYC937

This practicum extends the work of PSYC937.

PSYC939 OTHER PRACTICUM WORK  
Autumn or spring session; 26 hours of seminars; 6 credit points  
Assessment: Seminar (case conference) presentations, field notebooks and assessment by university and field supervisors.

An extra amount of supervised practicum experience is to be selected by students or recommended by staff.

PSYC940 EXTENDED PRACTICUM: CLINICAL PSYCHOLOGY  
Double session; 24 credit points (field work, plus 52 hours seminars)  
Chairperson for Subject: Associate Professor Linda L. Viney  
Assessment: Reports by field supervisors and university consultants. Field notebooks. Seminar (case conference) presentations.

This full year practicum subject is available only to students who have completed part or all of their graduate training in clinical psychology, at the discretion of the Departmental Head. They should be concurrently employed in the practice of clinical psychology or a closely related discipline. This subject gives students the opportunity to gain supervised professional experience, either as part of the M.A. degree or as miscellaneous students.
PSYC952 PSYCHOLOGY HONOURS
THEORY SEMINAR
Autumn session; 8 credit points
Chairperson for Subject: Dr D.L. Mixon

The Honours Theory Seminar, which is available as a separate subject to candidates for the Master of Studies, the M.A. and Dip.Gen.Psyc. only, will examine the relationship between theory and method in psychology with a view to developing critical as well as synthesizing skills. Topics may include: What are data? What is theory? The relationship between psychology and other disciplines. The socio-political context of theory and practice. Ethical issues.

The assessment of the Psychology Honours Seminar will be based on the quality of assignments.

PSYC953 HEALTH PSYCHOLOGY
Spring session; 8 credit points (two contact hours; lecture/seminar)
Chairperson: Dr G. Huon
Assessment: Essay, seminar, research proposal and exam

This course 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, to parallel contrasts between, for example, body and mind, biological and psychological or social explanations of behaviour, pharmacological and surgical interventions, or psychological and social treatments. Specifically medical topics to be considered relate to the control of intractable pain, patient education for diabetes, rehabilitation after trauma and following cerebrovascular insults. Other topics include the applications of psychological principles to the development, and implementation of preventative programmes aimed at a 'healthy lifestyle', such as those for stress, exercise, weight control, smoking, and drug and alcohol related problems. Since the delivery of any effective service or programme presupposes that personal and social systems interact in health care, current theories about biological, psychological, social and cultural determinants of behaviour will be examined.

Textbook

PSYC954 PSYCHOLOGY AND WOMEN
Autumn session; 8 credit points (2 contact hours; 2 hour lecture/seminar)

Chairperson for Subject: Dr B. Walker
Assessment: Seminars and reading summaries (100%)

This course will explore the ways in which psychology has viewed women. Traditionally psychology has seen women in comparison with the male norm. Classical psychoanalytic theory will be considered in relation to this question. Such an approach has been criticised and alternative theories advocated.

Account of the development of gender identity, sex roles and sex differences will be compared. The relationships that females engage in throughout their lives, with their parents, siblings, peers, lovers, children and workmates will be considered. The effects on the individual woman of social systems, including the delivery of health care services and psychotherapy, will be explored.

Textbooks
To be advised.

PSYC955 PSYCHOLOGY OF INFORMATION PROCESSING
Autumn or spring session; 8 credit points (2 hours lectures, 2 hours laboratories)
Chairperson for Subject: Professor W.J. Lovegrove
Assessment: Laboratory work and assignment and/or examinations

The objective of this course is to investigate what can be learned about human capabilities and limitations when the Homosapien is treated as an information-processing system. It will be achieved by following the fate of incoming information through its various stages of transformation. The structural properties as well as controlled processes involved at each of these stages will be illustrated with selected topics in Attention, Perception, Memory, Language and Reasoning. Practical applications will also be considered.

Textbook
No set text.

PSYC956 OCCUPATIONAL PSYCHOLOGY
Spring session; 8 credit points (1 hour lecture/per week; 18 hours practical/per session)
Chairperson for Subject: To be advised.
Assessment: Essay submitted during the session (30%), seminar papers submitted during the session (30%) and one three hour examination at the end of session one (40%).

The course will extend the introduction to Industrial and Organizational Psychology given in PSYC351. Practical applications of psychology in a number of work areas (e.g.
health and safety; recruitment selection and placement; occupational guidance, appraisal, training and development; job and tasks design; work organization; quality of working life - will be examined. Two key themes of the course will be: (a) the collection, integration and deployment of information and (b) the integration of biological, social and individual theoretical perspectives on behaviour for practical purposes at work.

Textbook

PSYC957 BEHAVIOURAL MEDICINE
Autumn or spring session; 8 credit points (2 hours lecture/seminar)
Chairperson for Subject: Dr S. Ginsberg

Behavioural medicine has been defined as "the interdisciplinary field concerned with the development and integration of behavioural and biomedical science knowledge and techniques relevant to health and illness and the application of this knowledge and these techniques to prevention, diagnosis, treatment, and rehabilitation". This subject examines the contribution of conditioning and learning, behaviour modification, psychophysiology, and biofeedback to this interdisciplinary endeavour.

Textbook
Journal articles will be assigned rather than a set text.

PSYC958 HUMAN COMMUNICATION
Autumn session; 8 credit points (2 hrs per week)
Chairperson for Subject: Dr D.L. Mixon
Assessment: Within session assignments and laboratory work

The course will examine nonverbal communication in the context of expressive/perceptual systems. Particular attention will be given to the vocal/auditory system and the bodily/visual system. Laboratory sessions will be devoted to ways of increasing vocal and bodily expressive skills and auditory and visual perceptual skills as well as the measurement of each.

Textbook
No set text.

PSYC959 ADVANCED COURSE IN DEVELOPMENT PSYCHOLOGY
Autumn or spring session; 8 credit points (2 hrs lecture/seminar)
Chairperson for Subject: to be notified

Assessment: Within session research project.

The purpose of the course is to provide the experience of applying the theory and research techniques of child and lifespan development psychology to practical problems in the social and educational spheres. Interventions in those spheres reveal, through the way problems are defined and the prescriptions for their solution, a variety of models of helping and coping which are in turn based on different theories of development. The models of helping and coping which are the foundations of those interventions will provide the broad framework for the course and for the design of the research projects which will be the major requirement. Students will be introduced to the theoretical bases of empirical research, to the range of experimental paradigms and research designs, and methods of observation and recording data.

Textbook
No set text.

PSYC960 BIOFEEDBACK
Autumn or spring session; 8 credit points (2 hrs lecture/seminar/laboratory)
Chairperson for Subject: Dr S. Ginsberg
Assessment: Essay and within-session assignments

This subject provides a detailed examination of theory and research as well as application of the control of physiological activity by means of biofeedback techniques. Laboratories will provide demonstrations of certain of the matters considered in the lecture/seminars.

Textbook
Journal articles will be assigned in addition to or instead of a set text.

PSYC961 TOPICS IN DATA ANALYSIS
Double session; 8 credit points (26 hrs of seminars)
Convenor: Dr D. Brown
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 the statistical package SPSSX and to perform some analyses using SPSSX. Students will also be encouraged to discuss problems in data analysis arising from their own research projects. A reading list will be provided.

PSYC962 SELECTED TOPICS IN CONDITIONING AND LEARNING
Autumn or spring session; 8 credit points (2 hrs lecture/seminar per week)
Convenor: Dr S. Ginsberg
Assessment: Within session assignments

This subject provides an in-depth examination of certain of the topics (different topics in different years) introduced at a more basic level in PSYC243 Learning and Memory.

Textbook
Journal articles will be assigned in lieu of a set text.

PSYC963 RESEARCH PROJECT
Double session; 8 credit points
Convenor: Dr D. Mixon

This subject involves the completion of a single empirical study.

PSYC970 PSYCHOLOGY OF READING AND READING DISABILITIES
Autumn or spring session; 8 credit points
Convenor: Professor W. J. Lovegrove
Assessment: Major seminar (15%), minor seminars (15%), log book (10%), essay (30%), case report (30%).

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. Furthermore, a range of remedial procedures will be introduced.

This subject will introduce students to practical issues concerned with assessing reading ability and proposing remedial strategies.

Textbooks
Text to be advised.
Research articles will mostly be used in this subject.

PSYC971 TOPICS IN APPLIED PSYCHOLOGY
Autumn or spring session; 8 credit points
Convenor: Dr N. Mackay and Dr P. Smith

Assessment: Seminars (60%), written assignments (40%)

This subject will focus on applied psychological skills and will aim to give students experience in a selection of these. In any one year three units will be presented. The range includes the following.

Personal construct methodology - models of clinical practice - biofeedback - applied behavioural analysis - action research in organizations - methods of social investigation - exploration of health and illness related behaviours and attitudes.

Textbooks
Refer to Department of Psychology for current reading list.

PSYC972 ASSESSMENT AND COUNSELLING
Autumn or spring session; 8 credit points
Convenor: Dr J. de Wet and Mr J. Wragg
Assessment: Two tape transcript assessments each worth 25% and two test/assessment reports each worth 25%

This course will initially focus on a microskills approach to working with individual clients. A brief introduction to group work will also be examined. A practical workshop format employing role play observation exercises, taped exercises, feedback and discussion will be used. Further development of counselling skills will be undertaken from a second perspective in order to provide students with a greater awareness of other counselling frameworks. In addition this course will focus on assessment and report writing in relation to working with individual clients.

Textbooks
Refer to Department.

PSYC973 CONTEMPORARY ISSUES IN PSYCHOLOGY
Autumn or spring session; 8 credit points
Convenor: Dr D. Mixon
Assessment: Within session assignments (100%). Please refer to Department when offered.

The topic of this course will vary from year to year subject to availability of staff and focussing on those issues of contemporary importance which the Head of Department considers to be of suitable substance and level to be offered as a PSYC900 subject.

Textbook
Journal Articles
PSYC999 RESEARCH PROJECT
24 credit points

All applied psychologists should know how to answer psychological questions by recourse to raw data. All students entering the M.A. in Applied Psychology program with a pass degree or without the major empirical project of the Honours year, therefore, will be required to design and carry out a small research project under supervision. This research will be in the general field of applied psychology and normally in one of the students' areas of specialization. Students will show that they are able to:

1. define their problem,
2. devise a method by which to collect data relevant to it,
3. collect, analyse and interpret those data; and
4. report their findings in the form of an article suitable for a refereed journal of their choice.

PSYC999 MAJOR THESIS
48 credit points

For students who have an appropriate honours degree in Psychology. Refer to Department for details.

NOTE: Provision exists for students who do not have an honours degree to complete a Master of Arts by Coursework and Major Thesis (a total of 96 credit points) as provided under section 6(2) of the Masters Degree Requirements.
INTRODUCTION

The following postgraduate degrees are available:

1. Graduate Diploma in Science (a) (Community Health) (b) (Mental Health)
2. Graduate Diploma in General Practice
3. Master of Science (Community Health)
4. Master of Science (Nutrition and Dietetics)
5. Honours Master of Science (Community Health) by Research
6. Honours Master of Science (Nutrition)
7. Honours Master of Science (Nutrition and Dietetics)
8. Doctor of Philosophy

The schedule of subjects available for the degrees is set out on the following pages.

SCHEDULE OF GRADUATE SUBJECTS

GRADUATE DIPLOMA IN SCIENCE (COMMUNITY HEALTH)

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<thead>
<tr>
<th>Schedule 1</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>HSCH901</td>
<td>Community Health Services</td>
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<tr>
<td>HSCH902</td>
<td>Communication and Education</td>
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</tr>
<tr>
<td>HSCH903</td>
<td>Research and Evaluation Methods</td>
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</tr>
<tr>
<td>HSCH904</td>
<td>Epidemiology I</td>
<td>6</td>
</tr>
<tr>
<td>HSCH905</td>
<td>Social Aspects of Community Health Promotion</td>
<td>6</td>
</tr>
<tr>
<td>HSCH906</td>
<td>Health Services Organisation and Management</td>
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<td>HSCH907</td>
<td>Special Topic in Community Health</td>
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<tr>
<td>HSCH908</td>
<td>An Economic Approach to Contemporary Health Issues</td>
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<tr>
<td>HSCH909</td>
<td>Health Services Planning</td>
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<tr>
<td>HSCH910</td>
<td>Health Policies and Politics</td>
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<tr>
<td>HSCH911</td>
<td>Communication in Community Health</td>
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<tr>
<td>HSCH912</td>
<td>Health Promotion I - The Place of Health Promotion in the Health Care System</td>
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<tr>
<td>HSCH913</td>
<td>Health Promotion II - A Practical Approach to Program Delivery</td>
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<tr>
<td>HSCH914</td>
<td>Drug Problems and Issues</td>
<td>6</td>
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</table>

Schedule 2

Any subjects listed in the Handbook which are approved by the Heads of Health Sciences and the Department or School which offers the subject. Candidates should consult the Handbook and subject coordinators concerned to ascertain subject prerequisites.

GRADUATE DIPLOMA IN SCIENCE (MENTAL HEALTH)

<table>
<thead>
<tr>
<th>Schedule 1</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>HSCH950</td>
<td>Comprehensive mental health services</td>
<td>6</td>
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<tr>
<td>HSCH951</td>
<td>Clinical Psychiatry</td>
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<tr>
<td>HSCH952</td>
<td>Interviewing and assessment techniques</td>
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</tr>
<tr>
<td>HSCH953</td>
<td>Methods of intervention and treatment 1</td>
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<tr>
<td>HSCH954</td>
<td>Methods of intervention and treatment 2</td>
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<tr>
<td>HSCH955</td>
<td>Socio-cultural issues in mental health</td>
<td>6</td>
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<tr>
<td>HSCH956</td>
<td>Supervised clinical practice</td>
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### GRADUATE DIPLOMA IN SCIENCE (MENTAL HEALTH) (Cont'd)

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<tr>
<th>Number</th>
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<tbody>
<tr>
<td>Schedule 2</td>
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<tr>
<td>HSCH957</td>
<td>Emotional and behavioural disorders of childhood</td>
<td>6</td>
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<tr>
<td>HSCH958</td>
<td>Adolescent mental health</td>
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<tr>
<td>HSCH959</td>
<td>Adult mental health</td>
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<tr>
<td>HSCH960</td>
<td>Mental health problems of the aged</td>
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<tr>
<td>HSCH961</td>
<td>Principles and practice of psychosocial rehabilitation</td>
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<tr>
<td>HSCH962</td>
<td>Family and community education</td>
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<tr>
<td>HSCH963</td>
<td>Service planning and evaluation</td>
<td>6</td>
</tr>
<tr>
<td>HSCH964</td>
<td>Legal and ethical issues</td>
<td>6</td>
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<tr>
<td>HSCH965</td>
<td>Special topic in Mental Health</td>
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### GRADUATE DIPLOMA IN GENERAL PRACTICE

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### MASTER OF SCIENCE (COMMUNITY HEALTH)

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<th>Schedule 1 - Core Courses</th>
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<td>HSCH906</td>
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<td>HSCH924</td>
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<tr>
<th>Schedule 2 - Elective Courses</th>
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<tr>
<td>HSCH907</td>
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<td>HSCH913</td>
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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 partake in the skill-based subjects offered.

**Autumn session**
Students should note that CHEM215, Food chemistry, is a prerequisite to HSCH978 Therapeutic Dietetics. Students who have not passed CHEM215 should take this subject in Autumn session.

**All Students:**
- Introductory session
  - HSCH975 Community Dietetics 6
  - HSCH976 Community Nutrition 6
  - HSCH903 Research and Evaluation Methods 6

**Students without nutrition major:**
- HSCH301 Nutrients and Metabolism 8

**Students with nutrition major:**
- HSCH902 Communication and Education 6

**Spring session**

**All students:**
- HSCH977 Nutrition Counselling 6
- HSCH978 Therapeutic Dietetics 6
- HSCH979 Nutrition Services Planning and Food Service Management 6

**Students without a nutrition major:**
- HSCH1303 Behavioural Aspects of Nutrition 8

**Students with a nutrition major:**
- HSCH906 Health Services Organisation and Management 6
  - or
- HSCH910 Health Policies and Politics 6
  - or
- HSCH904 Epidemiology I 6
  - or
- HSCH980 Studies in Public Health Nutrition 6
  - or
A related subject at 300 or 900 level, with the approval of the Head of Department of Public Health and Nutrition

**Session 3**
- HSCH982 Practical Studies in Nutrition and Dietetics 24

**Session 4**
- HSCH924 Nutrition Research Project 24

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**HONOURS MASTER OF SCIENCE (COMMUNITY HEALTH)**
**HONOURS MASTER OF SCIENCE (NUTRITION)**
**HONOURS MASTER OF SCIENCE (NUTRITION AND DIETETICS)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<td>36</td>
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<tr>
<td>HSCH948 Major Thesis</td>
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**COURSE DESCRIPTIONS**

1. **GRADUATE DIPLOMA IN SCIENCE**
   
   **(a) Community Health**
   
   The Graduate Diploma is intended to cater for a variety of health professionals working in aspects of community health, and offers the opportunity to undertake professional studies in community health. The Graduate Diploma caters for those community health workers 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 Science (Community Health) or Master of Science (Honours) degrees.
The aims of the course emphasise primary health care, community development and a broad social view of health and health promotion. The course will provide practitioners with both skills and a conceptual basis for their practice in community health.

Qualification requirements will be as for Graduate Diploma Regulations Paragraphs 5(1), 5(2a), 5(2c) and 5(3) in this Handbook.

All other regulations shall be as for the Graduate Diploma Regulations in this Handbook.

Course Requirements
A candidate shall undertake an approved course recommended by the Departmental Head.

A candidate for the Graduate Diploma in Science (Community Health) shall successfully complete subjects with a total value of 48 credit points, not less than 36 of which shall be chosen from Schedule 1 and the balance from Schedule 2, as set out in the Schedule of Graduate Subjects above.

Assessment: Assessment of coursework will be the responsibility of the subject coordinators or supervisor and the School Assessment Committee. Normal requirements for independent library work and assignments will apply.

(b) Mental Health

The Graduate Diploma in Science (Mental Health) is designed to retrain categories of mental health staff and to provide training for the multidisciplinary group of health professionals who will care for mental health clients in comprehensive area-based settings. It aims to produce graduates with the clinical and professional competence to work within the full range of mental health services.

Qualification requirements will be as for Graduate Diploma Regulations paragraphs 5(1), 5(2a), 5(2c) and 5(3) in this Handbook.

Course Requirements
A candidate will undertake an approved course recommended by the Departmental Head.

A candidate for the Graduate Diploma in Mental Health will successfully complete subjects with a total value of 54 credit points, 42 of which will comprise the core subjects in Schedule 1, and 12 of which will be chosen from subjects listed in Schedule 2, as set out in the Schedule of Graduate Subjects above.

Not all subjects in Schedule 2 will be offered each year. Elective courses will be offered subject to demand and to availability of teachers.

Assessment: Assessment of coursework will be the responsibility of the subject coordinators and the School Assessment Committee. Satisfactory completion of the supervised clinical practice will be determined by the supervisor in consultation with the Coordinator of the program and the Head of the Department of Public Health and Nutrition.

All other regulations shall be as for the Graduate Diploma Regulations in this Handbook.

2. GRADUATE DIPLOMA IN GENERAL PRACTICE

Unlike some areas of medical specialisation, general medical practice has not been well served by postgraduate educational programs. Those educational opportunities that are available tend to be in specific areas of general practice. This course will provide an opportunity for further study in all areas of general practice; the emphasis is on mastering as many aspects of practice as possible.

The Graduate Diploma caters for medical practitioners who intend to enter general practice and who wish to have a comprehensive training. The course, which contains a substantial clinical component, will provide practitioners with both skills and a conceptual basis for their medical practice. The Graduate Diploma does not include a research component; medical practitioners with an interest in research are advised to consider the Master of Science (Honours) or Doctor of Philosophy degrees.

Course Requirements
A candidate will undertake an approved course recommended by the Departmental Head.

A candidate for the Graduate Diploma in General Practice will successfully complete subjects with a total value of 48 credit points, 36 to be chosen from Schedule 1 and 12 from Schedule 2 as set out in the Schedule of Graduate Subjects above.

3. MASTER OF SCIENCE (COMMUNITY HEALTH)

The Pass Masters degree is intended to cater for a variety of health professionals working in aspects of community health, and offers the opportunity to undertake foundation studies in community health and to specialize in a clinical or topic area relevant to the practice of community health.
The Master of Science (Community Health) program aims to provide training for individuals working in community health. It is anticipated that graduates of nursing, medicine, physiotherapy, health education and other health professions will be interested in pursuing the course.

Because of the multidisciplinary nature of Community Health and the variation in type and duration of professional training in the health professions it is considered desirable to prescribe a variety of entry requirements.

In all cases a minimum of two years experience in some aspects of Community Health is required in addition to other qualifications for entry.

Normal entry requirements would be:

(a) a three year undergraduate degree from the University of Wollongong or other approved tertiary institution,

(b) a recognised health professional qualification of at least four years duration from an approved tertiary institution (for example Diploma in Physiotherapy).

In appropriate circumstances, an applicant who does not qualify for registration under (i) or (ii) above may be permitted to register provided that the applicant submits evidence of such tertiary academic and professional attainments as may be approved.

Time Limits
A candidate registered as a full-time candidate may not, without approval, continue to be registered for more than six consecutive sessions from the date of original registration.

A candidate registered as a part-time candidate may not, without approval, continue to be registered for more than twelve consecutive sessions from the date of original registration.

Course Requirements
A candidate for the degree of Master of Science (Community Health) shall undertake a 72 credit point program comprising core courses (36 credit points - Schedule 1), electives (12 credit points at 300 or 400 or graduate level) and a major project, the topic of which shall be approved by the Academic Committee of the Department of Public Health and Nutrition (24 credit points.)

In special circumstances a candidate may undertake electives in lieu of up to 2 core courses where the candidate can show that he or she has already undertaken equivalent coursework as part of another program of study.

The elective program will be prescribed in each case depending upon the specialization chosen. It is anticipated that electives will comprise coursework which may be taken within the Department of Public Health and Nutrition (Schedule 2 subjects) as well as within other Departments and Schools of the University of Wollongong or other accredited institutions.

In special circumstances candidates may contract to undertake an independent study for a defined number of credit points up to six in lieu of an elective course. This situation is most likely to arise in a clinical specialization where numbers of candidates wishing to study in the area are insufficient to justify a formal course. In such cases the candidate, in conjunction with a supervisor in the field, will present a proposal incorporating objectives and methods of criteria for assessment of the independent study. This proposal must be approved by the Academic Committee of the Department of Public Health and Nutrition.

4. MASTER OF SCIENCE (NUTRITION AND DIETETICS)

Aim
The Postgraduate programs in Nutrition and Dietetics will produce graduates who are eligible for membership of the Dietitians Association of Australia and who thus may be employed as nutritionists/dietitians in Australia and selected overseas countries.

The Master of Science (Nutrition and Dietetics) program of coursework and placements will develop the basic necessary 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 therapeutic situations. It will also provide students with the opportunity to specialise in a selected research area related to nutrition and dietetics.

Course design
The course is designed to address the major nutritional issues experience in Australia today. It commences with a focus on the Australian community and the role that nutrition has in health and disease. Community nutrition and dietetics are then introduced.

Following this, studies are included to develop the necessary knowledge and skills required by a nutritionist/dietitian working in particular environments, for example hospitals, community locations, public health. The
theme which is pursued is that in any of these different capacities, the nutritionist/dietitian is working towards the common goal of addressing major causes of ill-health through good nutritional practices, be it at the primary, secondary or tertiary level.

Course Requirements
A candidate for the Master of Science (Nutrition and Dietetics) will undertake a set program of study, student placements and a research project.

The set program of study is designed to cover those areas set down as essential for the training of dietitians in Australia, with an emphasis on community aspects of dietetics and nutrition. Some of the subjects will be taken jointly with other postgraduate programs and there is limited flexibility of subject choice to allow students to pursue individual interests.

The minor placements will provide students with the opportunity of experiencing aspects of the nutritionist/dietitians work in a variety of community health settings. The major placement comprises supervised training for the candidates in community nutrition and therapeutic dietetics in major and community-based hospitals, community health organisations and other units involved in aspects of nutrition care or promotion.

The major project will provide an opportunity for students to extend their training in a specialised area of dietetics and/or nutrition. The topic of the major project shall be approved by the Departmental Head.

Duration
The Master of Science (Nutrition and Dietetics) is a two year, full-time course of 96 credit points. Some opportunity will exist to undertake part-time study, with the approval of the Departmental Head.

Entry Requirements
Entry will be based on selection by interview. The interview panel will include at least the Departmental Head and course coordinator/nutrition lecturer.

Students should have completed a 144 credit point BSc degree which included the following subjects:

100-level
BIOL103 General Biology A
BIOL104 General Biology B
CHEM101 Chemistry 1A
CHEM102 Chemistry 1B
HSHM101 Human Anatomy
PSYC111 Psychology 1A
PSYC112 Psychology 1B

200-level
BIOL213 Basic Biochemistry
BIOL214 Metabolic Biochemistry
CHEM215 Food Chemistry
HSHM250 Physiology

300-level
HSCH301 Nutrients and Metabolism
HSCH302 Human Nutrition in Health and Disease
HSCH303 Behavioural Aspects of Nutrition

An average assessment of not less than credit level (65 per cent) in the major study in the previous two sessions of equivalent full-time study should normally be achieved for consideration for selection. These criteria may be varied in the case of students who have been in the workforce since graduation; in such cases additional criteria relating to postgraduate activity may be applied.

Graduates holding a BSc or equivalent degree from other recognised tertiary institutions may be permitted to enrol as a candidate for the Master of Science (Nutrition and Dietetics) provided their undergraduate performance is deemed equivalent to those entering with a BSc from The University of Wollongong or they have a MSc or equivalent degree including full year courses or equivalent in Biochemistry and Human Physiology at second year University level. Unless specific exemption is made by the Head of the School, subjects CHEM215, HSCH301, and HSCH303 must be completed during the postgraduate program in Nutrition and Dietetics.

5. HONOURS MASTER OF SCIENCE (COMMUNITY HEALTH)

The Honours degree allows candidates who possess qualifications in a specialist field of Community Health to undertake a program of research in Community Health.

6. HONOURS MASTER OF SCIENCE (NUTRITION)

The Honours degree allows candidates who possess qualifications and/or postgraduate experience in nutrition to undertake a specialist nutrition research program.

Course Requirements
Potential candidates will discuss their area of interest with the co-ordinator of the program and present a research project title and general outline. If a suitable supervisor is available 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 Regulations.

7. HONOURS MASTER OF SCIENCE (NUTRITION AND DIETETICS)

The honours degree allows candidates who possess qualifications in nutrition and dietetics to undertake a program of specialised research in nutrition and dietetics.

Course Requirements
Potential candidates will discuss their area of interest with the coordinator of the program and present a research project title and general outline. If a supervisor is available 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 Regulations.

SUBJECT DESCRIPTIONS

HSCH901 COMMUNITY HEALTH SERVICES
6 credit points; 2 hours; Autumn session

Students will undertake visits to relevant community health services and will study the functions of those services for discussion in class seminars. The fieldwork will provide the contextual material against which an organizing framework for the core courses will be developed. The course will also raise for discussion health services systems and analysis of health policy.

Course Co-ordinator: Associate Professor Pat Mowbray, Director of Community Health, I.A.H.S.

Textbook

HSCH902 COMMUNICATION AND EDUCATION
6 credit points; 2 hours; Autumn session

This course will examine the principles of communication in large and small groups. It will encompass principles of adult education, program planning and effective communication at all levels. Particular attention will be paid to facilitation of discussion groups and to overcoming barriers to communication created by different educational, ethnic and social backgrounds.

Course Co-ordinator: Associate Professor Christine Ewan

Textbooks:
M. Knowles, The Adult Learner: A Neglected Species, Gulf, 1984
M. Tight, Adult Learning and Education, Croom Helm, 1983.

HSCH903 RESEARCH AND EVALUATION METHODS
6 credit points; 2 hours; Autumn session

This course will be an introduction to the variety of research and evaluation methods which are relevant to community health. Students will be required to develop a research proposal as part of the course requirement. Emphasis will also be placed on criticising research and students' proposals will be discussed by the class.

Course Co-ordinator: Associate Professor Christine Ewan

Textbook

HSCH904 EPIDEMIOLOGY I
6 credit points; 2 hours; Spring session

This course will emphasise basic principles and uses of epidemiology. Simple methods and statistics will be covered to the extent that they are required to understand epidemiological research reports. A specialization in Epidemiology will be available for those who wish to pursue the topic in greater depth.

Course Co-ordinator: Professor Dennis Calvert

Textbooks
To be advised.

HSCH905 SOCIAL ASPECTS OF COMMUNITY HEALTH PROMOTION
6 credit points; 2 hours; Spring session

This course will cover theories and research in the social and behavioural sciences as they relate to health. This background will be examined in relation to its implications for community health and health promotion. Health care of individuals will be compared and contrasted to health care of communities and the strategies for both discussed. Community development and mobilization will be examined from social anthropological and psychological perspectives.

Course Co-ordinator: Associate Professor Christine Ewan
This course will introduce basic concepts in administration and management relevant to community health. It will aim to promote understanding of basic principles of organizational structure and function, organizational communication and organizational behaviour. Aspects of health systems which create organizational problems will be raised and approaches to these problems discussed. A specialization in Health Administration will be available.

Course Co-ordinator: To be announced.

Textbooks

HSCH907 SPECIAL TOPIC IN COMMUNITY HEALTH
6 credit points

The candidates, 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 must be approved by a committee of the Department of Public Health and Nutrition responsible for academic oversight of programs in Community Health.

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 at least once a week and to conduct independent library research as well as directed readings, assignments and assessments.

Textbooks
Nil prescribed.

HSCH908 HEALTH SERVICES PLANNING
Autumn session; 6 credit points (2 hours seminar per week)

Assessment: Satisfactory completion of 2 assignments. Assignment I (2500 words) focuses on the process of strategic planning for health services. Assignment II (2500 words) focuses on micro-planning in health services.

Practical and theoretical requirements for carrying out health services planning in the community health area. Topics to be covered:


Course Co-ordinator: To be announced.

Textbooks
J.R. Schuerman, Research and Evaluation in Human Services, Free Press, 1984

HSCH910 HEALTH POLICIES AND POLITICS
Spring session; 6 credit points (2 hours seminar per week)

Assessment: Satisfactory completion of 2 assignments and individual seminar presentation. Assignment I (3500 words) requires analysis of a significant health policy. Assignment II (2000 words) compares approaches to policy implementation in health service delivery.

Practical and theoretical aspects of health policy formulation, development and termination with an emphasis on the part that the formal and informal political process in society plays in this.

Topics to be covered: What is health and policy: models and process? Health policy making at micro and macro levels. The political process in health policy making. Changing health policy.

Course Co-ordinator: To be announced.

Textbooks
R. Alford, Health Care Politics, University of Chicago Press, 1975
C. Ham, Health Policy in Britain, MacMillan, London, 1982
M. Lipsky, Street Level Bureaucracy, Sage, N.Y., 1980.
The subject deals with skills necessary for effective communication: small group facilitation, health promotion and community participation and development. It uses the small group task development (educational) process, NOT the therapeutic group process to improve and develop these skills. Group process will be organised around a particular health problem. Topics to be covered: Listening skills. Teaching and learning in groups. Experiential learning. Features of small group process. Conflict resolution. Teamwork.

Course Co-ordinator: Associate Professor Pat Mowbray.

Textbooks

Minimum number for enrolment - 8.

**HSCH912 HEALTH PROMOTION I - THE PLACE OF HEALTH PROMOTION IN THE HEALTH CARE SYSTEM**

*Autumn session; 6 credit points (2 hours seminar per week)*

**Assessment:** Seminar presentation and discussion and satisfactory completion of weekly assignments related to seminar readings. A 3000 word final assignment on the relationship between health promotion and the "new public health". Passes in all components are necessary for satisfactory completion of the course.

Health Promotion, its scope and planning. Defining the parameters of 'Health Promotion' in a health care system.

Topics to be covered: Health Promotion its scope and emphasis. Planning approaches and framework. Community development and needs assessment. Project planning.

**Course Co-ordinator:** Ms Heather Yeatman.

**Textbooks**

**HSCH913 HEALTH PROMOTION II - A PRACTICAL APPROACH TO PROGRAM DELIVERY**

*Spring session; 6 credit points (2 hours seminar per week)*

**Assessment:** Seminar presentation and discussion. Satisfactory completion of a project design in Health Promotion which would be suitable for submission for funding purposes. Passes in all components are necessary for satisfactory completion of the course.

Practical and theoretical components of the delivery of a Health Promotion project.

**Topics to be covered:** Historical perspectives in Health Promotion. The history of various projects locally and nationally. Relating practical strategies to objectives. Designing a framework for projects. Political processes in 'Health Promotion'.

**Course Co-ordinator:** To be announced.

**Textbooks**

**HSCH914 DRUG PROBLEMS AND ISSUES**

*Spring session; 6 credit points (2 hours seminar per week)*

**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.

**Course Co-ordinator:** Mr G. Lake, Lecturer, Team Leader, Kembla House, Drug and Alcohol Service, Illawarra Area Health Service.

**Textbooks**
To be notified.

**HSCH924 MAJOR PROJECT**

*24 credit points*

The major project will form the major problem-oriented component of the course. Coursework in core and specialization subjects will provide the major resource for identification, planning, implementation and evaluation of the project component. The major project component will be supervised by a specialist in the chosen field.

**† HSCH930 SUPERVISED CLINICAL PRACTICE IN ACUTE CARE**

**† HSCH931 SUPERVISED CLINICAL PRACTICE IN OBSTETRICS AND GYNAECOLOGY**

**† HSCH932 SUPERVISED CLINICAL PRACTICE IN GENERAL MEDICINE**

**† HSCH933 SUPERVISED CLINICAL PRACTICE IN GENERAL SURGERY**
†HSCH934 SUPERVISED CLINICAL PRACTICE IN ACCIDENT AND EMERGENCY
†HSCH935 SUPERVISED CLINICAL PRACTICE IN GENERAL PRACTICE
†HSCH936 SUPERVISED CLINICAL PRACTICE IN PEDIATRICS
†HSCH937 SUPERVISED CLINICAL PRACTICE IN PSYCHIATRY
†HSCH 938 CLINICAL PRACTICE IN REHABILITATION

‡Autumn, Spring or Summer sessions: each subject will be undertaken over 10 weeks with minimum supervision contact of 3 hours/week; 6 credit points each subject. A student will take only one Supervised Clinical Practice subject at any one time.

Pre-requisite
Medical degree (MB BS or equivalent) and registration as a medical practitioner in N.S.W.

Assessment: Each subject will be an independent study over 10 weeks directly coordinated by an appropriately qualified clinical coordinator, a medical practitioner, who will supervise individual students. A member of the University staff will be overall subject coordinator. Students will be employed as medical officers by the Area Health Service. Assessment recommendation will be made by an Assessment Committee comprising the Director of Postgraduate Education of the Illawarra Area Health Service, the Coordinator of the General Practice Training Unit, the clinical coordinators of the relevant subjects, staff of the University who may be nominated by the Head of the Department of Public Health and Nutrition, and the subject coordinator. The Head of the Department of Public Health and Nutrition will be in the Chair.

In each Clinical Practice Subject assessment will be on the basis of achieving mastery of clinical skills and satisfactory performance in the study program for that subject. At the beginning of each subject students will have written details of the criteria for satisfactory performance in that subject, and will have a log-book of clinical skills to be mastered. Satisfactory performance in a particular subject will include one or two written case commentaries or dissertations (topic set by supervisor) a specified number of case presentations at an appropriate forum (eg clinical meetings the The Wollongong Hospital) and nominated tasks (eg minor research projects, presentations at the Departmental Journal Club).

Students must complete a supervised clinical practicum. * Supervisors must develop and submit an outline of the program, including details of assessment, to the Department of Public Health and Nutrition Assessment Committee by an approved date before each 10-week term begins. Results will be submitted by the due date for the University session in which the 10 week term finishes.

Content
The Graduate Diploma caters for medical practitioners who intend to enter general practice and who wish to have a comprehensive training. The course, which contains a substantial clinical component, will provide practitioners with both skills and a conceptual basis for their medical practice. The Diploma does not include a research component; medical practitioners with an interest in research are advised to consider the Master of Science (Honours) or Doctor or Philosophy degrees.

Course Requirements
A candidate for the Graduate Diploma in General Practice will successfully complete subjects with a total value of 48 credit points, 36 to be chosen from Schedule 1 and 12 from Schedule 2 as set out in the Schedule of Graduate Subjects above.

Textbooks: To be advised.

Subject Coordinators: Associate Professor C. Ewan; Professor D Calvert.

HSCH947 THESIS
36 credit points

HSCH948 MAJOR THESIS
48 credit points

HSCH950 COMPREHENSIVE MENTAL HEALTH SERVICES
Autumn session; 6 credit points (2 hours per week)

Assessment: Assessment methods will be chosen from a variety of methods including review, case reports, seminar presentations, research proposals. Specific assignments will be determined when lecturers are appointed and will be given in detail to students at commencement of course.

The course undertakes a review and history of basic theoretical models used to explain psychiatric disorder and presents a historical overview of mental health services. It

*Supervisors: Will be appointed as honorary teaching staff annually from among the ranks of medical staff of the Illawarra Area Health Service.
outlines the design and impact of relevant 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 intervention services, residential 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.

Course Co-ordinator: Associate Professor C. Ewan.

Textbooks To be notified.

HSCH951 CLINICAL PSYCHIATRY
Autumn session; 6 credit points (2 hours per week)
Assessment: Assessment methods will be chosen from a variety of methods including literature review, case reports, seminar presentations, research proposals. Specific assignments will be determined when lecturers are appointed and will be given in detail to students at commencement of course.

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.

Course Co-ordinator: To be announced.

Textbooks: To be notified.

HSCH952 INTERVIEWING AND ASSESSMENT TECHNIQUES
Spring session; 6 credit points (2 hours per week)
Assessment: Assessment methods will be chosen from a variety of methods including literature review, case reports, seminar presentations, research proposals. Specific assignments will be determined when lecturers are appointed and will be given in detail to students at commencement of course.

This subject provides an overview of impersonal communication with emphasis on the nature of the helping relationship and the effect of personal attitudes and values upon this relationship.

Principles and techniques of clinical interviewing and assessment are examined and applied to specific disorders, populations, and situations. Standardised protocol for interviewing, writing up case histories, and conducting mental state examinations are outlined. Also addressed are the specific considerations for interviewing and assessing individuals, families and social networks in crisis situations.

Course Co-ordinator: To be announced.

Textbooks: To be notified.

HSCH953 METHODS OF INTERVENTION AND TREATMENT 1
Spring session; 6 credit points (2 hours per week)
Assessment: Assessment methods will be chosen from a variety of methods including literature review, case reports, seminar presentations, research proposals. Specific assignments will be determined when lecturers are appointed and will be given in detail to students at commencement of course.

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.

Course Co-ordinator: To be announced.

Textbooks: To be notified.

HSCH954 METHODS OF INTERVENTION AND TREATMENT 2
Autumn session; 6 credit points (2 hours per week)
Assessment: Assessment methods will be chosen from a variety of methods including literature review, case reports, seminar presentations, research proposals. Specific assignments will be determined when lecturers are appointed and will be given in detail to students at commencement of course.

This subject further examines therapeutic interventions that can be utilised by those working with people with serious psychiatric disorders. Principles and practices of behavioural intervention and individual and family therapy are examined in greater detail. An overview of current principles and practices of rehabilitation places particular emphasis on the formulation, implication and evaluation of individual management plans.
Course Co-ordinator: To be announced.

Textbooks: To be notified.

HSCH955 SOCIO-CULTURAL ISSUES IN MENTAL HEALTH
Autumn session; 6 credit points (2 hours per day)
Assessment: Assessment methods will be chosen from a variety of methods including literature review, case reports, seminar presentations, research proposals. Specific assignments will be determined when lecturers are appointed and will be given in detail to students at commencement of course.

This subject examines the theoretical perspectives and practical problems of mental health in Australian society. It identifies the socio-cultural factors that influence the causation, styles of presentation, precipitation, and perpetuation of mental health problems. Practical issues are examined concerning the mental health of Australian Aboriginals, and migrants of diverse racial, national, religious, and language backgrounds. The role, structure, and dynamics of the family is discussed in relation to causation, expression, treatment options, and outcomes.

Course Co-ordinator: To be announced.

Textbooks: To be notified.

HSCH956 SUPERVISED CLINICAL PRACTICE
Over three sessions; 6 credit points
Assessment: 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 clinical supervisor must support this report or alternatively, submit a report to the student's academic advisor.

Students must complete a supervised clinical practicum, preferably within their workplace. Students are to negotiate details in conjunction with their academic advisors 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.

HSCH957 EMOTIONAL AND BEHAVIOURAL DISORDERS OF CHILDHOOD
Session to be advised; 6 credit points (2 hours per week)
Assessment: Assessment methods will be chosen from a variety of methods including literature review, case reports, seminar presentations, research proposals. Specific assignments will be determined when lecturers are appointed and will be given in detail to students at commencement of course.

The subject provides an overview of normal development, disorders of development, childhood psychopathology, assessment, diagnosis, therapeutic approaches, management and outcomes.

Problems such as child abuse, sexual assault, divorce, adoption and fostering, and residential care are also examined.

Course Co-ordinator: To be announced.

Textbooks: To be notified.

HSCH958 ADOLESCENT MENTAL HEALTH
Session to be advised; 6 credit points (2 hours per week)
Assessment: Assessment methods will be chosen from a variety of methods including literature review, case reports, seminar presentation, research proposals. Specific assignments will be determined when lecturers are appointed and will be given to students at commencement of course.

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, individual and family assessment, intervention and treatment options. Special topics include suicide and para-suicide, substance abuse, delinquency, behavioural disorders, sexual assault, and parent-adolescent conflict.

Course Co-ordinator: To be announced.

Textbooks: To be notified.

HSCH959 ADULT MENTAL HEALTH
Session to be advised; 6 credit points (2 hours per week)
Assessment: Assessment methods will be chosen from a variety of methods including literature review, case reports, seminar presentations, research proposals. Specific assignments will be determined when lecturers are appointed and will be given in detail to students at commencement of course.

Provides an overview of adult physical, social, and psychological development. Comprehensively examines adult psychiatric disorders, issues in the assessment, diagnosis and treatment of a variety of disorders.
Additional topics include marriage and family breakdown, stress and stress management, drug and alcohol abuse, gambling, problems of adults with psychiatric disorders in the prison system, and the issue of homeless adults with psychiatric disorders.

Course Coordinator: To be announced.

Textbooks: To be notified.

HSCH960 MENTAL HEALTH PROBLEMS OF THE AGED
Session to be advised; 6 credit points (2 hours per week)
Assessment: Assessment methods will be chosen from a variety of methods including literature review, case reports, seminar presentations, research proposals. Specific assignments will be determined when lecturers are appointed and will be given in detail to students at commencement of course.

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, psychopharmacology and therapeutic and management approaches. Special topics include death and bereavement, alcohol and drug abuse, legal and ethical issues.

Course Co-ordinator: To be announced.

Textbooks: To be advised.

PSCH961 PRINCIPLES AND PRACTICES OF PSYCHIATRIC REHABILITATION
Session to be advised; 6 credit points (2 hours per week)
Assessment: Assessment methods will be chosen from a variety of methods including literature review, case reports, seminar presentations, research proposals. Specific assignments will be determined when lecturers are appointed and will be given in detail to students at commencement of course.

This subject provides an in-depth examination of current practices in the rehabilitation of people with serious psychiatric disorders. Students will examine and utilise functional assessments; develop individual management plans; design, implement and evaluate living skills programs across a range of functional domains.

Course Coordinator: To be announced.

Textbooks: To be notified.

HSCH962 FAMILY AND COMMUNITY EDUCATION
Session to be advised; 6 credit points (2 hours per week)

Assessment: Assessment methods will be chosen from a variety of methods including literature review, case reports, seminar presentations, research proposals. Specific assignments will be determined when lecturers are appointed and will be given in detail to students at commencement of course.

This subject examines the principles of communication in large and small groups. It encompasses principles of adult education, program planning and evaluation, and effective communication at all levels.

It examines the role and purpose of family education, staff education, and community education relevant to mental health.

Course Coordinator: To be announced.

Textbooks: To be notified.

HSCH963 SERVICE PLANNING AND EVALUATION
Session to be advised; 6 credit points (2 hours per week)
Assessment: Assessment methods will be chosen from a variety of methods including literature review, case reports, seminar presentations, research proposals. Specific assignments will be determined when lecturers are appointed and will be given in detail to students at commencement of course.

This subject provides an introduction to planning mental health services through the use of demographic and client need information. It provides practical information on funding options and submission writing. Focuses on establishing services through the allocation of human and financial resources, development of service philosophies, goals, objectives and policies. Provides a framework for monitoring service through the use of standards and evaluating the service in terms of process and outcome.

Course Coordinator: To be announced.

Textbooks: To be notified.

HSCH964 LEGAL AND ETHICAL ISSUES
Session to be advised; 6 credit points (2 hours per week)
Assessment: Assessment methods will be chosen from a variety of methods including literature review, case reports, seminar presentations, research proposals. Specific assignments will be determined when lecturers are appointed and will be given in detail to students at commencement of course.

Provides an examination of the design and impact of current legislation such as the Mental Health Act, Anti-discrimination legislation, the Crimes Act (mental disorder/
forensic), the Protected Estates Act, Guardianship, Freedom of Information, and Informed Consent. Provides an examination into the human and legal rights of mental health services consumers, and the role of advocacy organisations in promoting and protecting the rights of consumers.

Legal responsibilities of staff and services is also discussed with references to duty of care and the administration of medication in various service settings.

Ethical dilemmas are presented which foster discussion on issues such as confidentiality, objectivity, professional-client relationships, relationships between professionals, and so on.

Course Coordinator: To be announced.

Textbooks: To be notified.

HSCH975 COMMUNITY DIETETICS
Autumn session; 6 credit points (4 hours lectures, 2 hours tutorial, weeks 1-7; 2 x 4 hours seminars/practicals, weeks 8-14)
Assignments completed during the session (60%); one 3 hour examination at the end of Autumn session (40%). Mastery of practical aspects (outlined in the course handbook) will be necessary for a pass in this subject.

This subject comprises two segments. The first will familiarise the student with the common nutritional concerns/problems in the Australian community, and will describe the extent of these concerns and problems. It will provide the student with information on their biological, behavioural and social basis and will detail appropriate dietary regimens to deal with them. Possible complications, long term health implications will also be discussed. Matters such as costs and organisation of programs will be considered.

The second segment will provide the student with skills in basic food preparation, modification of recipes for special diets, limitations and use of standard kitchen equipment and introductory food demonstration techniques. Issues related to food processing and food microbiology pertaining to everyday kitchen/household practices will be revised. The Food Act and the types and functions of food additives and regulations governing their uses will be studied.

Course Co-ordinator: To be announced.

Textbooks: To be notified.

HSCH976 COMMUNITY NUTRITION
Autumn session; 6 credit points (4 hours lectures/seminars per week, weeks 1 - 7; placements one day per week, weeks 1 - 14; one 2-week placement during session break).
Assessment: A major report (3000 words) to be submitted during examination week after Autumn session (50%); written and verbal assignments (50%). A satisfactory report in community replacement (detailed requirements given in the course handbook) will be necessary for a pass in this subject.

The student will be introduced to the principles of community health and the history or the community health movement in Australia. It will describe the roles of various health and allied professionals in the community and will provide opportunities to visit key community health organisations/units.

The principles of health education and health promotion will be covered and selected community nutrition programs designed to reach different segments of the community will be examined.

This subject also includes community placements. These placements will provide the student with opportunities to familiarise him/herself with selected community health programs. An introductory placement will be held during session followed by a 2-week placement during session break, which may or may not be with the same organisation or unit.

Course Co-ordinator: To be announced.

Textbooks

HSCH977 NUTRITION COUNSELLING
Spring session: 5 credit points (2 hours lectures plus 2 hours seminar/workshop/visit per week)
Assessment: One written assignment (2500 words) (50%); and production of a nutrition education aid (50%). Mastery of counselling skills objectives (details given in the course handbook) is necessary for a pass in this subject.

This subject will develop in students basic skills in case assessment and client counselling and will introduce them to the principles and uses of a variety of counselling techniques.

A variety of techniques will be employed to assist students in the development of their own personal counselling style, including role plays, videotaping of sessions and visits to observe various counsellors assisting clients.

This subject will also provide the student with skills to assist in the provision of nutrition
information to clients. It will include areas allied to nutrition which are required for successful nutrition behaviour change counselling.

Subject Co-ordinator: To be announced.

Textbooks: To be advised.

HSCH978 THERAPEUTIC DIETETICS
Spring session; 6 credit points (2 hours lectures; 2 hour seminar/tutorial per week).
Pre-requisite: CHEM215 Food chemistry
Assessment: One three hour examination at the end of Spring session (60%); written assignments during the session (40%).

This subject deals with the major nutritional problems encountered in therapeutic settings. For each problem area it will cover the biological basis for the problem and prescribe the appropriate therapeutic diets or intervention. Possible complications and/or long term implications will also be discussed.

Subject Co-ordinator: To be announced.

Textbooks: To be advised.

HSCH979 NUTRITION SERVICES PLANNING AND FOOD SERVICES MANAGEMENT
Spring session: 6 credit points (2 hours lectures/seminars per week; plus 2 x 4 hours seminars/practicals per week in weeks 8 - 14).
Assessment: Written assignments (40%); and written examination at the end of Spring session (60%).

Students will examine the theoretical and practical aspects of management and organisation in health services. Case studies will exemplify these aspects. Students will examine in particular the concepts of organisational change and corporate development.

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.

Course Co-ordinator: To be announced.

Textbooks

HSCH980 STUDIES IN PUBLIC HEALTH NUTRITION
Spring session; 6 credit points.
Assessment: One project report of 6-8,000 words.

The candidates in conjunction with a supervisor appointed by the Departmental Head, 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 must be approved by a committee of the Department of Public Health and Nutrition responsible for academic oversight of programs in Nutrition/Community Health. Institutional ethics clearance may also be required.

The aim of the study is to provide the student with an opportunity to investigate an aspect(s) of nutrition in the public health arena. It may draw on information from health departments at State and National level, and/or from nutritionists working with food industries, in research and in private consultancies.

Candidates will be expected to meet with their supervisors at least once a week and to conduct independent library research.

Course Co-ordinator: To be announced.

Textbook: Nil prescribed.

HSCH982 PRACTICAL STUDIES IN NUTRITION AND DIETETICS
Autumn and Spring; 24 credit points (16 week placements; 10 x 3 hours workshops; and 7 x 2 hour seminars).
Assessment: Mastery of skills or satisfactory achievement of objectives and completion of assignments (as outlined in the course 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.

This subject comprises a practicum of 16 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 Dietetic Association of Australia.

A minimum of 6 weeks of the practicum will be spent at a major teaching hospital and 2 weeks
in a paediatric unit. Students will also be able to spend periods of time (2 weeks minimum) in various other locations including country hospitals, community health units programs, food industries, non-government organisations, nutrition research units, departments of public health, private enterprise 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. These seminars will be held during the session prior to the placements.

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.

Course Co-ordinator: To be announced.

Textbooks: To be notified.
FACULTY OF MATHEMATICAL SCIENCES

PRINCIPAL OFFICERS

Dean: Associate Professor Martin Bunder
Sub Dean: Dr Grahame Morris
Faculty Officer: Mr Paul McGuire

MEMBERSHIP

The Faculty of Mathematical Sciences is made up of the following Departments:

Computing Science
Mathematics

COURSES

All Units offer Honours Master of Science & Doctor of Philosophy degrees by research.

Major coursework programs are available in the Faculty in the following areas:

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Application forms may be obtained from the Student Enquiry Office on the Ground Floor of the Administration Building or by writing to the Vice-Principal (Administration), The University of Wollongong, P.O. Box 1144, Wollongong, NSW, 2500, Australia.
COMPUTING SCIENCE

INTRODUCTION

The following postgraduate degrees and diplomas are available.

1. Graduate Diploma in Computing Science
2. Honours Master of Science by Research or Coursework
3. Doctor of Philosophy

The schedule of subjects available for the Masters degrees is set out on the following pages.

For the Doctor of Philosophy degree candidates enrol in the subject CSCI993 Thesis.

SCHEDULE OF GRADUATE SUBJECTS

MASTER OF COMPUTING (re-enrolling students only)

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HONOURS MASTER OF SCIENCE

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<td>CSCI946</td>
<td>Advanced Topics in Computing Science F</td>
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<td>CSCI950</td>
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<td>CSCI951</td>
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<td>CSCI955</td>
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<td>CSCI957</td>
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<td>CSCI958</td>
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<td>CSCI993</td>
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COURSE DESCRIPTIONS

1. GRADUATE DIPLOMA IN COMPUTING SCIENCE

The Graduate Diploma in Computing Science is designed to provide advanced studies in Computing Science at a professional level to graduates of this or another university who have some background in Computing Science. The expected level of Computing Science background will be equivalent to CSCI201 Computing Science II.

Subject to staff and resources some graduate subjects may not be available in any given year.
The Graduate Diploma in Computing Science shall be subject to the University regulations for the award of Graduate Diplomas together with the following conditions:

(1) The Graduate Diploma in Computing Science is a coherent program of study (48 credit points) which involves the successful completion of

(a) the subject CSCI411 Computing Science Honours Seminar (12 credit points); and

(b) subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Computing Science) to the value of 12 credit points; and

(c) further subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Computing Science), and/or the Schedule of Graduate Subjects for the Honours Master of Science Degree (Mathematics), and/or the Mathematics Schedule to the value of 24 credit points.

(2) A candidate may not include in this program any subjects which the candidate has previously credited towards another degree or graduate diploma of the University.

(3) A candidate who accumulates failures in subjects to the value of 24 or more credit points shall be required to show cause why enrolment should be allowed to continue.

2. HONOURS MASTER OF SCIENCE

The degree of Honours Master of Science (MSc)(Hons) in the Department of Computing Science shall be subject to the University regulations 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, specialising in one or more of the following fields:

- Artificial Intelligence;
- Fast Packet Switching;
- Intelligent Database Design;
- Robotics;
- Small Systems Architectures.

(2) Entry to the degree program will normally be from an Honours degree in Computing Science or from a pass degree with an appropriate 3 year sequence in Computing Science. Entry may also be approved by the Academic Senate for candidates with the qualification of Diploma in Computing Science on the recommendation of the Head of the Department of Computing Science.

(3) Where entry to the degree program has been approved from an Honours degree at a standard of Class II, Division 2 or higher or a Graduate Diploma in Computing Science, it will normally occupy two sessions of full-time or four sessions of part-time study, and shall involve one of the following:

(a) satisfactory completion of the subject CSCI993 which is a thesis embodying the results of investigation to the value of 48 credit points.

(b) satisfactory completion of the subject CSCI992 which is a minor thesis embodying the results of an investigation whose credit point value is 24, together with the satisfactory completion of

(i) subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Computing Science) to the value of 12 credit points; and

(ii) further subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Computing Science), and/or the Schedule of Graduate Subjects for the Honours Master of Science Degree (Mathematics) to the value of 12 credit points;

(c) satisfactory completion of the subject CSCI991 which is a substantial written project whose credit point value is 12 together with the satisfactory completion of

(i) subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Computing Science) to the value of 12 credit points; and

(ii) further subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Computing Science), and/or the Schedule of Graduate Subjects for the Honours Master of Science Degree (Mathematics) to the value of 12 credit points;
(4) Where entry to the degree program has been approved from a degree at a standard below Honours Class II, Division 2 it will normally occupy four sessions of full-time study or eight sessions of part-time study, and shall involve one of the following:

(a) satisfactory completion of the subject CSCI993 which is a thesis embodying the results of an investigation whose credit point value is 48 together with the satisfactory completion of the Computing Science Honours Seminar whose credit point value is 12 and the satisfactory completion of

(i) subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Computing Science), to the value of 12 credit points; and

(ii) further subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Computing Science), and/or the Schedule of Graduate Subjects for the Honours Master of Science Degree (Mathematics), to the value of 24 credit points.

OR

(b) satisfactory completion of the subject CSCI992 which is a minor thesis embodying the results of an investigation whose credit points value is 24 together with the satisfactory completion of the Computing Science Honours Seminar whose credit point value is 12 and the satisfactory completion of

(i) subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Computing Science) to the value of 12 credit points; and

(ii) further subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Computing Science), and/or the Schedule of Graduate Subjects for the Honours Master of Science Degree (Mathematics), and/or the Mathematics Schedule to the value of 24 credit points.

OR

(c) satisfactory completion of the subject CSCI991 which is a substantial written project whose credit point value is 12 together with the completion of the Computing Science Honours Seminar whose credit point value is 12 and the satisfactory completion of

(i) subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Computing Science) to the value of 12 credit points; and

(ii) further subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Computing Science), and/or the Schedule of Graduate Subjects for the Honours Master of Science Degree (Mathematics) to the value of 36 credit points; and

(iii) further subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Computing Science), and/or the Schedule of Graduate Subjects for the Honours Master of Science Degree (Mathematics) and/or the Mathematics Schedule to the value of 24 credit points.

(5) A candidate may not include in this degree program any subject which the candidate has previously taken and had credited towards another degree or graduate diploma of the University.

(6) All subjects chosen from either the Schedule of Graduate Subjects for the Honours Master of Science Degree or the Mathematics Schedule of the Bachelor Degree Regulations for inclusion in the Science), and/or the Schedule of Graduate Subjects for the Honours Master of Science Degree (Mathematics) to the value of 24 credit points; and

(iii) further subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Computing Science), and/or the Schedule of Graduate Subjects for the Honours Master of Science Degree (Mathematics) to the value of 24 credit points.
degree program staff be subject to the approval of the Head of the Department of Computing Science.

(7) Not all graduate subjects will necessarily be available during a given year.

(8) Notwithstanding the conditions relating to the limitation of time for the degree of Honours Master of Science, 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.

(9) Each candidate for the degree program under 3(c) or 4(c) shall be assigned a supervisor by the Head of the Department of Computing Science. Where a candidate has enrolled in a degree program that includes either a thesis or a minor thesis the Academic Senate shall appoint a supervisor on the recommendation of the Head of the Department of Computing Science.

(10) The graduate project referred to in 3(c) and 4(c) shall be assessed by two examiners appointed by the Head of the Department of Computing Science.

SUBJECT DESCRIPTIONS

CSCI901 MASTER OF COMPUTING PART 1
12 credit points

An introduction to the fundamental concepts of computing science. Topics to be covered will include: problem solving, algorithm design and program development; general features of system components and their relationships. The implementation language used will be Pascal.

CSCI902 MASTER OF COMPUTING PART 2
12 credit points

The general techniques of programming are applied in specific fields. The topics to be covered will include: machine level programming in assembly language, scientific applications using FORTRAN 77; business applications using COBOL and system applications using the implementation language C.

CSCI903 MASTER OF COMPUTING PART 3
12 credit points

The application of the previous knowledge and skills to the field of microcomputers is treated in this subject. Topics to be covered will include: microcomputer systems; microcomputer architecture; programmable interface adaptors and applications of microcomputers to a variety of control situations.

CSCI904 MASTER OF COMPUTING PART 4
12 credit points

The subject extends the knowledge, skills and technique in the areas treated in CSCI901 and broadens the student's competence by treating topics which will include: data structures and their representation; advanced programming techniques and the application of data structures to specify programming situations. The implementation language used will be Pascal.

CSCI905 MASTER OF COMPUTING PART 5
12 credit points

This subject will take the form of a reading course designed for each student in consultation with the Head of the Department and the Graduate Coordinator in the Department. It is possible that, in consultation with other Faculties, a broad range of options will be available to meet the needs of the individuals.

CSCI906 MASTER OF COMPUTING PART 6
12 credit points

This subject draws together the student's knowledge and skills developed throughout the previous five subjects and provides the student with an opportunity to display this mastery by completing a substantial project.

Topics will include aspects of software engineering together with aspects of work drawn from these areas of computing which have particular relevance to the individual candidate's project.

CSCI91 ADVANCED TOPICS IN COMPUTING SCIENCE A
CSCI912 ADVANCED TOPICS IN COMPUTING SCIENCE B
CSCI913 ADVANCED TOPICS IN COMPUTING SCIENCE C
CSCI914 ADVANCED TOPICS IN COMPUTING SCIENCE D
CSCI915 ADVANCED TOPICS IN COMPUTING SCIENCE E
CSCI916 ADVANCED TOPICS IN COMPUTING SCIENCE F

6 credit points

Topics will be selected from those areas of computing science in which visiting staff
members of the department are engaged in active research.

CSCI950 ADVANCED OPERATING SYSTEMS
6 credit points

This course will involve the study of the implementation of an actual operating system and of problems associated with the porting of systems amongst different computers.

CSCI951 COMPUTING METHODS
6 credit points

This subject focusses on the formal aspects of problem specification and the use of such specifications in program development and constructive program proofs.

CSCI952 COMBINATIONAL ALGORITHMS
6 credit points


CSCI953 THEORY OF COMPUTING SCIENCE
6 credit points

Theory of computation; formal language and automata theory; recursive function and fixed point theory; computability theory; the lambda calculus. Program verification and the semantics of programming languages. Complexity theory; abstract and concrete complexity; NP - completeness.

CSCI954 ARTIFICIAL INTELLIGENCE
6 credit points


CSCI955 COMPUTER NETWORKS
6 credit points

MATHEMATICS

INTRODUCTION

The following postgraduate degrees and diplomas are available:

1. Graduate Diploma in Science (Mathematics)
2. Graduate Diploma in Science (Statistics)
3. Honours Master of Science by Research or Coursework
4. Doctor of Philosophy

The schedule of subjects available for the Masters degree is set out on the following pages.

For the Doctor of Philosophy degree candidates enrol in the subject MATH993 Thesis.

The specific requirements for each degree and diploma and the descriptions of the subjects available are set out in the pages following the schedules of subjects.

SCHEDULE OF GRADUATE SUBJECTS

HONOURS MASTER OF SCIENCE

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<tr>
<td>MATH902</td>
<td>Solution of Differential Equations by One-Parameter Groups</td>
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<td>MATH903</td>
<td>Mean Periodic Functions</td>
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<td>MATH911</td>
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<td>MATH913</td>
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<td>MATH914</td>
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<td>MATH915</td>
<td>Dynamics of Multiphase Flow</td>
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<td>MATH916</td>
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<td>MATH917</td>
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<td>Replacement Theory and Populations</td>
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<td>Optimisation Techniques</td>
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<td>MATH934</td>
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<td>MATH935</td>
<td>Decision Theory</td>
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<td>MATH936</td>
<td>Multivariate Analysis</td>
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<td>MATH937</td>
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<td>MATH973</td>
<td>Advanced Topics in Pure Mathematics A</td>
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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:

- Numerical analysis
- Matrix analysis
- Fluid mechanics
- Biological fluid mechanics
- Oceanography
- Nuclear reactor theory
- Statistical decision theory
- Times Series
- Population dynamics and plant growth
- Industrial applications of mathematics
- Functional analysis
- Measure theory
- Abstract algebra
- Logic
- Set Theory
- Topology
- Continuum mechanics
- Non-linear partial differential equations
number 1. GRADUATE DIPLOMA IN SCIENCE
(MATHEMATICS)

The Graduate Diploma in Science (Mathematics) shall be subject to the University requirements for the award of Graduate Diplomas together with the following conditions.

(1) A candidate shall undertake a course of graduate studies in one or more of the following fields:


(2) Entry to the Graduate Diploma 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 Departmental Head, from a degree or diploma containing substantial study in an appropriate discipline.

(3) The graduate diploma will normally occupy two sessions of full-time study or four sessions of part-time study, and will involve:

- the successful completion of a Mathematics Honours Seminar whose credit point value is 12, and the satisfactory completion of subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Department of Mathematics) under certain circumstances, with the approval of the Departmental Head, a limited number of subjects may be chosen from the Schedule of Graduate Subjects (Department of Computing Science) and the Mathematics Schedule of the Undergraduate Bachelor Degree Regulations to the credit point value of 36, provided that not less than 24 credit points shall be obtained in respect to graduate subjects taken from the Schedule of Graduate Subjects for the Honours Master of Science Degree.

(4) A candidate may not include in this graduate diploma programme any subject which the candidate has previously taken and had credited towards another degree or diploma of the University.

(5) Not all graduate subjects will necessarily be available during a given year.

(6) Unless otherwise determined by Council, the registration of a candidate shall be terminated if that candidate fails subjects to the total value of 18 or more credit points.

2. GRADUATE DIPLOMA IN SCIENCE
(STATISTICS)

The Graduate Diploma in Science (Statistics) shall be subject to the University requirements for the award of Graduate Diplomas together with the following conditions.

(1) A candidate shall undertake a course of graduate studies in Statistics (which may include some other relevant topics in Mathematics).

(2) Entry to the Graduate Diploma will normally be from a pass degree with an appropriate 3 year sequence in Mathematics, including Statistics, or, subject to the approval of Council on the recommendation of the Departmental Head, from a degree or diploma containing substantial study in an appropriate discipline.

(3) The graduate diploma will normally occupy two sessions of full-time study or four sessions of part-time study, and will involve:
the successful completion of a Mathematics Honours Seminar whose credit point value is 12, and the satisfactory completion of subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Department of Mathematics) (under certain circumstances, with the approval of the Departmental Head, a limited number of subjects may be chosen from the Schedule of Graduate Subjects (Department of Computing Science)) and the Mathematics Schedule of the Undergraduate Bachelor Degree Regulations to the credit point value of 36, provided that not less than 24 credit points shall be obtained in respect to graduate subjects taken from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Department of Mathematics).

(4) A candidate may not include in this graduate diploma programme any subject which the candidate has previously taken and had credited towards another degree or diploma of the University.

(5) Not all graduate subjects will necessarily be available during a given year.

(6) Unless otherwise determined by Council, the registration of a candidate shall be terminated if that candidate fails subjects to the total value of 18 or more credit points.

3. HONOURS MASTER OF SCIENCE

The degree of Honours Master of Science (MSc(Hons)) in the Department of Mathematics shall be subject to the University Honours Masters Degree Regulations together with the following conditions.

(1) A candidate shall undertake research, or a course of graduate studies and research in one or more of the following fields:


(2) Entry to the degree program will normally be from an Honours degree in Mathematics or from a pass degree with an appropriate 3 year sequence in Mathematics. Entry may also be

approved by Council for candidates with the qualification of Graduate Diploma in Science (Mathematics or Statistics) on the recommendation of the Departmental Head.

(3) Where entry to the degree program has been approved from an Honours degree at a standard of Class II, Division 2 or a Diploma in Mathematics, it will normally occupy two sessions of full-time study or four sessions of part-time study, and shall involve:

(a) a thesis embodying the results of 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 the satisfactory completion of graduate subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Department of Mathematics) (under certain circumstances, with the approval of the Departmental Head, a limited number of subjects may be chosen from the Schedule of Graduate Subjects (Department of Computing Science)), to the value of 36 credit points.

(4) Where entry to the degree program has been approved from a degree at a standard below Honours Class II, Division 2, it will normally occupy four sessions of full-time study or eight sessions of part-time study, and shall involve:

(a) a thesis embodying the results of an investigation whose credit point value is 48 together with the satisfactory completion of the Mathematics Honours Seminar whose credit point value is 12 and the satisfactory completion of subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Department of Mathematics) (under certain circumstances, with the approval of the Departmental Head, a limited number of subjects may be chosen from the Schedule of Graduate Subjects (Department of Computing Science)) and the Mathematics Schedule of the Undergraduate Bachelor Degree Regulations to the credit point value of 36, provided that not less than 24 credit points shall be
obtained in respect of graduate subjects taken from the Schedule of Graduate Subjects for the Honours Master of Science Degree, or

(b) a minor thesis embodying the results of an investigation whose credit point value is 24 together with the satisfactory completion of the Mathematics Honours Seminar whose credit point value is 12 and the satisfactory completion of subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Department of Mathematics) (under certain circumstances, with the approval of the Departmental Head, a limited number of subjects may be chosen from the Schedule of Graduate Subjects (Department of Computing Science)) and the Mathematics Schedule of the Undergraduate Bachelor Degree Regulations to the credit point value of 60, provided that not less than 48 credit points shall be obtained in respect of graduate subjects taken from the Schedule of Graduate Subjects for the Honours Master of Science Degree, or,

(c) satisfactory completion of a substantial written project whose credit point value is 12 together with the satisfactory completion of the Mathematics Honours Seminar whose credit point value is 12 and the satisfactory completion of subjects chosen from the Schedule of Graduate Subjects for the Honours Master of Science Degree (Department of Mathematics) (under certain circumstances, with the approval of the Departmental Head, a limited number of subjects may be chosen from the Schedule of Graduate Subjects (Department of Computing Science)) and the Mathematics Schedule of the Undergraduate Bachelor Degree Regulations to the credit point value of 72, provided that not less than 60 credit points shall be obtained in respect of graduate subjects taken from the Schedule of Graduate Subjects for the Honours Master of Science Degree.

(5) A candidate may not include in this degree program any subject which the candidate has previously taken and had credited towards another degree or diploma of the University.

(6) All subjects chosen from either the Schedule of Graduate Subjects for the Honours Master of Science Degree or the Mathematics Schedule of the Undergraduate Handbook for inclusion in the degree program shall be subject to the approval of the Departmental Head.

(7) Not all graduate subjects will necessarily be available during a given year.

(8) Notwithstanding the regulations relating to the limitation of time for the degree of Honours Master, 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.

(9) Each candidate for the degree program under 3(c) and 4(c) shall be assigned a supervisor by the Departmental Head.

Where a candidate has enrolled in a degree program that includes either a thesis or a minor thesis, the Academic Senate shall appoint a supervisor on the recommendation of the Departmental Head.

(10) The graduate project referred to in 3(c) and 4(c) shall be assessed by two examiners appointed by the Departmental Head.

SUBJECT DESCRIPTIONS

Subjects
For further details, see the postgraduate coursework co-ordinator: Professor D. Griffiths.

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 limited assignments.
MATH901 PERTURBATION METHODS
Dimensional analysis, order symbols, asymptotics, algebraic equations, differential equations, methods of renormalization, multiple scales, averaging, variation of parameters, strained parameters and matched asymptotic expansions.

MATH902 SOLUTION OF DIFFERENTIAL EQUATIONS BY ONE-PARAMETER GROUPS

MATH903 MEAN PERIODIC FUNCTIONS
An introduction to L. Schwartz's theory of mean periodic functions using the transform of J.P. Kahane. Applications to differential equations.

MATH911 COASTAL DYNAMICS
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.

MATH912 CONTINUUM MECHANICS AND FINITE ELASTICITY
The basic principles of continuum mechanics and the solved problems of finite elasticity. Equations for small deformations superimposed upon a state of finite strain and applications to stability problems. Linear elasticity. Selected problems from the theories of non-Newtonian fluids, plasticity and fibre-reinforced materials.

Textbook

MATH914 VISCOUS FLUIDS
Equations of motion of a viscous fluid, exact solutions, low Reynolds number flows, boundary layers, matched asymptotic expansions.

MATH915 DYNAMICS OF MULTIPHASE FLOW
Study of the motion of drops, particles and bubbles in viscous or inertia dominated flows. Two-phase flow in a porous medium.

Reference

MATH916 HEAT CONDUCTION AND MOVING BOUNDARY PROBLEMS
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.

MATH917 ADVANCED NUMERICAL ANALYSIS

MATH918 NUMERICAL LINEAR ALGEBRA
Modern methods of solving the algebraic eigenvalue problem including the generalized problem $Ax = Bx$.

MATH919 SPARSE MATRIX TECHNIQUES
Solution of partial differential equations using finite difference and finite element techniques. Topics covered include formulation of finite difference and finite element approximations to partial differential equations, matrix properties of the approximate equations, methods of solution of the approximate equations.

MATH921 ADVANCED FUNCTIONAL ANALYSIS
Banach spaces, Linear Operators between Banach spaces, the Uniform Boundedness Principle, Closed graph theorem and open mapping theorem, Hahn-Banach theorem, applications to some of the following: Fourier series, integral equations, quadrature formulae, approximation theory, analytic function theory, spectral theory.

MATH922 HARMONIC ANALYSIS
The course will consist of a certain amount of Lebesque Integration Theory which will be applied to a discussion of various topics in the theory of Fourier Series. The generalization of Fourier Series to harmonic analysis on groups will also be considered.

MATH924 DISTRIBUTIONS
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 its dual space.

MATH925 TOPICS IN ALGEBRA
Partially ordered sets, lattices, modular lattices, Boolean Algebras and Boolean rings, orthomodular lattices.
MATH926 LOGIC AN SET THEORY
Primitive Recursive and recursive functions. Arithmetization, Godel's Theorem, Recursive undecidability. Axioms for set theory, ordinal numbers, equinumerocity, Hartog's theorem, the Axiom of Choice.

MATH927 COMBINATORY LOGIC
Introduction to Pure and illatute combinatory logic, relation to lambda-conversion, functionality, application to propositional and predicate calculus.

MATH928 ADVANCED MEASURE THEORY
Construction of outer, measures, Hausdorff measures, signed measures, Radon-Nikodym theorem, differentiation of measures.

MATH929 SOBOLEV SPACES AND APPLICATIONS
Definition and properties of Sobolev spaces, mollifiers, applications to partial differential equations and the calculus of variations.

MATH930 TIME SERIES
Prediction Theory; Linear models - identification, estimation, diagnostic checking; multivariate models.

MATH932 REPLACEMENT THEORY AND POPULATIONS

MATH933 OPTIMIZATION TECHNIQUES
Solution of non-linear optimisation problems. Topics covered include: unconstrained minimisation using Fletcher Powell and related techniques, the linear search problem, solution methods specific to least squares problems, linear constraints, penalty function methods, Huhn Tucker conditions, Lagrange multipliers.

MATH934 REGRESSION ANALYSIS
Multiple and Polynomial Regression, Stepwise and Stagewise regression, Model Building, Regression models of not full rank, Relationship between regression analysis and analysis of variance models, Non-linear models, Detection of outliers.

MATH935 DECISION THEORY

MATH936 MULTIVARIATE ANALYSIS
Regression; the multivariate normal and Wishart distributions; Hotelling's $T^2$ and Wilks' $L$; multivariate analysis of variance.

MATH937 INFERENCE
Transformations; distribution of quadratic forms; estimation techniques; hypothesis testing; sufficiency; asymptotic theory.

MATH938 EXPERIMENTAL DESIGN
The general linear model. Complete and incomplete block designs. The construction of optimal block designs. Factorial designs and fractional factorial designs. Response surface methodology.

MATH939 ADVANCED TOPICS IN APPLIED MATHEMATICS A
Topics will be selected from the areas of interest of staff members or visiting staff members of the department.

MATH940 ADVANCED TOPICS IN APPLIED MATHEMATICS B
Topics will be selected from the areas of interest of staff members or visiting staff members of the department.

MATH941 ADVANCED TOPICS IN PURE MATHEMATICS A
Topics will be selected from the areas of staff members or visiting staff members of the department. These may include topics in Analysis, Algebra, Logic or Number Theory.

MATH942 ADVANCED TOPICS IN PURE MATHEMATICS B
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.

MATH943 ADVANCED TOPICS IN STATISTICS A
Selection of topics from one or more of the following areas: Multivariate Statistics, Sequential Analysis, Selecting and Ordering of Populations, Statistical Inference, Statistical Quality Control and Non Parametric Statistics.

MATH944 ADVANCED TOPICS IN PROBABILITY AND OPERATIONS RESEARCH
Selection of topics from one or more of the following areas: Advanced Probability Theory, Branching Processes, Queueing Theory, Inventory Control, Dynamic and Stochastic Programming.
MATH977 ADVANCED TOPICS IN
MATHEMATICS A
Topics will be selected from the areas of interest of staff members or visiting staff members of the Department.

MATH978 ADVANCED TOPICS IN
MATHEMATICS B
Topics will be selected from the areas of interest of staff members or visiting staff members of the Department.

MATH979 ADVANCED TOPICS IN
STATISTICS B
Selection of topics from one or more of the following areas: Multivariate Statistics, Sequential Analysis, Selecting and Ordering of Populations, Statistical Inference, Statistical Quality Control, and Non Parametric Statistics.

MATH991 PROJECT
12 credit points

MATH992 MINOR THESIS
24 credit points

MATH993 THESIS
48 credit points
FACULTY OF SCIENCE

PRINCIPAL OFFICERS

Dean: Associate Professor Peter Bolton
Sub Dean: Dr Adrian Hutton
Faculty Officer: Ms Pat Macquarie

MEMBERSHIP

The Faculty of Science is made up of the following Departments:

- Biology
- Chemistry
- Geography
- Geology
- Physics

COURSES

All Units offer Honours Master of Science & Doctor of Philosophy degrees by research. In addition, the Honours Master of Arts is offered in the Department of Geography.

Major coursework programs are available in the Faculty in the following areas:

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<tr>
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<td>Chemistry</td>
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<tr>
<td>Coal Geology</td>
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<td>Geography</td>
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<td>Geology</td>
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<td>Physics</td>
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<tr>
<td>Science Administration</td>
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<tr>
<td>Biology</td>
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<td>Chemistry</td>
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<tr>
<td>Physics</td>
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</table>

Application forms may be obtained from the Student Enquiry Office on the Ground Floor of the Administration Building or by writing to the Vice-Principal (Administration), The University of Wollongong, P.O. Box 1144, Wollongong, NSW, 2500, Australia.
BIOLOGY

INTRODUCTION

The following postgraduate degrees are available:

1. Graduate Diploma in Science (Biology)
2. Graduate Diploma in Science (Biotechnology)
3. Master of Science (Biotechnology)
4. Master of Science (Science Administration)
5. Honours Master of Science in Biotechnology
6. Honours Master of Science by Research
7. Doctor of Philosophy

The schedule of subjects available for the Masters degrees is set out on the following pages.

For the Doctor of Philosophy degree candidates enrol in the subject BIOL999 Thesis.

The specific requirements for the Masters degrees and the description of the subjects available are set out in the pages following the schedule of subjects.

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:

Animal Physiology
Comparative studies of metabolism and thermoregulation in vertebrates. Studies of the thyroid gland and the effects of thyroid hormones on cell metabolism.

Behavioural Ecology
Behavioural mechanisms regulating spatial and temporal patterns of population distribution in insects, with particular reference to migration, territoriality, reproductive isolation, sexual selection and mate choice.

Biotechnology
Development of bioprobes for pathogens of humans, animals and plants; plant tissue culture.
Molecular and cellular biology of algae and higher plant protoplasts.

Ecology

Genetics and Marine Ecology
Ecological-genetics of marine and freshwater invertebrates (especially the roles of asexual reproduction, phenotypic plasticity and self-recognition in clonal organisms).
Pollination systems and the population genetics of native plants.

Immunobiology
Somatic hyper-mutation in antibody V-regions.
Development of non-toxic immunological adjuvants.
Restriction fragment length analysis to study the mechanism of acquired inheritance.
Ontogeny-regulation of idiotype restricted and anti-self responses.

Marine Ecology
Role of marine natural products in mediating interactions between organisms, settlement of marine invertebrates.

Microbiology and Immunobiology
Pathobiology of micro-organisms infecting plant and animal cells and effects of viral infection on the immune system.
Environmental microbiology.

Neurobiology
Neuropeptide metabolism.
Peptidases of the nervous system.

Plant Biochemistry
Functional properties of chloroplasts and mitochondria in high plant leaves; regulation of photosynthetic and respiratory metabolism; photosynthesis in marine phytoplankton; osmoregulation in salt-tolerant algae.

Sensory Ecology & Neuroethology
Acoustic behaviour in bats and birds; neural and behavioural mechanisms of hearing and sound localisation; echolocation systems in bats and birds; foraging behaviour; electrorception in platypus.

Virology
Viral glycoproteins: their structure, synthesis and importance in immunity.
SCHEDULE OF GRADUATE SUBJECTS

GRADUATE DIPLOMA IN SCIENCE (BIOTECHNOLOGY)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<td>Schedule 1</td>
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<td>BIOL320</td>
<td>Cell and Molecular Biology</td>
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<tr>
<td>BIOL321</td>
<td>Cellular and Molecular Differentiation</td>
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</tr>
<tr>
<td>BIOL322</td>
<td>Applied and Environmental Microbiology</td>
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</tr>
<tr>
<td>CHEM320</td>
<td>Biological Chemistry</td>
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</tr>
<tr>
<td>MATH252</td>
<td>Statistics for the Natural Sciences</td>
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<tr>
<td>Schedule 2</td>
<td></td>
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<td>BIOL332</td>
<td>Comparative Biochemistry and Physiology</td>
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<tr>
<td>BIOL351</td>
<td>Population Biology</td>
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<tr>
<td>BIOL360</td>
<td>Concepts and Techniques of Modern Biology</td>
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</tr>
<tr>
<td>BIOL392</td>
<td>Advanced Studies in Biology</td>
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</tr>
<tr>
<td>MGMT309</td>
<td>Business Organisation and Manufacturing Management</td>
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<tr>
<td>STS250</td>
<td>From Molecular Genetics to Biotechnology</td>
<td>8</td>
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<tr>
<td>STS371</td>
<td>Topics in Law and Technological Change</td>
<td>8</td>
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<tr>
<td>or</td>
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<tr>
<td>LAW362</td>
<td>Intellectual Property Law</td>
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<tr>
<td>BIOL910</td>
<td>Advanced Topics in Biology A</td>
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<td>BIOL911</td>
<td>Advanced Topics in Biology B</td>
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<tr>
<td>Schedule 3</td>
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<tr>
<td>BIOL410</td>
<td>Antibody Technology</td>
<td>8</td>
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<tr>
<td>BIOL411</td>
<td>Nucleic Acid Technology</td>
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</tbody>
</table>

MASTER OF SCIENCE (BIOTECHNOLOGY)

Autumn session

Core subjects

| BIOL913 | Cell Culture and Monoclonal Antibody Technology | 8 |
| BIOL914 | Recombinant DNA Technology                      | 8 |
| BIOL915 | RNA & Protein Technology                        | 8 |

Optional subject#

| BIOL322 | Applied and Environmental Microbiology          | 8 |

Spring session

Optional subjects#

| BIOL916* | Plant and Agricultural Biotechnology            | 6 |
| BIOL917* | Aquatic/Environmental Biotechnology             | 6 |
| BIOL981* | Diagnostic Biotechnology                        | 6 |
| STS937   | The Management of Technology                    | 6 |
| LAW362   | Intellectual Property Law                       | 6 |
| MGMT309  | Business Organisation and Manufacturing Management | 6 |

* At least one of these subjects must be taken. Not all of these subjects will necessarily be offered in any one year.

# Other appropriate subjects from the graduate 300 level schedule may be permitted with the permission of the Departmental Head although no more than 24 credit points of 300 level subjects can be credited to this degree.
TABLE 1 TWO YEAR (FULL-TIME) PROGRAM

**First Year Compulsory**
- ACCY901 Accounting for Managers 6 Spring
- BIOL921 Applied Biology Report 18 A
- MGMT911 Organisational Behaviour 6 Autumn

*Options (three of the following)*
- MGMT976 Competitive Strategy and Analysis 6 Autumn
- SCIE900 Research Methodology and Communication 6 Autumn
- STS937 The Management of Technology 6 Spring
- LAW960 Law for Managers 6 Spring
- LAW362 Industrial and Intellectual Property Law 6 Autumn

**Second Year Compulsory**
- BIOL990 Applied Biology Research Project 24 A
- MGMT922 Marketing I 6 Autumn
- STS931 Risk Assessment, Health and Safety 12 Spring

*Options (one of the following)*
- MGMT921 Managerial Finance 6 Spring
- MGMT940 Innovation and Entrepreneurship 6 Autumn
- MGMT945 Technology Enterprise Project 6 A

TABLE 2 14 MONTH (FULL-TIME) PROGRAM

**Summer session (Jan/Feb)**
- BIOL921 Applied Biology Report 18

**Autumn session**
- MGMT911 Organisational Behaviour 6
- MGMT922 Marketing I 6
- MGMT976 Competitive Strategy and Analysis 6
- SCIE900 Research Methodology and Communication 6

**Spring session**
- Core
  - ACCY901 Accounting for Managers 6
  - STS931 Risk Assessment, Health and Safety 12

**Double session (A)**
- Core
  - MGMT945 Technology Enterprise Project 6

*Options (one of the following)*
- LAW960 Law for Managers 6
- STS937 The Management of Technology 6

**Summer session (Dec/Feb)**
- BIOL990 Applied Biology Research Project 24

HONOURS MASTER OF SCIENCE IN BIOTECHNOLOGY

**Autumn session**
- Core subjects
  - BIOL913 Cell Culture and Monoclonal Antibody Technology 8
  - BIOL914 Recombinant DNA Technology 8
  - BIOL915 RNA and Protein Technology 8
### HONOURS MASTER OF SCIENCE IN BIOTECHNOLOGY (Cont'd)

**Optional subject**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>BIOL322</td>
<td>Applied and Environmental Microbiology</td>
<td>8</td>
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</table>

**Spring session**

**Optional subjects**

<table>
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<tr>
<th>Number</th>
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<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>BIOL916*</td>
<td>Plant and Agricultural Biotechnology</td>
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</tr>
<tr>
<td>BIOL917*</td>
<td>Aquatic/Environmental Biotechnology</td>
<td>6</td>
</tr>
<tr>
<td>BIOL918*</td>
<td>Diagnostic Biotechnology</td>
<td>6</td>
</tr>
<tr>
<td>LAW362</td>
<td>Intellectual Property Law</td>
<td>6</td>
</tr>
<tr>
<td>MGMT309</td>
<td>Business Organisation and Manufacturing Management</td>
<td>6</td>
</tr>
<tr>
<td>STS937</td>
<td>The Management of Technology</td>
<td>6</td>
</tr>
</tbody>
</table>

**Session 3**

**Core subject**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL991</td>
<td>Biotechnology Research Project</td>
<td>24</td>
</tr>
</tbody>
</table>

### HONOURS MASTER OF SCIENCE BY RESEARCH

**Course Descriptions**

1. **GRADUATE DIPLOMA IN SCIENCE (BIOLOGY)**

   The purpose of the Graduate Diploma (Biology) is to provide in a recognised University course a means for graduates with a background in Biology to acquire competence in additional areas in the discipline at a reasonably advanced level, which will enable them to proceed with further studies in those areas.

   **Diploma Structure**

   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 shall be approved by the Departmental Head.

2. **GRADUATE DIPLOMA IN SCIENCE (BIOTECHNOLOGY)**

   The purpose of the Graduate Diploma (Biotechnology) is to provide in a recognised University course a means for graduates with a limited background in Biotechnology to acquire competence in this area at a reasonably advanced level.

   **Specific Aims**

   1. To produce a diploma structure with a solid base in the scientific disciplines which are the foundations for Biotechnology.

   2. To provide such students with the requisite scientific background and technological skills plus an insight into the legal and ethical issues associated with the use of biotechnology. Satisfactory completion of the Graduate Diploma will be necessary for all students who wish to proceed to the MSc or MSc(Hons) in Biotechnology and who do not have the appropriate background.
Diploma Structure
Successful completion of appropriate subjects (listed in the Schedule) with a value of at least 48 credit points is required.

Subjects to a value of at least 24 credit points (up to 30 if necessary) from Schedule 1 will be prescribed unless the student's previous degree included similar subjects. If competence in these areas has been previously demonstrated students can choose 32 credit points from Schedule 2 taking into account the necessary prerequisites for each subject chosen.

Subjects in Schedule 3 are compulsory.

3. MASTER OF SCIENCE (BIOTECHNOLOGY)

This program will cover the latest theory and procedures in Cellular and Molecular Biology as well as their application to pure and applied science. The role of specific aspects of Biotechnology in developed and developing countries will be addressed. The program will run over two sessions on a full-time basis or four sessions on a part-time basis. This is a coursework program and does not involve a research project.

Specific Aims
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.

As well as providing the essential scientific background the program will provide candidates with expertise in specific applications of Biotechnology and the possibility of undertaking appropriate subjects in the management of science.

Degree Structure
Entry into the course will normally be a Bachelors degree with Honours at a standard of Class II Division 2 or above in an appropriate discipline, or a Graduate Diploma in Science (Biotechnology) completed at an appropriate standard. Students without some background in microbiology will be required to take BIOL322.

Tutorials and laboratory-based project work will be undertaken in each of the subjects (see Schedule above), which will be run on a modular basis requiring full-time attendance for the stated period of time. The core subjects will provide the basic knowledge, while the optional subjects will enable the student to focus in the particular areas of application which most interest them. Coursework to a value of at least 48 credit points is required.

4. MASTER OF SCIENCE (SCIENCE ADMINISTRATION)

Introduction and Objectives for Biology graduates
Three major career routes are generally followed by biology graduates: (i) the research route involving an Honours year which is followed by a PhD if interested in a career; (ii) teaching, requiring a subsequent DipEd course, and (iii) direct entry into manufacturing, service industry or government employment. Under categories (ii) and (iii) students undertake a second higher qualification in biology such as an Honours Master of Science, after some experience has been gained.

The Master of Science (Science Administration) - MSc (ScAdmin) course is also aimed at category (iii) graduates. While many biologists begin their industrial careers 'at the bench', subsequent progression up the career ladder generally involves the assumption of considerable managerial responsibility. Both their functional efficiency and their career prospects would be enhanced by gaining familiarity with business concepts, language, and skills early in their careers. The course is also suitable for biologists in government laboratories desiring management training.

The objectives of this proposed degree are therefore two-fold, namely to provide biology graduates with:

(i) a sound grounding in the commercial and business studies area (management, marketing, finance, communication, etc.), as well as in the broader social and environmental implications of technology; and

(ii) a greater insight into the industrial/commercial aspects of biology via a major literature survey and a research project in applied chemistry.

Close integration of the two strands will be achieved by the use of biologically based case studies in relevant management subjects and by the use of the applied research project in BIOL990. Students taking MGMT945 will use the background from this research project for the hypothetical enterprise for which a business plan is developed in this subject.

Structure of the Course
This is a 96 credit point course extending over two years for full-time students and four years for part-time students.
It contains two complementary and integrated strands:

(i) 42 credit points of graduate Biology subjects, namely BIOL921 and BIOL990, the latter of which involves an applied research project and minor thesis;

(ii) 54 credit points of graduate subjects covering topics in management, finance, marketing, communication, technology, and innovation. These subjects are selected from the Schedule for the MSc (ScAdmin) degree and include a 42 credit point core, taught by the Department of Management (24 credit points), Science and Technology Studies (12 credit points), and Accountancy (6 credit points).

Fast Track Program
An alternative fast track route (14 months full-time) is also available in some years, as outlined in the Schedule. This route employs the Summer Session periods and is facilitated by the fact that most of the Management/Commerce subjects are taught in the evenings.

Entry to the Course
Entry will be restricted to about 6. Students must consult the Departmental Head for approval of overall entry, and for the choice of topics and supervisors in BIOL921 and BIOL990.

Pre-requisites
The minimum pre-requisite is a BSc degree, or its equivalent, with a major in Biology.

5. HONOURS MASTER OF SCIENCE (BIOTECHNOLOGY)

This program will cover the latest theory and procedures in Cellular and Molecular Biology as well as their application to pure and applied science. The role of specific aspects of Biotechnology in developed and developing countries will be addressed. 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. The program will run over three sessions on a full-time basis or six sessions on a part-time basis. If the third session for which a full-time student registers in the Summer session, the degree can be completed within twelve months.

Specific Aims
The Honours 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.

As well as providing the essential scientific background, the program will provide candidates with expertise in specific applications of Biotechnology and the possibility of undertaking appropriate subjects in the management of science.

The research project, which is a compulsory component of the course, can investigate either a fundamental or an applied problem. This research can be undertaken in association with industry or other approved institution and must utilise at least one of the technologies on which the course is based.

Degree Structure
Entry into the course will normally be a Bachelors degree with Honours at a standard of Class II Division 2 or above, in an appropriate discipline, or a Graduate Diploma in Science (Biotechnology) completed at an appropriate standard. Applicants with the latter qualifications will be required to have undertaken a laboratory research project as part of the Diploma and/or complete a Research Methodology subject before proceeding with the Honours Master degree. Students without some background in microbiology will be required to take BIOL322.

Tutorials and laboratory-based project work will be undertaken in each of the subjects, which will be run on a modular basis requiring full-time attendance for the stated period of time. The core subjects will provide the basic knowledge, while the optional subjects will enable the student to focus in the particular areas of application which most interest them. Coursework to a value of at least 48 credit points is required, as well as a 24 credit point Biotechnology Research Project.

6. HONOURS MASTER OF SCIENCE

The objective of this degree is to provide Biology graduates with a grounding in biological experimental research. Graduates entering the degree who hold a degree of Bachelor 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.

SUBJECT DESCRIPTIONS

BIOL910 ADVANCED TOPICS IN BIOLOGY
A: LITERATURE RESEARCH PROJECT
Autumn and/or spring session; 16 credit points
(112 hrs tutorials)
Assessment: Substantial report and seminar

Under the supervision of staff nominated by
the Head, Department of Biology, the student
will survey the biological literature and
present a written report and a seminar on a
topic chosen by the supervisory staff.

BIOL911 ADVANCED TOPICS IN BIOLOGY
B: LABORATORY RESEARCH PROJECT
Autumn and/or spring session; 16 credit points
(112 hrs tutorials)
Assessment: Substantial 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.

BIOL913: CELL CULTURE AND MONOCLONAL ANTIBODY TECHNOLOGY
Autumn session, 8 credit points; 84 hrs. of tutorials/practicals
Assessment: Seminars and mini-Project (80%)
Exam (20%)

Derivation of animal cells from tissues;
suspension and matrix culture systems; cloning
of cells; leukocyte separations and culture.

Production, identification and purification of
monoclonal antibodies.

The subject will provide the scientific
background behind the listed topics, the
practical knowledge to undertake them and an
understanding of their applications.

Subject Co-ordinator: Professor H Garnett.

Textbook(s): Journal Articles.

BIOL914: RECOMBINANT DNA TECHNOLOGY
Autumn session, 8 credit points; 84 hrs. of tutorials/practicals over a 4 week period.
Assessment: Seminars and mini-Project (80%)
Exam (20%)

The construction of cloning vectors-plasmid,
virus and cosmid vectors for cloning in
prokaryotic and eukaryotic cells. Riboprobes.
Vectors for expression and secretion systems.

Transformation of prokaryotic and eukaryotic
cells using vectors and physical procedures
such as electroporation. Selection of transformants.

DNA sequencing and synthesis of DNA.

Hybridisation procedures including in situ
methodology.

Polymerase chain reactions.

The subject will provide the scientific
background behind the listed topics, the
practical knowledge to undertake them and an
understanding of their applications.

Subject Co-ordinator: Professor H Garnett.

Textbook(s): Journal Articles.

BIOL915: RNA AND PROTEIN TECHNOLOGY
Autumn Session, 8 credit points; 84 hrs. of tutorials/practicals over a 4 week period.
Assessment: Seminars and mini-Project (80%)
Exam (20%).

Purification and separation of RNA;
cDNA production;
In vitro translation systems;
Purification and separation of proteins using
electrophoresis, HPLC/FPLC, affinity
chromatography.

Enzymic and chemical fragmentation of
proteins; epitope mapping.

Labelling of proteins with iodine, enzymes etc.

Peptide synthesis.

Development of vaccines.

The subject will provide the scientific
background behind the listed topics, the
practical knowledge to undertake them and an
understanding of their applications.

Subject Co-ordinator: Professor H. Garnett.

Textbook(s): Journal Articles.

BIOL916 PLANT AND AGRICULTURAL BIOTECHNOLOGY
Spring session; 6 credit points; 60 hrs of tutorials/practicals.
Pre-Requisite: BIOL913, BIOL914
Assessment: Seminars and mini-Project (80%)
Exam (20%).

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.

Subject Coordinator: Professor H Garnett.

Textbook: Journal Articles.

BIOL 917: AQUATIC AND ENVIRONMENTAL BIOTECHNOLOGY
Spring session; 6 credit points; 60 hrs. of tutorials/practicals.
Pre-requisite: BIOL322
 Assessment: Seminars and min-Project (80%) Exam (20%)

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.

Subject Co-ordinator: Professor H Garnett.

Textbook: Journal Articles.

BIOL 918: DIAGNOSTIC BIOTECHNOLOGY
Spring session: 6 credit points; 60 hrs. of tutorials/practicals.
Pre-requisites: BIOL913, BIOL914, BIOL915.
Assessment: Seminars and mini-Project (80%) Exam (20%)

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.

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.

Subject Co-ordinator: Professor H Garnett.

Textbook: Journal Articles.

BIOL921: APPLIED BIOLOGY REPORT
Double session (A); 18 credit points (120 hours tutorials).
Assessment: Seminars and mini-Project (80%) Exam (20%)

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.

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.

Subject Co-ordinator: Professor H Garnett.

Textbook: Journal Articles.

BIOL990: APPLIED BIOLOGY RESEARCH PROJECT
Autumn and/or Spring session; 24 credit points

Minor Thesis

Under the supervision of staff appointed by the Departmental Head the student will undertake a research project and present a minor thesis and a seminar on an applied biology topic chosen by the supervising staff. This subject will be taken in conjunction with MGMT945 Technology Enterprise Project, where the new biological process or product to be developed in the research project will form the hypothetical (or actual) basis of the enterprise for which a business plan is to be developed.

BIOL991: BIOTECHNOLOGY RESEARCH PROJECT
Autumn, Spring and Summer sessions; 24 credit points.
Pre-requisite: BIOL913, BIOL914, BIOL915.
Assessment: Written dissertation.

Under the supervisions of staff appointed by the Departmental Head the student will undertake a research project and present a thesis and seminar on a topic chosen by the supervising staff. The research can be
undertaken in collaboration with industry or another recognised institution.

BIOL999 MAJOR THESIS
48 credit points

SCIE900 RESEARCH METHODOLOGY AND COMMUNICATION

Autumn session: 6 credit points (28 hrs. lectures/tutorials, 14 hrs. practical)
Assessment: Essays, seminars and final examination.

A general review of research methodology in Science as a whole will be followed by discipline-based case studies of specific interest to individual candidates. For MSc (ScAdmin) students, emphasis will be placed on the methods employed in their Applied Report or Applied Research Project. Students will also be given training and experience both in the analysis of published scientific papers and in the written and verbal communication of their own results. This will involve two essays and a seminar presentation.

Subject Co-ordinator: To be advised.

Lecturer(s): Various lecturers from Science Departments and from the Department of Science and Technology Studies.

Textbook(s): To be advised.
CHEMISTRY

INTRODUCTION

The following postgraduate degrees are available:

1. Graduate Diploma in Science
2. Master of Science
3. Master of Science (Science Administration)
4. Honours Master of Science by Research
5. Doctor of Philosophy

The schedule of subjects available for the Masters degrees is set out on the following pages.

For the Doctor of Philosophy degree candidates enrol in the subject CHEM920 Thesis.

The specific requirements for the Masters degrees and the descriptions of the subjects available are set out in the pages following the schedules of subjects.

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:

Analysis by mass spectrometry
Computer control of mass spectrometers and other analytical instruments
Atmospheric trace gas analysis using Fourier transform infrared spectroscope
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 metal levels in the Illawarra region and investigations of the mechanism of toxic action
Geochemical transport of metals, including uranium and thorium
Oil shale chemistry

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
Chemistry of Australian shale oils and retort waters
Structural studies of organic, organometallic, and inorganic compounds using E.I., C.I., 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
A symmetric synthesis using organometallic complexes
The synthesis and investigation of transition metal complexes as models of metalloproteins such as type I and II copper proteins, cytochrome C oxidase, hemerythrin, hemoglobin, and ferritin
New methods for organic synthesis and asymmetric synthesis
Organic synthesis of natural products such as leukotrienes and prostaglandins, and their biological chemistry
Biosynthesis of natural products from marine or terrestrial sources
Marine natural products chemistry
The mechanism of senile cataract formation in man
Novel methods for peptide and protein synthesis using organometallic reagents
Protein modification by endogenous chemicals
Structure/function of proteins and peptides using high-field n.m.r. spectroscopy and other analytical techniques.
Plant secondary metabolites - aspects of their role in plants with emphasis on glucosinolates
Quantum chemical investigation of the electronic structure and properties of molecules
The psychonomic interface between physiology and psychology in the brain. Real-time neurochemistry

SCHEDULE OF GRADUATE SUBJECTS

GRADUATE DIPLOMA IN SCIENCE

Subjects to the value of 48 credit points chosen in consultation with Departmental Head (Chemistry)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tr>
<td>CHEM215</td>
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<td>CHEM311</td>
<td>Inorganic Chemistry III</td>
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</tr>
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<td>CHEM314</td>
<td>Analytical Chemistry III</td>
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## GRADUATE DIPLOMA IN SCIENCE (Cont'd)

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<td>CHEM321</td>
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<td>CHEM323</td>
<td>Physical Chemistry III</td>
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<td>CHEM324</td>
<td>Chemical Spectroscopy</td>
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<td>CHEM327</td>
<td>Chemistry of the Environment</td>
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<td>CHEM340</td>
<td>Chemistry Laboratory Project</td>
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<td>CHEM910</td>
<td>Selected Topics in Chemistry A</td>
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<td>CHEM911</td>
<td>Selected Topics in Chemistry B</td>
<td>8</td>
</tr>
<tr>
<td>CHEM918</td>
<td>Chemistry Report</td>
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## MASTER OF SCIENCE

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<thead>
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<th>Subject</th>
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<tr>
<td>CHEM910</td>
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<tr>
<td>CHEM915</td>
<td>Advanced Chemistry Laboratory Project</td>
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</tr>
<tr>
<td>CHEM918</td>
<td>Chemistry Report</td>
<td>16</td>
</tr>
<tr>
<td>CHEM919</td>
<td>Advanced Topics in Chemistry</td>
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</table>

## MASTER OF SCIENCE (SCIENCE ADMINISTRATION)

### TABLE 1 TWO YEAR (FULL-TIME) PROGRAM

<table>
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<tr>
<th>Session Offered</th>
<th>Subject</th>
<th>Credit Points</th>
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<tr>
<td><strong>First Year Compulsory</strong></td>
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<tr>
<td>Spring</td>
<td>ACCY901 Accounting for Managers</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>CHEM921 Applied Chemistry Report</td>
<td>18</td>
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<td></td>
<td>MGMT911 Organisational Behaviour</td>
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<tr>
<td>Autumn</td>
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<td></td>
<td>MGMT976 Competitive Strategy and Analysis</td>
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<tr>
<td></td>
<td>SCIE900 Research Methodology and Communication</td>
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</tr>
<tr>
<td></td>
<td>STS937 The Management of Technology</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>LAW960 Law for Managers</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>LAW362 Industrial and Intellectual Property Law</td>
<td>6</td>
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<td></td>
<td>or</td>
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<tr>
<td></td>
<td>Second Year Compulsory</td>
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<tr>
<td></td>
<td>CHEM990 Applied Chemistry Research Project</td>
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<tr>
<td></td>
<td>MGMT922 Marketing I</td>
<td>6</td>
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<td>STS931 Risk Assessment Health and Safety</td>
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<tr>
<td></td>
<td>MGMT921 Managerial Finance</td>
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<td></td>
<td>MGMT940 Innovation and Entrepreneurship</td>
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<td>MGMT945 Technology Enterprise Project</td>
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<td></td>
<td>TABLE 2 14 MONTH (FULL-TIME) PROGRAM</td>
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<tr>
<td></td>
<td>Summer session (Jan/Feb)</td>
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<td>CHEM921 Applied Chemistry Report</td>
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<td></td>
<td>Autumn session</td>
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<td></td>
<td>MGMT911 Organisational Behaviour</td>
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<tr>
<td></td>
<td>MGMT922 Marketing I</td>
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<tr>
<td></td>
<td>MGMT976 Competitive Strategy and Analysis</td>
<td>6</td>
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<tr>
<td></td>
<td>SCIE900 Research Methodology and Communication</td>
<td>6</td>
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<tr>
<td></td>
<td>Spring session</td>
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<tr>
<td></td>
<td>Core</td>
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<td></td>
<td>ACCY901 Accounting for Managers</td>
<td>6</td>
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<tr>
<td></td>
<td>STS931 Risk Assessment, Health &amp; Safety</td>
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MASTER OF SCIENCE (SCIENCE ADMINISTRATION) (Cont'd)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<td>Options</td>
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<tr>
<td>LAW960</td>
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<td>STS937</td>
<td>The Management of Technology</td>
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<tr>
<td>Double session Core</td>
<td>Technology Enterprise Project</td>
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<td>Summer session (Dec/Feb) CHEM990</td>
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HONOURS MASTER OF SCIENCE - CHEMISTRY

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<thead>
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<th>Subject</th>
<th>Description</th>
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<td>CHEM910</td>
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<td>CHEM918</td>
<td>Chemistry Report</td>
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<td>CHEM919</td>
<td>Advanced Topics in Chemistry</td>
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<tr>
<td>CHEM920</td>
<td>Chemistry Research Project</td>
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</tbody>
</table>

COURSE DESCRIPTIONS

1. 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.

2. MASTER OF SCIENCE

Introduction and Objectives
The objectives of this course are similar to those of the Honours Master of Science below. 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 the subjects CHEM910, CHEM918 and CHEM 919, in accordance with the Pass Master Degree Regulations.

Entry to the Course
Students must consult the Departmental Head for approval of overall entry and for the choice of subjects in 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.

3. MASTER OF SCIENCE (SCIENCE ADMINISTRATION)

Introduction and Objectives
Three major career routes are generally followed by Chemistry graduates: (i) the academic/research route involving an Honours year followed by a PhD research programme; (ii) teaching, requiring a subsequent Dip. Ed. course; and (iii) direct entry into manufacturing, service industry or government employment. In the last mentioned case, a second higher qualification in Chemistry is sometimes obtained such as a Master of Science in Chemistry (see above) after some industry/commercial experience has been gained.

The Master of Science (Science Administration) - MSc(ScAdmin) - course is aimed at category (ii) graduates. While many chemists begin their industrial careers 'at the bench', subsequent progression up the career ladder generally involves the assumption of considerable managerial responsibility. Both their functional efficiency and their career prospects would be enhanced by gaining familiarity with business concepts, language and skills early in their careers. The course is also suitable for chemists in government laboratories desiring management training.
The objectives of this degree are therefore two-fold, namely to provide Chemistry graduates with:

(a) a sound grounding in the commercial and business studies area (management, marketing, finance, communication, etc.), as well as in the broader social and environmental implications of technology; and

(b) a greater insight into the industrial/commercial aspects of chemistry via a major literature survey and a research project in applied chemistry.

Close integration of the two strands will be achieved by the use of chemically based case studies in relevant management subjects, and by the use of the applied research project in CHEM990 as the basis for the hypothetical enterprise for which a business plan is developed in the option MGMT945.

Structure of the Course
This is a 96 credit point course extending over two years for full-time students and four years for part-time students.

It contains two complementary and integrated strands:

(a) 42 credit points of graduate Chemistry subjects, namely CHEM921 and CHEM990, the latter of which involves an applied research project and minor thesis;

(b) 54 credit points of graduate subjects covering topics in management, finance, marketing, communication, technology and innovation. These subjects are selected from the Schedule for the MSc (ScAdmin) degree, and include a 30 credit point core taught by the Departments of Management (12 credit points), Science and Technology Studies (12 credit points) and Accountancy (6 credit points).

Detailed subject descriptions appear in the following pages

Fast Track Program
An alternative fast-track route (14 months full-time) is also available, as outlined in the Schedule.

This route employs the Summer session periods and is facilitated by the fact that most of the Management/Commerce subjects are taught in the evenings.

Entry to the Course
Entry will be restricted to about 6 and students must consult the Departmental Head for approval of overall entry and for the choice of topics and supervisors in CHEM921 and CHEM990.

Pre-requisites
The minimum pre-requisite is a BSc degree, or its equivalent, with a major in Chemistry.

4. 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 some standing, 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 Regulations.

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 the coursework subjects CHEM910 Selected Topics in Chemistry, 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.

SUBJECT DESCRIPTIONS

CHEM910 SELECTED TOPICS IN CHEMISTRY A
Double session (A); 16 credit points (56 hrs lectures, 56 hrs tutorials)
Compulsory for all students doing 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 CHEM911.
Assessment: Written examination, essay and seminar
Eight topics (each 7 lectures/7 tutorials) chosen from:

- Marine Chemistry;
- 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;

Textbook(s): A reading list will be provided at the beginning of each session.

CHEM911 SELECTED TOPICS IN CHEMISTRY B
Autumn or spring session; 8 credit points (28 hrs lectures, 28 hrs tutorials)
Assessment: Written examination, essay and seminar.
Four topics (each 7 lectures/7 tutorials) chosen from:

- Marine chemistry;
- 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;

Textbook(s): A reading list will be provided at the beginning of the session.

CHEM915 ADVANCED CHEMISTRY LABORATORY PROJECT
Autumn and/or Spring session; 16 credit points; 168 hours laboratory work.
Assessment: Substantial report and seminar.

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.

CHEM917 CHEMICAL TECHNOLOGY - PRINCIPLES AND PRACTICE
Double session (A); 8 credit points; 36 hrs. lectures/tutorials, plus industrial visits.
Assessment: Written examination, essay and seminar.

The chemical principles and practice involved in the petrochemical, pharmaceutical and agrochemical industries will be studied, and the potential impact of current research on these technologies analysed. The course will include not only formal lectures/tutorials, but also field visits to a range of chemical plants.

CHEM918 CHEMISTRY REPORT
Double session (A); 16 credit points (112 hrs tutorials)
Assessment: Substantial report

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.

CHEM919 ADVANCED TOPICS IN CHEMISTRY
Double session (A); 16 credit points (56 hrs lectures, 56 hrs tutorials)
Assessment: Written examination and seminar

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.

CHEM 920 CHEMISTRY RESEARCH PROJECT
48 credit points
Assessment: Major thesis

Topic to be arranged in consultation with the Departmental Head and approved by the Board of Research and Postgraduate Studies.
CHEM921 APPLIED CHEMISTRY REPORT
Double session A; 18 credit points (120 hrs tutorials)
Assessment: Substantial report and seminar

Under the supervision of staff appointed by the Departmental Head, students will survey the chemical literature, prepare a report, and present a seminar on a topic of relevance to the chemical industry chosen by the supervising staff.

CHEM990 APPLIED CHEMISTRY RESEARCH PROJECT
Autumn and/or Spring session: 24 credit points
Assessment: Minor Thesis

Under the supervision of staff appointed by the Departmental Head the student may undertake a research project and present a minor thesis and a seminar on an applied chemistry topic chosen by the supervising staff. This subject may be taken in conjunction with MGMT945 Technology Enterprise Project, where the new chemical process or product to be developed in the research project may form the hypothetical (or actual) basis of the enterprise for which a business plan is to be developed.

SCIE900 RESEARCH METHODOLOGY AND COMMUNICATION
Autumn session; 6 credit points (28 hrs. lectures/tutorials, 14 hrs. practical).
Assessment: Essays, seminars and final examination.

A general review of research methodology in Science as a whole will be followed by discipline-based case studies of specific interest to individual candidates. For MSc (ScAdmin) students, emphasis will be placed on the methods employed in their Applied Report or Applied Research Project. Students will also be given training and experience both in the analysis of published scientific papers and in the written and verbal communication of their own results. This will involve two essays and a seminar presentation.

Subject Co-ordinator: To be advised.

Lecturer(s): Various lecturers from Science Departments and from the Department of Science and Technology Studies.

Textbook(s): To be advised.
The following postgraduate degrees and diplomas are available:

1. Graduate Diploma in Science
2. Master of Arts, Master of Science
3. Honours Master of Arts by Research or Coursework; Honours Master of Science by Research or Coursework
4. Doctor of Philosophy

For the Graduate Diploma, subjects are selected from the undergraduate schedules of subjects set out in the Undergraduate Calendar. Please refer to the information about this diploma on the following pages.

The specific requirements for each degree and diploma and the descriptions of the subjects available are set out in the pages following the schedules of subjects.

**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:

- Agricultural geography
- Coastal geomorphology
- Environmental prehistory
- Fluvial geomorphology
- Environmental impacts
- Urban studies
- Remote sensing applications
- Biogeography
- Natural hazards
- Population studies
- Regional development and planning
- Transport planning
- South-east Asian studies
- Ageing and the elderly
- Health and welfare
- Evolution of the Australian eastern highlands
- Food, nutrition and hunger

### Schedule of Graduate Subjects

**Master of Arts, Master of Science**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td><strong>Strand 1:</strong> Tropical Environments</td>
<td>Tropical coastal and marine environments</td>
<td>12</td>
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<tr>
<td>GEOG911</td>
<td></td>
<td></td>
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<tr>
<td>GEOG912</td>
<td>Hydrology and geomorphology of tropical rivers</td>
<td>12</td>
</tr>
<tr>
<td>GEOG913</td>
<td>Tropical climates and climatic hazards</td>
<td>12</td>
</tr>
<tr>
<td>GEOG914</td>
<td>Land and vegetation resources of the tropics</td>
<td>12</td>
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<tr>
<td>GEOG915</td>
<td>Tropical applications of Geographic Information Systems and Remote Sensing</td>
<td>12</td>
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<tr>
<td>GEOG916</td>
<td>Changing landuse in the Pacific and Southeast Asia</td>
<td>12</td>
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<tr>
<td>GEOG917</td>
<td>Prehistory of tropical Australia and the Southwest Pacific</td>
<td>12</td>
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<tr>
<td><strong>Strand 2:</strong> Environmental Conservation</td>
<td>Environmental applications of Remote Sensing and Geographic Information Systems</td>
<td>12</td>
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<tr>
<td>GEOG921</td>
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<tr>
<td>GEOG922</td>
<td>Evaluation and conservation of archaeological and prehistoric sites</td>
<td>12</td>
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<tr>
<td>GEOG923</td>
<td>Landscape and soil surveys</td>
<td>12</td>
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<tr>
<td>GEOG924</td>
<td>Coastal and estuarine conservation</td>
<td>12</td>
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<tr>
<td>GEOG925</td>
<td>River management and water resource conservation</td>
<td>12</td>
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<tr>
<td>GEOG926</td>
<td>Conservation of biotic resources</td>
<td>12</td>
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<tr>
<td><strong>Strand 3:</strong> Human Environment Change: Analysis and Policy</td>
<td>Urban Social Analysis and Policy</td>
<td>12</td>
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<tr>
<td>GEOG931</td>
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<tr>
<td>GEOG932</td>
<td>Regional Analysis and Policy</td>
<td>12</td>
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<td>GEOG933</td>
<td>Population Dynamics Analysis and Policy</td>
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<td>GEOG934</td>
<td>Nutrition and Hunger: Analysis and Policy</td>
<td>12</td>
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<tr>
<td>GEOG935</td>
<td>Research Report</td>
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</tr>
</tbody>
</table>
## COURSE DESCRIPTIONS

### 1. 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 environment, urban, regional or social planning. In addition to the University’s Regulations for Graduate Diplomas, candidates for the Graduate Diploma in Science shall:

1. 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 Departmental Head, up to 12 credit points at 200-level may be obtained for cognate subjects offered by another Department;
2. not included in the diploma program subjects which, in the opinion of the Departmental Head are substantially equivalent in the content to those for which credit has already been obtained towards some other degree or diploma;
3. have their program approved by the Departmental Head before enrolling;
4. successfully complete the graduate diploma program in not more than 4 academic sessions.

### 2. MASTER OF ARTS, MASTER OF SCIENCE

The Department of 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 entering the program under the provisions of Regulation 10(2) or 10(3) will be required to complete subjects with a value of 48 or 72 credit points respectively. The subjects are grouped in three strands which reflect the major research strengths of the Department, 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 Departmental Head.

All subjects are worth 12 credit points and will involve 6 contact hours per week. Subject availability and content may vary from year to year depending on staff interests and availability.

### 3. HONOURS MASTER OF ARTS, HONOURS MASTER OF SCIENCE

The primary aim of the Honours Masters program in Geography is to provide research training at the postgraduate level. Students entering the program under Regulation 10(3) (Category A) will be required to complete subjects with a value of at least 96 credit points. Those enrolling under Regulation 10(2) (Category B) will be required to complete...
subjects with a value of at least 48 credit points.

SUBJECT DESCRIPTIONS

GEOG911 TROPICAL COASTAL AND MARINE ENVIRONMENTS
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays, research report, final examination.

The dynamics and morphology of coasts is reviewed with special emphasis placed on the character and development of coral and mangrove coasts. The problems of coastal landuse management and planning in the tropics are considered with reference to fluctuations in sea level and to tropical storms.

GEOG912 HYDROLOGY AND GEOMORPHOLOGY OF TROPICAL RIVERS
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays, research report, final examination.

The special characteristics of tropical rivers are considered with reference to general fluvial and hydrologic theory. Emphasis is given to case studies from the humid and semi-arid tropics.

GEOG913 TROPICAL CLIMATES AND CLIMATIC HAZARDS
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays, research report, final examination.

The variety and origins of tropical air masses and weather systems are considered within a general review of recent developments in climatology. Emphasis is given to the magnitude and frequency of hazards associated with extreme climatic events such as tropical cyclones and droughts and to recent advances in their prediction.

GEOG914 LAND AND VEGETATION RESOURCES OF THE TROPICS
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays, research report, final examination.

This course deals with the great diversity of tropical environments ranging from semi-arid savannas, lowland rainforest, mangrove littoral margins to montane forests and herblands. Special attention is given to tropical applications of a wide range of analytical biogeographical techniques.

GEOG915 TROPICAL APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS AND REMOTE SENSING
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays, research report, final examination.

Resource assessment of remote or underdeveloped areas has been greatly advanced by recent developments in Remote Sensing and in Geographic Information Systems. This course deals with application to tropical resource assessment of the main techniques of these fields, especially satellite imagery, aerial photography and analytical computer cartography.

GEOG916 CHANGING LANDUSE IN THE PACIFIC AND SOUTHEAST ASIA
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays, research report, final examination.

The dynamics of the transformation of traditional landuse patterns in the Pacific and Southeast Asia are analysed within the framework of contemporary demographic, political and economic changes in the region. Special reference is given to the social and environmental consequences of the increasing pressure of population on the limited resource base.

GEOG917 PREHISTORY OF TROPICAL AUSTRALIA AND THE SOUTHWEST PACIFIC
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays, research project, final examination.

The course deals with the long history, rich cultural heritage and relationships to the biophysical environment of the traditional societies of this region. Special attention is given to the techniques of assessing paleoenvironmental and archaeological evidence.

GEOG921 ENVIRONMENTAL APPLICATION OF REMOTE SENSING AND GEOGRAPHICAL INFORMATION SYSTEMS
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays, research project, final examination.
The remote sensing and spatial analysis of data are now central to the development and assessment of environmental resource inventories. This course provides training in the application of advanced systems of analysis in this field, including MICROBRIAN satellite image analysis. Geographic Information Management Systems and SUPERMAP computer cartographic analysis.

GEOG922 EVALUATION AND CONSERVATION OF ARCHAEOLOGICAL AND PREHISTORIC SITES
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays, research project, final examination.

Legislative requirements for archaeological and prehistoric environmental input to impact assessment have greatly increased the need for training in this field. This course provides both a review of recent advances in Australian prehistory and also experience in the application of techniques of assessing the significance and problems of managing archaeological sites.

GEOG923 LANDSCAPE AND SOIL SURVEY
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays, research report, final examination.

This course provides advanced training in the theory and practice of landscape and soil survey. Students will participate in a variety of field and laboratory aspects of the preparation of soil landscape maps.

GEOG924 COASTAL AND ESTUARINE CONSERVATION
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays, research report, final examination.

The major problems of conservation and management of coasts and estuaries is considered within the framework of sea level fluctuations, near-shore and estuarine hydrodynamics and sediment budgets.

GEOG925 RIVER MANAGEMENT AND WATER RESOURCES
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays, research report, final examination.

The course deals with the hydrological cycle and the principles of hydrology, together with the geomorphological problems of river management. Effects of human modification of rivers systems are also considered.

GEOG926 CONSERVATION OF BIOTIC RESOURCES
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays, research report, final examination.

Contemporary debate on the conservation versus the exploitation of biotic resources is considered within the framework of biogeographical theory. Varied techniques of conservation are reviewed.

GEOG931 URBAN SOCIAL ANALYSIS AND POLICY
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays/seminar reports, research report/project, final examination.

This subject will explore substantive, theoretical and methodological issues relevant to social policy formulation and implementation in the urban context. The issues to be examined and their specific contexts will vary from session to session depending upon the interests and availability of academic staff.

GEOG932 REGIONAL ANALYSIS AND POLICY
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays/seminar reports, research report/project, final examination.

This subject will explore substantive, theoretical and methodological issues relevant to policy formulation and implementation in the regional context. The issues to be examined and their specific contexts will vary from session to session depending upon the interests and availability of academic staff.

GEOG933 POPULATION DYNAMICS ANALYSIS AND POLICY
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)

This subject will explore substantive, theoretical and methodological issues relevant to policy formulation and implementation in the regional context. The issues to be examined and their specific contexts will vary from session to session depending upon the interests and availability of academic staff.
Assessment: as appropriate from essays/seminar reports, research report/project, final examination.

This subject will explore substantive, theoretical and methodological issues important to the analysis of demographic change and the development and implementation of population-related policy. The issues to be examined and their specific regional contexts will vary from session to session depending upon the interests and availability of academic staff but will normally be drawn from the areas of mortality and morbidity, fertility and family formation, migration, population growth, and ageing and the elderly.

GEOG934 NUTRITION AND HUNGER: ANALYSIS AND POLICY
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 3 hours practical/tutorial work per week)
Assessment: as appropriate from essays/seminar reports, research report/project, final examination.

This subject will explore theoretical, substantive and methodological issues relating to the production, distribution and consumption of food, with particular but not exclusive reference to the Less Developed Countries. The issues to be examined and their specific contexts will vary from session to session depending upon the interests and availability of academic staff.

GEOG935 RESEARCH REPORT
Autumn or Spring session; 12 credit points (2 hours workshop per week)
Assessment: research report.

This subject will allow the student to research in detail a problem identified in another subject within the programme. 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.

GEOG941 RESEARCH METHODS
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 2 hours practical work per week)
Assessment: as appropriate from essays, research report, final examination.

The course provides a general review of the methodology of geographical research, but will concentrate on the methods employed in the specific field of the Research Project or Major Thesis being undertaken by the candidate.

GEOG942 DEVELOPMENT OF GEOGRAPHICAL THOUGHT
Autumn or Spring session; 12 credit points (3 hours lecture/seminar; 2 hours practical work per week)
Assessment: as appropriate from essays, research report, final examination.

The course reviews the main trends in the development of geographical thought, but will concentrate on developments in the specific field of the Research Project or Major Thesis being undertaken by the candidate.

GEOG943 RESEARCH PROJECT
24 credit points

The minor thesis takes the form of a supervised research project on an approved topic carried out over approximately a full session.

GEOG944 MAJOR THESIS
48 credit points

The major thesis takes the form of a supervised full-time research project on an approved topic over at least two sessions.
GEOLOGY

INTRODUCTION

The following postgraduate degrees and diplomas are available:

1. Graduate Diploma in Science (Coal Geology)
2. Master of Science
3. Honours Master of Science
   (a) Coal Geology by Coursework
   (b) Geology by Research or Coursework
4. Doctor of Philosophy

The schedule of subjects available for the Masters degrees and the diploma is set out on the following pages.

For the Doctor of Philosophy degree candidates enrol in the subject GEOL999 Thesis.

The specific requirements for the Masters degree and diploma and the descriptions of the subjects available are set out in the pages following the schedules of subjects.

SCHEDULE OF GRADUATE SUBJECTS

GRADUATE DIPLOMA IN SCIENCE (COAL GEOLOGY)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>GEOL981</td>
<td>Coal in the Energy Pattern</td>
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<tr>
<td>GEOL982</td>
<td>The Conditions of Peat Formation</td>
<td>6</td>
</tr>
<tr>
<td>GEOL983</td>
<td>Coalification, Coal and Mineral Analysis</td>
<td>6</td>
</tr>
<tr>
<td>GEOL984</td>
<td>Coal Basin Setting and Analysis</td>
<td>6</td>
</tr>
<tr>
<td>GEOL985</td>
<td>Geological and Geophysical Exploration</td>
<td>6</td>
</tr>
<tr>
<td>GEOL986</td>
<td>Mining Coal</td>
<td>6</td>
</tr>
<tr>
<td>GEOL987</td>
<td>Coal Utilization</td>
<td>6</td>
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<tr>
<td>GEOL988</td>
<td>Environmental Aspects</td>
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MASTER OF SCIENCE

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<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>GEOL903</td>
<td>Biostratigraphy</td>
<td>6</td>
</tr>
<tr>
<td>GEOL905</td>
<td>Mathematical Geology</td>
<td>6</td>
</tr>
<tr>
<td>GEOL906</td>
<td>Metamorphism</td>
<td>6</td>
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<tr>
<td>GEOL907</td>
<td>Aspects of Geophysics</td>
<td>6</td>
</tr>
<tr>
<td>GEOL908</td>
<td>Sedimentology</td>
<td>6</td>
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<tr>
<td>GEOL910</td>
<td>Advanced Topics in Geology A</td>
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<tr>
<td>GEOL911</td>
<td>Advanced Topics in Geology B</td>
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<td>GEOL912</td>
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<td>GEOL913</td>
<td>Advanced Topics in Geology D</td>
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<td>GEOL914</td>
<td>Vulcanology</td>
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<td>GEOL915</td>
<td>Structural Geology and Tectonics</td>
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<tr>
<td>GEOL916</td>
<td>Organic Geochemistry</td>
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<tr>
<td>GEOL917</td>
<td>Aspects of Petroleum Geology</td>
<td>12</td>
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<tr>
<td>GEOL918</td>
<td>Analytical Methods in Geology</td>
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Key Centre for Mines
Teaching at the postgraduate level is being integrated with the work of the Key Centre for Mines which incorporates aspects of Geology, Mining Engineering and Mineral Processing teaching and research at the Universities of New South Wales and Wollongong.

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:

- The geology of coal measures, coal utilisation.
- Biostratigraphy of the Early and Middle Palaeozoic rocks of Australasia.
- Organic geochemistry.
- Economic and environmental geology.
- The geology of oil shales.
- Petroleum geology.
- Organic petrology of petroleum source rocks.
- Sedimentology of terrestrial and shallow marine sequences.
- Geology of volcaniclastic sequences.
- Petrography and geochemistry of igneous and metamorphic rocks.
- Structural geology and tectonics.
### COURSE DESCRIPTIONS

#### 1. GRADUATE DIPLOMA IN SCIENCE (COAL GEOLOGY)

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 will be an inservice or "sandwich-type" course aimed at upgrading and updating professional expertise in areas of rapid development.

Students will be required to spend a total of approximately ten weeks on campus in the two years, generally two and a half weeks in January-February and two and a half weeks in June-July each year.

#### 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

The basic structure of the course will be part-time extending over two academic years.

It will consist of two parts -

1. Lectures, tutorial, practical and formal field work which will involve eight weeks of full-time instruction during the course, the periods of such instructions

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<tr>
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being when possible in the University
vacations. (These subjects are GEOL981
to GEOL988 inclusive).

(b) One project. Presentation of the results
will be in the form of a report.

For assessment purposes the weighting of Parts
A and B will be equal.

Teaching in the course will emphasize the use
of the "case history" approach utilizing the
extensive experience of the staff of the
University and that of invited lecturers.

2. MASTER OF SCIENCE

The Department 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 Pass Master degree
regulations in this volume.

Entry to the course will be dependent upon
approval by the Board of Research and
Postgraduate Studies on the advice of the
Head of the Department of Geology.

Students must consult the Head of the
Department of Geology, for approval of their
proposed choice of subjects.

Subjects will normally be selected from the
Schedule of Subjects for the Master of Science
degree. Subjects to be offered each year will
depend upon student and staff availability.

3. HONOURS MASTER OF SCIENCE

(a) Coal Geology

Students will be required to complete a
program of study with a total value of at least
96 credit points. The formal coursework is
equivalent to 48 credit points and the
remaining 48 credit points will consist of
project and thesis work.

The assessment of the student's performance in
the course shall be made by the Board of
Research and Postgraduate Studies on the
recommendation of the Departmental
Assessment Committee.

Students will be required to spend a total of
approximately four (4) weeks per year at the
University over a period of two years. Two
weeks will be in November-December or
January-February and two weeks in June-July
each year.

A University hall of residence may be
available during the periods of the course for
accommodation.

Course Outline
The course consists of two parts:

Part A The subjects GEOL981 to GEOL988
inclusive.
Part B GEOL950 and GEOL989.

Part A Formal Coursework - 48 credit points
(for GEOL981 to 988 inclusive)
The syllabus for the formal coursework
comprises eight subjects each of which will be
covered in forty-eight hours of
lectures/tutorials and associated
laboratory/field work. Each subject counts as 6
credit points. Assessment is on the basis of
written assignments set during the formal
coursework.

Part B Project and Thesis - 48 credit points
(GEOL950, GEOL989)
This will be in two sections. The first will be
predominantly a literature survey. The second
and more major study will involve a field or
laboratory study (or both) of a problem in coal
geology. Students employed in the coal
industry will be encouraged to choose topics
which are relevant to their employment.

Admission Requirements
Applicants for admission are required to have
degree with a major in Geology from the
University of Wollongong or an approved
degree from another tertiary institution.

(b) Geology

Introduction and Objectives
The rapid development of earth sciences has
produced a need for postgraduate coursework.
The courses offered by the Department 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 those described below, in accordance with
the Honours Masters Degree Regulations.
Students entering with an Honours degree in Geology 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 Board of Research and Postgraduate Studies on the advice of the Head of the Department of Geology.

Selection of Subjects
Students must consult the Head of the Department of Geology, for approval of their proposed choice of subjects.

Strands
The following subject combinations may be varied to take account of the candidates qualifications, objectives and study plan.

1. Petroleum Geology
   96 credit points from
   GEOL334 Fossil Fuels
   GEOL916 Organic Geochemistry
   GEOL917 Aspects of Petroleum Geology
   GEOL982 The conditions of Peat Formation
   GEOL983 Coalification, Coal & Mineral Analysis
   GEOL984 Coal Basin Setting & Analysis
   GEOL950 Project A
   GEOL999 Major Thesis

2. Igneous and Metamorphic Petrology
   GEOL905 Mathematical Geology
   GEOL906 Metamorphism
   GEOL914 Vulcanology
   GEOL912 Advanced Topics in Geology C
   GEOL918 Analytical Methods in Geology
   GEOL950 Project A
   GEOL999 Major Thesis

3. Sedimentology
   GEOL905 Mathematical Geology
   GEOL906 Metamorphism
   GEOL908 Sedimentology
   GEOL984 Coal Basin Setting and Analysis
   Either GEOL903 Biostratigraphy, OR GEOL915 Structural Geology and Tectonics
   GEOL950 Project A
   GEOL999 Major Thesis

4. Structural Geology and Tectonics
   GEOL915 Structural Geology and Tectonics
   GEOL907 Aspects of Geophysics
   GEOL912 Advanced Topics in Geology C
   GEOL950 Project A
   GEOL999 Major Thesis
   and any 12 credit points from:
   GEOL906 Metamorphism
   GEOL908 Sedimentology
   GEOL917 Aspects of Petroleum Geology
   GEOL984 Coal Basin Setting and Analysis
   GEOL985 Geological and Geophysical Exploration
   GEOL986 Mining Coal

5. Palaeontology and Stratigraphy
   GEOL903 Biostratigraphy
   GEOL905 Mathematical Geology
   GEOL908 Sedimentology
   GEOL910 Advanced Topics in Geology A
   GEOL950 Project A
   GEOL999 Major Thesis

Pre-Requisites
The minimum pre-requisite for all subjects is that the student must have graduates with at least 24 credit points of 300-level Geology subjects.

Proposed Postgraduate Subject Offerings Over A Two Year Period
Subjects to be offered in any year will depend upon student and staff availability but are normally offered in a two year cycle as summarised below.

Autumn session 1990
   GEOL903 Biostratigraphy
   GEOL914 Vulcanology
   GEOL917 Aspects of Petroleum Geology
   GEOL987 Coal Utilization
   GEOL988 Environmental Aspects

Spring session 1990
   GEOL906 Metamorphism
   GEOL915 Structural Geology and Tectonics
   GEOL981 Coal in the Energy Pattern
   GEOL982 The Conditions of Peat Formation

Autumn session 1991
   GEOL908 Sedimentology
   GEOL916 Organic Geochemistry
   GEOL918 Analytical Methods in Geology
   GEOL983 Coalification, Coal
and Mineral Analysis
GEOL984 Coal Basin Setting and Analysis

Spring session 1991
GEOL905 Mathematical Geology
GEOL907 Aspects of Geophysics
GEOL985 Geological and Geophysical Exploration
GEOL986 Mining Coal

SUBJECT DESCRIPTIONS

GEOL903 BIOSTRATIGRAPHY
Autumn session Subject; 6 credit points (14 hrs lectures and 14 hrs tutorials)
Assessments, and written examination at the end of session.

Australian and, to a lesser extent, other sequences of special interest.

Important faunal groups, assemblages and sequences, from the point of view of morphology, taxonomy, ecology, palaeogeography, correlation.

Principles of, and recent developments in, correlation.

GEOL905 MATHEMATICAL GEOLOGY*
Spring session Subject; 6 credit points (14 hrs lectures and 14 hrs tutorials)
Assessments, and written examination at the end of session.

The quantitative approach in geology. Experimental design as applied to normal field activities. Recent case studies in applying mathematical methods.

GEOL906 METAMORPHISM
Spring session Subject; 6 credit points (14 hrs lectures and 14 hrs tutorials)
Assessments, and written examination at the end of session.

Metamorphic mineral paragenesis with examples of metamorphic facies.

Thermodynamic considerations for equilibrium mineral assemblages.

Patterns of igneous phenomena and crystal liquid equilibria.

GEOL907 ASPECTS OF GEOPHYSICS*
Spring session Subject; 6 credit points (14 hrs lectures and 14 hrs tutorials)
Assessments, and written examination at the end of session.

Principles of, and recent developments in, geophysics. Application of geophysical studies and techniques in exploration, geology and mining and the determination of the earth's structure; case studies.

GEOL908 SEDIMENTOLOGY*
Autumn session Subject; 6 credit points (14 hrs lectures and 14 hrs tutorials)
Assessments, and written examination at the end of session.

The major sedimentary facies, their development and characteristics. The analysis of sedimentary assemblages and the synthesis of the results of analysis. Sedimentary structures and their use in the interpretation of palaeoenvironments.

GEOL910 ADVANCED TOPICS IN GEOLOGY
A Double Session (A) Subject; 12 credit points Assessment: seminars, essays, written examination.

This subject will have two hours contact per week. Topics will be selected from areas of research in which staff members or visiting staff members are engaged.

GEOL911 ADVANCED TOPICS IN GEOLOGY
B Double Session (A) Subject; 12 credit points Assessment: seminars, essays, written examination.

This subject will have two hours contact per week. Topics will be selected from areas of research in which staff members or visiting staff members are engaged.

GEOL912 ADVANCED TOPICS IN GEOLOGY
C Autumn or Spring session subject; 6 credit points Assessment: seminars, essays, written examination

This subject will have two hours contact per week. Topics will be selected from areas of research in which staff members or visiting staff members are engaged.

GEOL913 ADVANCED TOPICS IN GEOLOGY
D Autumn or Spring session subject; 6 credit points Assessment: seminars, essays, written examination.

This subject will have two hours contact per week. Topics will be selected from areas of research in which staff members or visiting staff members are engaged.

* Not offered in 1990.
GEOL914 VULCANOLOGY
Autumn session subject; 6 credit points (28 hrs lectures).
Assessment: Seminars, essays, written examination
This subject presents an overview of the physical aspects of volcanology for both modern volcanoes and ancient volcanic deposits. In particular, the tectonic setting of volcanoes and the physical properties of magmas are described and their effects on volcanic processes and deposits are examined.

GEOL915 STRUCTURAL GEOLOGY AND TECTONICS
Spring session subject; 6 credit points (14 hrs lectures and 14 hrs tutorials).
Assessment: Seminars, essays, written examination
This subject treats advanced aspects of structural geology and tectonics. Emphasis is on advanced methods of structural analysis and understanding of rock deformation from the perspectives of stress and strain. The second half of the course concentrates on plate tectonic concepts and their application to modern and ancient rock assemblages.

GEOL916 ORGANIC GEOCHEMISTRY*
Autumn session subject; 6 credit points (28 hrs lectures plus practical assignments). Each student will present one seminar
Assessment: by written examination and on the basis of written assignments including seminar presentations.

References

GEOL917 ASPECTS OF PETROLEUM GEOLOGY
Double Session (A) Subject; 12 credit points (56 hrs lectures plus practical assignments). Each student will present two seminars.
Assessment: by written examination and on the basis of written assignments including seminar presentations.

References

GEOL918 ANALYTICAL METHODS IN GEOLOGY*
Autumn session subject; 6 credit points (28 hrs lectures plus practical work)
Assessment: Seminars, essays, written examination
This subject provides an outline of the theory and practice of modern methods in determinative mineralogy and isotope geology.

Mineral separation and the use of various analytical techniques including AA, XRD, XRF, SEM, microprobe, neutron activation and mass spectrometry are discussed. Applications are stable and unstable isotopes in geochronology and petrogenetic studies are outlined.

References

GEOL950 PROJECT A*
18 credit points
Embodies a laboratory and/or library study on some topical aspect of geology equivalent to four months of full-time study.

GEOL951 PROJECT B
18 credit points
This topic will consist of a field and/or library study on some topical aspect of geology equivalent to four months of full-time study.

* Not offered in 1990.
GEOL981 COAL IN THE ENERGY PATTERN
6 credit points
Keywords: Coal resources, reserves, demand, assessment, feasibility, Hubbert’s pimple, estimation, modelling.

The historical pattern of energy use and the probable changes in the pattern form a basis for understanding the implications of the radical changes which are likely to occur in the medium term. System costs and man-power deployment for the coal industry are very different from those in the oil industry and present difficulties in changing from an oil-based to a coal-based world energy budget. The lower calorific value and relatively high content of impurities in coal, together with the difficulties of handling solids mean that substitution by coal involves increased handling problems.

Resources can only be considered as reserves if the probability of their existence has been established at an acceptable level of certainty and the coal can be extracted economically. With increasing maturity of exploration, reserves increase, but can then decrease if additional “hazards” are discovered. Reserves calculation methods need to be understood in both geological and a commercial context.

The historical patterns of exponential growth in energy use can lead, with a finite resource, to a production pattern which has been described by Hubbert. Modelling techniques are useful in establishing possible future use and production patterns. The fate of past predictions will be examined.

GEOL982 THE CONDITIONS OF PEAT FORMATION
6 credit points
Keywords: Vegetable matter, plant, nutrition, peat accretion, moor ecology, bio-chemical coalification, macerals, microlithotypes, lithotypes, syn-depositional subsidence, seam-splitting, coal-measure lithology.

This subject of the course is designed to convey conceptual parameters of coal formation as a basis for an understanding of exploratory and analytical methods. It begins with a discussion of the influence of vegetable matter, as source material, on peat formation. Emphasis is put on the relationship between plant types and the resulting peat. A consideration of the source material serves also to delineate the stratigraphic range within which coal deposits can be expected to occur. Plant nutritional aspects lead to an appreciation of moor types and various biotopes within the latter. Intimately linked with this aspect is the breakdown of vegetable matter into peat and later coal components, i.e. the development of the organo-petrographic constituents of coal. The concept of coal type (in contrast to coal rank) is discussed in conjunction with an introduction to coal petrographic nomenclature and classification systems. The course is concluded with a discussion of peat and coal as integrated parts of a number of lithofacies models.

GEOL983 COALIFICATION, COAL AND MINERAL ANALYSIS
6 credit points
Keywords: Coal rank and type, rank evaluation parameters, coking potential, liquid/gas yields, inherent, adventitious, syngenetic and epigenetic mineral matter, mineral origins, coal and mineral analytical methods.

The second or physico-chemical stage of coalification leads to major changes in the physical and chemical properties of the macerals. These changes are rank dependent. Methods of assessing rank are related to their use in problem solving in geological and fuel technology studies. Rank change may be modelled mathematically and the results of modelling studies used to improve the understanding of basin history.

This subject is designed to cover also the types, compositions, origins and depositional controls of the mineral matter in coal. The concepts of inherent, adventitious, syngenetic and epigenetic mineral matter in coal and its depositional controls will be related to their economic significances. The various analytical methods applied to the analysis and characterisation of organic and inorganic constituents of coal either separately or collectively, and coke, are discussed in relation to their principles of operation and the type, application and value of the analytical data which result.

The analytical methods involved are as follows:

For coal:
Proximate and ultimate analysis, reflectance and fluorescence measurement, apparent density, sizing and washability tests, ash fusion-point determinations (and mineral caused variations), plastometer and dilatometer tests, swelling index determination, Gray King assays, Roga index and coking quality tests and photometry.

For minerals:
Reflected light microscopy, point counting and use of various optical graticules, X-radiography, radio frequency and...
conventional mineral concentration techniques, thermal analysis (DTA and DTG), X-ray diffraction, X-ray fluorescence, infra-red and atomic absorption spectroscopy, electron microscopy and staining techniques.

GEOL984 COAL-BASIN SETTING AND ANALYSIS
6 credit points
Keywords: Tectonic setting, plate tectonics, foredeep, intradeep, pericratonic coalfields, intracratonic coalfields, nontectonic coalfields, palaeo-current analysis, lithofacies maps, structural analysis.

This subject is divided into two parts - conceptual and analytical. In the first part of the geotectonic environment of coal formation is dealt with. Concepts of plate tectonics are stressed by relating coal basins to settings near:

1. converging plate margins;
2. diverging plate margins; and
3. in midplate positions.

In the second part analytical procedures are discussed and applied in the field as well as in the laboratory. Both methods of structural and sedimentary geology are used in order to unravel the history of a coal basin. Case histories are discussed and extensive use is made of the geological environment found in the vicinity of both centres of instruction.

GEOL985 GEOLOGICAL AND GEOPHYSICAL EXPLORATION
6 credit points
Keywords: Field geology, sampling, field geophysics, drilling, logging, downhole logging, quality, feasibility, mine planning, mine exploration.

An outline will be made of regional and detailed mapping and sampling of coal-bearing basins and the structures within such basins. Geophysical techniques used in coal-bearing basins will be described, including such methods as seismic, gravity, magnetic, electrical and thermal methods - advantages and disadvantages of the techniques. A description will be made of various drilling techniques and interpretation of drilling products, and downhole techniques in coal assessment studies. Quality assessment and feasibility studies will be discussed. The role of geological and geophysical exploration results as a guide to the planning of underground and open cut mines and mine layouts will be discussed. A description will be made of the application of some geological and geophysical techniques in monitoring developments during mining.

GEOL986 MINING COAL
6 credit points
Keywords: Mine layout, data collection, analysis, interpretation, stress history, strain analysis, design and planning, rock mechanics, structural analysis, strata control, gas emanations, geological hazards.

The control of sedimentary and structural features on mine planning and layout will be described. A description will be made of the collection, analysis and interpretation of data useful in coal mining. The influence and sedimentation, subsidence, lithification, folding, faulting and igneous intrusions on stress in coal-bearing sequences will be discussed. Types of stress and strain likely to be encountered in a coal-mining program will be described. The measurement of strain in rocks and its analysis and interpretation in coal mining will be described. Discussion of the design and planning of underground coal mine layout and extraction procedures will be complemented by discussion of the design and planning of open cut coal mines. Rock mechanics measurements will be described, as well as other structural studies during coal mining, and the analysis of such data in the control and monitoring of coal-mining development. Recognition of geological hazards will be discussed, as will strata control and mine-gas control.

GEOL987 COAL UTILIZATION
6 credit points
Keywords: Preparation, grindability, washing, liberation, gasification, pyrolysis, solvent extraction, hydrogenation, carbonization, mesophase, coke structure, coke strength, combustion, ash properties.

Coal Preparation. Coal, as mined, typically contains mineral matter which can be removed by washing processes which depend upon specific gravity differences or upon differing flotation behaviour. Grindability is primarily related to coal type and rank, with the tectonic history of the coal having some effects. Liberation at any given size is controlled by the form of the association of the mineral matter and the coal macerals. Liberation can be predicted from a knowledge of the forms of occurrence of the mineral matter.

Reforming of coal into liquid or gaseous fuels presents a means of removing impurities in coal (minerals and sulphur in particular) and at the same time converting it into a state which is more easily handled. The processes of conversion involves a loss in energy which ranges from about 30% to about 70%. Gasification processes are relatively insensitive to the properties of the coal and may be followed by the Fischer-Tropsch
synthesis process to make liquid hydrocarbons. Pyrolysis techniques can be modified to increase the yield of liquids but require coals of a restricted range of rank and type. Further they yield a char residue which is difficult to handle and to use. Solvent extraction and hydro-generation both require coals of a restricted range of type and rank, and present problems related to autocatalysis and the poisoning of introduced catalysts.

Coals of suitable rank and type go through a plastic phase, when heated, which allows the development of a coke structure with vesicles and mesophase development. The performance of a coke in a blast furnace is related to physical strength and to chemical reactivity. Blending of coals is used to improve the physical and chemical properties of coke. The concepts of rank and type are of great importance in the design of blends and in the calculation of the effects which are likely to result from a given programme of blending.

Combustion of coal to provide electric power is the fastest growing use for coal. The burning process of coal in a pulverized fuel burner is related to its petrographic composition. The nature and properties of the residual ash are related to the composition and associations of the inorganic constituents of the coal. Boiler fouling affects efficiency and is related to the petrology and chemistry of the coal. The disposal of ash is a major problem, but presents a challenge in terms of the potential use of the ash as a construction material. Sulphur and heavy metal emissions are subject to regulatory controls in many parts of the world.

GEOL988 ENVIRONMENTAL ASPECTS
6 credit points

Keywords: Pollution, dusts, gas emissions, reclamation, mine subsidence, waste products, environmental impacts, alienation of resources and conflicts of interest.

The relationship of mining operations to communities, downstream pollution problems, mineralogical composition and types of associated dusts, the composition of mine waters and stack emissions, the reclamation of mine sites, the effects of mine subsidence, the composition, uses and disposal of waste residues, environmental impact studies. Alienation of resources and conflicts of interest will be studies within the overall framework of coal mining and utilization.

GEOL989 THESIS
30 credit points

Embody work on either a field or laboratory project nominally equivalent to two thirds of a year of research.
PHYSICS

INTRODUCTION

The following postgraduate degrees are available:

1. Master of Science (Science Administration)
2. Honours Master of Science by Research or Coursework
3. Doctor of Philosophy

The schedule of subjects available for the Masters degrees is set out on the following pages.

For the Doctor of Philosophy degree candidates enrol in the subject PHYS999 Thesis.

SCHEDULE OF GRADUATE SUBJECTS

MASTER OF SCIENCE (SCIENCE ADMINISTRATION)

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**TABLE 1 TWO YEAR (FULL-TIME) PROGRAM**

**First Year Compulsory**

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<tbody>
<tr>
<td>ACCY901</td>
<td>Accounting for Managers</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>MGMT911</td>
<td>Organisational Behaviour</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>PHYS921</td>
<td>Applied Physics Report</td>
<td>18</td>
<td>A</td>
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</table>

**Options (three of the following)**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
<th>Session Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT976</td>
<td>Competitive Strategy &amp; Analysis</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>SCIE900</td>
<td>Research Methodology &amp; Communication</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>STS937</td>
<td>The Management of Technology</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>LAW960</td>
<td>Law for Managers</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>or LAW362</td>
<td>Industrial and Intellectual Property Law</td>
<td>6</td>
<td>1</td>
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</table>

**Second Year Compulsory**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
<th>Session Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT922</td>
<td>Marketing I</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>PHYS990</td>
<td>Applied Physics Research Project</td>
<td>24</td>
<td>A</td>
</tr>
<tr>
<td>STS931</td>
<td>Risk Assessment, Health &amp; Safety</td>
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**Options (one of the following)**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
<th>Session Offered</th>
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</thead>
<tbody>
<tr>
<td>MGMT921</td>
<td>Managerial Finance</td>
<td>6</td>
<td>2</td>
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<tr>
<td>MGMT940</td>
<td>Innovation and Entrepreneurship</td>
<td>6</td>
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<tr>
<td>MGMT945</td>
<td>Technology Enterprise Project</td>
<td>6</td>
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</table>

**TABLE 2 14 MONTH (FULL-TIME) PROGRAM**

**Summer session (Jan/Feb)**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS921</td>
<td>Applied Physics Report</td>
<td>18</td>
</tr>
</tbody>
</table>

+ Students should check with the Departmental Head to see if this program is available in any particular year.
MASTER OF SCIENCE (SCIENCE ADMINISTRATION) (Cont'd)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>Autumn session</td>
<td></td>
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</tr>
<tr>
<td>MGMT911</td>
<td>Organisational Behaviour</td>
<td>6</td>
</tr>
<tr>
<td>MGMT922</td>
<td>Marketing I</td>
<td>6</td>
</tr>
<tr>
<td>MGMT976</td>
<td>Competitive Strategy &amp; Analysis</td>
<td>6</td>
</tr>
<tr>
<td>SCIE900</td>
<td>Research Methodology and Communication</td>
<td>6</td>
</tr>
<tr>
<td>Spring session</td>
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<tr>
<td>Core</td>
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<tr>
<td>MGMT945</td>
<td>Technology Enterprise Project</td>
<td>6</td>
</tr>
<tr>
<td>Options (one of the following)</td>
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<td></td>
</tr>
<tr>
<td>LAW960</td>
<td>Law for Managers</td>
<td>6</td>
</tr>
<tr>
<td>STS937</td>
<td>The Management of Technology</td>
<td>6</td>
</tr>
<tr>
<td>Summer Session (Dec/Feb)</td>
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<tr>
<td>PHYS990</td>
<td>Applied Physics Project</td>
<td>24</td>
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</table>

HONOURS MASTER OF SCIENCE

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>PHYS910</td>
<td>Advanced Project in Physics A</td>
<td>6</td>
</tr>
<tr>
<td>PHYS946</td>
<td>Advanced Solid State Physics</td>
<td>6</td>
</tr>
<tr>
<td>PHYS947</td>
<td>Special Topics in Physics A</td>
<td>6</td>
</tr>
<tr>
<td>PHYS960</td>
<td>Advanced Project in Physics B</td>
<td>6</td>
</tr>
<tr>
<td>PHYS997</td>
<td>Special Topic in Physics B</td>
<td>6</td>
</tr>
<tr>
<td>PHYS999</td>
<td>Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS

1. MASTER OF SCIENCE (SCIENCE ADMINISTRATION)

Introduction and Objectives
Three major career routes are generally followed by Physics graduates: (i) the academic/research route involving an Honours year followed by a PhD research program, (ii) teaching, requiring a subsequent DipEd course, and (iii) direct entry into manufacturing, service industry or government employment.

The Master of Science (Science Administration) MSc(ScAdmin) course is aimed at category (iii) graduates. While many physicists begin their industrial careers 'at the bench', subsequent progression up the career ladder generally involves the assumption of considerable managerial responsibility. Both their functional efficiency and their career prospects would be enhanced by them gaining familiarity with business concepts, language, and skills early in their careers. The course is also suitable for physicists in government laboratories desiring management training.

The objectives of this proposed degree are therefore two-fold, namely to provide Physics graduates with:

(1) a sound grounding in the commercial and business studies area (management, marketing, finance, communication, etc.), as well as in the broader social and environmental implications of technology; and

(2) a greater insight into the industrial/commercial aspects of Physics via a major literature survey and a research project in applied physics.

Close integration of the two strands will be achieved by the use of physics based case studies in relevant management subjects, and by the use of the applied research project in PHYS990. Students taking MGMT945 will use the background from this research for the hypothetical enterprise for which a business plan is developed in this subject.

Structure of the Course
This is a 96 credit point course extending over two years for full-time students, and four years for part-time students.
It contains two complementary and integrated strands:

(i) 42 credit points of graduate Physics subjects, namely PHYS921 and PHYS990, the latter of which involves an applied research project and minor thesis;

(ii) 54 credit points of graduate subjects covering topics in management, finance, marketing, communication, technology, and innovation. These subjects are selected from the Schedule for the MSc (ScAdmin) degree, and include a 30 credit point core taught by the Departments of Management (12 credit points), Science and Technology Studies (12 credit points), and Accountancy (6 credit points).

**Fast Track Program**

An alternative fast track route (14 months full-time) is also available in some years, as outlined in the Schedule. This route employs the Summer Session periods and is facilitated by the fact that most of the Management/Commerce subjects are taught in the evenings.

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 Regulations together with the following conditions:

(1) Entry to the degree program will normally be from an Honours degree in 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, 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 below and the Bachelor Degree Schedule. These subjects will normally be chosen in consultation with and approved by the Departmental Head.

**SUBJECT DESCRIPTIONS**

**PHYS910 ADVANCED PROJECT IN PHYSICS A**  
*Autumn session; 6 credit points*  
*42 hours laboratory*

**PHYS921 APPLIED PHYSICS REPORT**  
*Double session (A); 18 credit points (120 hours tutorials)*  
**Assessment:** Substantial report and seminar

Under the supervision of staff appointed by the Departmental Head, students will survey the literature, prepare a report and present a seminar on a topic of relevance to industry and technology chosen by the supervising staff. Topics may be selected from areas related to Solid State Physics, Nuclear Physics, Laser Spectroscopy and Image Processing Analysis.

**PHYS946 ADVANCED SOLID STATE PHYSICS**  
*Double Session (A); 6 credit points*  
**Assessment:** Based on assigned problems, tests and sessional examinations

Crystal Symmetries; Groups of Linear Transformation; Abstract Groups; Theory of Group Representations; Group of the Schrödinger Equation; Selection Rule Theorem; Groups of Physical Interest; Rotation Operations; Double-Valued Representations; Direct Products; Crystal Fields; Adiabatic Approximations; Bloch's Theorem; The Effective Mass Expansion; Spin-Orbit Interaction; Time-reversal Symmetry; Symmetry Properties of Wave Vectors; Band Theory; Impurities in Semiconductors.

**PHYS947 SPECIAL TOPIC IN PHYSICS A**  
*Autumn session; 6 credit points*  
*(14 hours seminars and 14 hours tutorials)*

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.

**PHYS960 ADVANCED PROJECT IN PHYSICS B**  
*Spring session; 6 credit points*  
*42 hours laboratory*

**Assessment:** This will be based on the satisfactory operation of the completed experiments and the adequacy of the written descriptions of the experiments.
The student will be required to design and construct several self-contained experiments at the level of those encountered in PHYS306 Projects in Physics A. The number and type shall be determined by two members of the academic staff of the Department of Physics.

PHY990 APPLIED PHYSICS RESEARCH PROJECT
*Autumn and/or spring session; 24 credit points*

*Assessment:* Minor Thesis

Under the supervision of staff appointed by the Departmental Head the student will undertake a research project and present a minor thesis and a seminar on an Applied Physics topic chosen by the supervising staff. The student's choice of option of subjects should be discussed with the Departmental Head. Research topics will normally be in the same area as surveyed in PHYS921.

PHY997 SPECIAL TOPIC IN PHYSICS B
*Spring session; 6 credit points (14 hours seminars and 14 hours tutorials)*

*Pre-requisite, Co-requisites and Assessment:* Same 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.

PHY999 MAJOR THESIS
*Double session subject; 48 credit points*

SCIE900 RESEARCH METHODOLOGY AND COMMUNICATION
*Autumn session; 6 credit points (28 hours lectures/tutorials, 14 hours practical)*

*Assessment:* essays, seminars and final examination

A general review of research methodology in Science as a whole will be followed by discipline-based case studies of specific interest to individual candidates. For MSc (ScAdmin) students, emphasis will be placed on the methods employed in their Applied Report or Applied Research Project. Students will also be given training and experience in both the analysis of published scientific papers and in the written and verbal communication of their own results. This will involve two essays and a seminar presentation.

*Textbook(s):* To be advised

*Subject Co-ordinator:* To be advised

*Lecturer(s):* Various lecturers from Science Departments and from the Department of Science and Technology Studies.