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 a book expanded Argent bound and clasped Or on a Chief of the last three Cinquefoils pierced Gules".
University of Wollongong Calendar

There are 2 volumes of the Calendar:

University of Wollongong Undergraduate Calendar 1994
University of Wollongong Postgraduate Calendar 1994

University of Wollongong,
Northfields Avenue,
Wollongong, NSW 2522.
Telephone: (042) 213555
Facsimile: (042) 213477
All enquiries should be addressed to the Vice-Principal (Administration).

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

The University attempts to ensure that the information contained in this publication is up to date at the time of printing (October 1993) but sections may be amended without notice by the University in response to changing circumstances or for any other reasons. Students should check with the University at the time of application/enrolment whether any later information is available in respect of any material contained in this Calendar.

Editorial and production: Academic and Student Services Branch,
University of Wollongong

Typesetting: Lynell Reed
University of Wollongong

Printing: Bridge Printery, Rosebery, NSW
QUICK REFERENCE GUIDE

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FACULTY OF ARTS ➔

FACULTY OF COMMERCE ➔

FACULTY OF CREATIVE ARTS ➔

FACULTY OF EDUCATION ➔

FACULTY OF ENGINEERING ➔

FACULTY OF HEALTH & BEHAVIOURAL SCIENCES ➔

FACULTY OF INFORMATICS ➔

FACULTY OF LAW ➔

FACULTY OF SCIENCE ➔

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*All Durable Buildings

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

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

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

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

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 policy of the University of Wollongong is to provide a safe working environment for its staff, students and visitors. As a consequence of this, the University encourages all members of the University complex to regard accident prevention and safe working as a collective and individual responsibility.

In order to implement this policy, the University supports the activities of the Occupational Health and Safety Committee in monitoring the safety environment and safety awareness and training at all levels of activity.

The University regards seriously its corporate responsibility under the various Occupational Health and Safety Statutes and will ensure that all members of the University staff understand clearly their individual responsibilities outlined in such legislation. In this regard, Heads of Departments and other Academic and Administrative Units are responsible for day to day safety within their areas of responsibility. The Safety Officer is available to advise on specific matters or assist in implementing safety programs.

The University insists that all staff and students work within the various legal requirements with regard to safe working and the current, and future, safety rules devised to protect them in specific situations.

Personal habits and conduct on campus should be such that they do not cause accidents nor create hazards which may endanger members of the University or other persons.
CALANDAR OF DATES

SUMMER SESSION
December 6 to December 19

CHRISTMAS RECESS
December 20 to January 2
January 3 to February 6

EXAMINATIONS
February 7 to February 13

December 1993

Monday 6 ............................................ Summer Session lectures commence
Monday 20 ............................................Christmas recess commences
Monday 20 ............................................ HECS Census Date
Monday 20 ............................................ International Student Audit Date

January 1994

Sunday 2 ............................................ Christmas recess ends
Friday 7 ............................................ Last day of withdrawal from Summer Session subjects
Wednesday 26 .................................... Australia Day holiday

February

Friday 4 ............................................ Summer Session lectures finish
Monday 7 ............................................ Examinations commence
Friday 11 ............................................ Examinations finish

AUTUMN SESSION
February 28 to April 3

RECESS
April 4 to April 10
April 11 to June 12

STUDY RECESS
June 13 to June 19

EXAMINATIONS
June 20 to July 3

MID-YEAR RECESS
July 4 to July 17

January

Monday 10 ............................................ Last day for Undergraduate Re-enrolments (postal)
Monday 10 ............................................ Last day for Postgraduate Enrolments and Re-enrolments (postal)
Wednesday 26 .................................... Australia Day holiday
February

Tuesday 1,  
Wednesday 2,  
Thursday 3, Friday 4, Monday 7.....Enrolment of new undergraduates

Monday 21, Tuesday 22..........Final Enrolment Days - Undergraduate

Friday 18 .............................................. Last day for late Re-enrolments

Friday 25 .............................................. Last day for Payment of  
Compulsory Charges of Re-enrolling Students

March

Monday 28..............................Autumn Session lectures commence

Wednesday 30 .................... International Students Audit Date

Thursday 31............................. HECS Census Date

April

Friday 1 ................................................. Good Friday

Monday 4 .............................................. Easter Monday  
recess begins

Sunday 10 ..................................... April recess ends

Monday 25......................................... Anzac Day

Friday 29.............................. Last day to withdraw from Autumn Session subjects

May

Monday 9........................................ University Day

Tuesday 10, Wednesday 11, ................... May Graduation Ceremonies

Thursday 12, Friday 13

June

Sunday 12 ........................................ Autumn Session lectures finish

Monday 13......................................... Queen's Birthday holiday

Monday 13......................................... Study recess commences

Sunday 19 ........................................ Study recess ends

Monday 20 ........................................ Examinations commence

July

Sunday 3 ........................................... Examinations end

Monday 4 ........................................... Mid-year recess commences

SPRING SESSION

July 18 to September 25  

RECESS September 26 to October 9  

October 10 to November 6  

STUDY RECESS November 7 to November 13  

EXAMINATIONS November 14 to December 4
GENERAL INFORMATION

July

Sunday 17 ................................................................. Mid-year recess ends
Monday 18 ............................................................. Spring Session lectures commence
Friday 29 .............................................................. Last day to withdraw from double session (Code A) subjects

August

Tuesday 30 ............................................................. International Students Audit Date
Wednesday 31 .......................................................... HECS Census Date

September

Friday 9 ............................................................... Last day to withdraw from Spring Session subjects
Monday 26 ............................................................. Recess commences

October

Monday 3 ............................................................... Labour Day
Thursday 6, Friday 7 ............................................. October Graduation Ceremonies
Sunday 9 ............................................................... Recess ends

November

Sunday 6 .............................................................. Spring Session lectures finish
Monday 7 ............................................................. Study recess commences
Sunday 13 ............................................................. Study recess ends
Monday 14 ............................................................. Examinations commence

December

Sunday 4 ............................................................. Examinations end
Friday 16 ............................................................. Last day to withdraw from double session (Code B) subjects
Sunday 25 ............................................................. Christmas Day
Monday 26 ............................................................. Boxing Day
THE FACULTIES

ARTS – Member Units
Department of English
Department of History & Politics
Department of Modern Languages
Department of Philosophy
Department of Science and Technology Studies
Department of Sociology
Graduate School of Journalism

Associate Units
Centre for Multicultural Studies

COMMERCE – Member Units
Department of Accountancy
Department of Business Systems
Department of Economics
Department of Management

CREATIVE ARTS – Member Units
The Faculty of Creative Arts does not have separate member units.

Associate Units
Conservatorium of Music

EDUCATION
The Faculty of Education does not have separate member units.

Associate Units
Aboriginal Education Centre

ENGINEERING – Member Units
Department of Civil and Mining Engineering
Department of Materials Engineering
Department of Mechanical Engineering

Associate Units
Key Centre for Mines
Key Centre for Advanced Manufacturing and Industrial Automation

HEALTH AND BEHAVIOURAL SCIENCES – Member Units
Department of Biomedical Science
Department of Nursing
Department of Psychology
Department of Public Health and Nutrition
Graduate School of Health and Medical Sciences

INFORMATICS – Member Units
Department of Applied Statistics
Department of Computer Science
Department of Electrical and Computer Engineering
Department of Mathematics
Department of Information and Communication Technology
6 GENERAL INFORMATION

LAW – Member Units
The Faculty of Law does not have separate member units.

SCIENCE – Member Units
Department of Biological Sciences
Department of Chemistry
Department of Geography
Department of Geology
Department of Physics
Environmental Science Unit

Associate Units
Centre for Court Policy and Administration
Centre for Natural Resources Law and Policy
**GOVERNMENT OF THE UNIVERSITY**

Visitor
His Excellency the Governor of New South Wales

Chancellor
The Honourable Robert Marsden Hope, AC CMG LLB HonLLD *Syd*, HonLLD, QC

Deputy Chancellor
Brian Somerville Gillett, BA DipEd *Syd*, HonDLitt

Vice-Chancellor and Principal
Professor Kenneth Richard McKinnon, AUA *Adel*, BA BEd *Q'ld*, EdD *Harv*, FACE

Deputy Vice-Chancellor
Professor Gerard R Sutton, BE MEng Sc *UNSW*, PhD CUA

Pro Vice-Chancellor (Academic)
Professor Christine E Ewan, MB BS PhD MA *Syd*, FAFPHM

Pro Vice-Chancellor (Research)
Professor William J Lovegrove, BA PhD *Q'ld*, MAPsS

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

Vice-Principal (International)
James W Langridge, BBus *UTS*, Dip Tertiary Ed *NE*, MACS

Dean of Faculty of Arts
Professor James S Hagan, BA DipEd *Syd*, PhD *ANU*

Dean of Faculty of Commerce
Vacant**

Dean of Faculty of Creative Arts
Vacant**

Dean of Faculty of Education
Vacant**

Dean of Faculty of Engineering
Professor Tibor G Rozgonyi, DipMaths/Phys *Eger*, DipMiningEng PhD *Miskolc*

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* Correct at time of printing (October 1993) including known appointments for 1994.
** Selection process for appointment of new Dean underway at time of printing.

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Dean of Health and Behavioural Sciences
Professor Sidney A Morris, BSc *Q'ld*, PhD *Flin*, FIMA, C Math, ComplEAust

Dean of Faculty of Informatics
Professor John L Goldring, BA LLB *Syd*, LLM *Col*, Barrister *NSW*, Barrister and Solicitor *ACT & PNG*

Dean of Faculty of Law
Professor Murray G A Wilson, MA *NZ & Wis*, PhD *Melb*

Dean of Students
Josephine Castle, BA *Syd*, MA *Warw*
THE UNIVERSITY COUNCIL

Elected by the Legislative Council
The Honourable Stephen Mutch, MLC, MA LLB UNSW

Elected by the Legislative Assembly
The Honourable Christopher Downy, MLA, BA DipEd Syd

Ministerial Nominees
Susan Louise Chapman, DipHealthAdmin Mitchell, BA MBA
Brian Somerville Gillett, BA DipEd Syd, HonDLitt
Paul Jeans, BE(Mech) UNSW
Roderick John Oxley, BBus AssDip Local Govt Admin Mitchell, CPA, FAIM

Ex Officio
The Chancellor: The Honourable Robert Marsden Hope, AC CMG LLB HonLLD Sydney, QC
The Vice-Chancellor and Principal: Professor Kenneth Richard McKinnon, AUA Adel, BA BEd Q'ld, EdD Harv, FACE
The Chairperson of the Academic Senate: Professor Barry Conyngham, MA Sydney, DMus Melb

Appointed by Council
Robert Duncan Somervaille, AO, AM, LLB Sydney

Elected by the Students of the University
Craig Barratt

Elected by Convocation
Canon Raymond E Heslehurst, BD Lond, ThL MTh AustCollTheol
Shirley Anne Nixon, BA
Associate Professor Robert William Upfold, BE ME PhD UNSW, ASTC, CEng, FIEAust, CEng, MIMech, AMAusIMM
Dr Winifred Lily Ward, BA PhD

Elected by the Full-time Academic Staff of the University
Associate Professor Maxwell J Lowrey, BE ME UNSW, PhD, ASTC, CEng, MIEAust, MACS
Susan E Rowley, BA DipEd Monash, BCA PhD

Elected by the Full-time General Staff of the University
Felicity McGregor, BA DipLib UNSW, AALIA

THE ACADEMIC SENATE

Chairperson of Senate
Professor Barry Conyngham

Deputy Chairperson of Senate
Professor Sidney A Morris

Ex Officio Members
The Honourable Robert M Hope, Chancellor
Professor Kenneth R McKinnon, Vice-Chancellor and Principal
Professor Gerard R Sutton, Deputy Vice-Chancellor
Professor Christine E Ewan, Pro Vice-Chancellor (Academic)
Professor William J Lovegrove, Pro Vice-Chancellor (Research)
Mr Kenneth E Baumber, Vice-Principal (Administration)
Mr John Shipp, University Librarian
Mr Greg Naimo, Director, Information Technology Services

Deans of Faculties
Professor James S Hagan, Faculty of Arts
Vacant, Faculty of Creative Arts
Vacant, Faculty of Commerce
Vacant, Faculty of Education
Professor Tibor G Rozgonyi, Faculty of Engineering
Vacant, Faculty of Health and Behavioural Sciences
Professor Sidney A Morris, Faculty of Informatics
Professor John L Goldring, Faculty of Law
Professor Murray Wilson, Faculty of Science

Dean of Students
Ms Josie Castle

Associate Deans
Associate Professor John Patterson, Faculty of Education
Professor David Farrier, Faculty of Law
Vacant, Faculty of Creative Arts

Heads of Departments
Professor Michael J R Gaffikin, Department of Accountancy
Mr J Rayner, Department of Applied Statistics
Associate Professor Robert J Whelan, Department of Biological Sciences
Professor Len Storlien, Department of Biomedical Science
Professor Graham K Winley, Department of Business Systems
Professor Leon A P Kane-Maguire, Department of Chemistry
Professor Raghunath Singh, Department of Civil & Mining Engineering
Professor Fergus O'Brien, Department of Computer Science
Associate Professor Robert G Castle, Department of Economics
Professor Christopher D Cook, Department of Electrical & Computer Engineering
Associate Professor James M Wieland, Department of English
Associate Professor Edward Bryant, Department of Geography
Associate Professor Anthony J Wright, Department of History and Politics
Associate Professor Joan Cooper, Department of Information & Communication Technology
Professor Gill Palmer, Department of Management
Associate Professor Noel F Kennon, Department of Materials Engineering
Professor Philip Broadbridge, Department of Mathematics
Professor Michael West, Department of Mechanical Engineering
Professor B Moloney, Department of Modern Languages
Professor Carol Morse, Department of Nursing
Vacant, Department of Philosophy
Professor Peter Fisher, Department of Physics
Professor Robert Barry, Department of Psychology
Associate Professor Ross Harris, Department of Public Health and Nutrition
Professor James E Falk, Department of Science and Technology Studies
Professor John Bern, Department of Sociology

Heads Of Centres
Professor Stephen Castles, Centre for Multicultural Studies
Professor Stephen C Hill, Centre for Research Policy

Elected Members

Academic Staff Elected by and from the Members of the Learning Development Centre, the Aboriginal Education Centre and the Centre for Staff Development
Ms Kim Draisma

Academic Staff Elected by and from the Members of Each Faculty
Faculty of Arts
Dr Rebecca Albury
Dr Andrew Wells
Three vacancies

Faculty of Commerce
Associate Professor Gary Linnegar
Ms Diana Kelly
Ms Barbara Cornelius
Mr Robert Williams
Dr Muayyad Jabri
Faculty of Creative Arts*
Faculty of Education
Professor Carla Fasano
Associate Professor John Hedberg
Dr Arthur Smith
Dr Wilma Vialle
Dr William Winser
Associate Professor Malcolm Harris
Dr Janice Wright
Faculty of Engineering
Professor Lewis Schmidt
Dr Tara Chandra
Dr John Montagner
Associate Professor Robin Chowdhury
Associate Professor Maxwell Lowrey
Faculty of Health & Behavioural Sciences
Dr Beverley Walker
Associate Professor Robyn Holden
Ms Irene Stein
Ms Barbara Tooth
Professor Dennis Calvert
Faculty of Informatics
Dr Peter Beadle
Professor David Griffiths
Dr Philip Laird
Dr Ian Pirie
Professor Jennifer Seberry
Faculty of Law
Professor Martin Tsamenyi
Dr Andrew Frazer
Mr Luke McNamara
Ms Penelope Pether
Ms Penelope Watson
Faculty of Science
Associate Professor William Zealey
Associate Professor Ross Lilley
Dr Leonie Jones
Dr Margaret Sheil
Dr William Price

Student Members
Mr Terry Foye
Mr Philip Jacobs
Mr Greg Kuhnert
Mr Martin Vella
Vacant

* Faculty of Creative Arts to be established in January 1994. Faculty representatives yet to be elected.
HONORARY GRADUATES

1976
DSc:  Professor Charles A M Gray, Hon JMN, BSc ME Syd, Hon DSc UNSW, CEng FI MechE, MICE, MIE Aust, FIE (Malaysia), Emeritus Professor, University of Malaya.
Professor Rupert H Myers, KBE, FTS, MSc, PhD Melb, Hon DSc, Hon LLD Strath, Hon DEng N’cle, Hon DLitt UNSW, FIMMA, FRACI, FAE, FIM, FIMM, MAIME
David E Parry, BE Syd
Sir Robert Webster, CMG, CBE, MC Hon DSc NSW, FASA

1977
DLitt:  Edgar Beale

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

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

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

1984
DLitt:  Sir Richard Kirby, LLB Syd

1985
DSc:  Sir Roden Cutler, VC, KCMG, KCVO, CBE, KStJ, BSc Syd, Hon LLD Syd, Hon DSc UNSW and N’cle (NSW), Hon DLitt NE, Hon FCA
DLitt:  Thistle Yolette Stead

1986
DCA:  John Henry Antill, OBE, CMG
MA(Hons):  Luigi Strano

1988
DSc:  Howard Knox Worner, CBE, DSc Eng Melb, Hon DSc N’cle (NSW), ABSM, CEng, FAAA, FTS, MAUSIMM, FIE Aust, FRACI, FAIE, FIM, FIMM, MAIME
Daniel Tague, DipElec/Mech Eng, CEng

1989
DLitt:  Brian Somerville Gillett, BA DipEd Syd
The Rt Honourable Sir John Grey Gorton, GCMG, AC, CH, MA Oxf
The Rt Honourable Michael Thomas Somare, PC, CH
The Honourable Edward Gough Whitlam, AC, QC, BA LLB Syd

1990
DSc:  Allan Roy Sefton

1991
LLD:  The Honourable Robert Marsden Hope, AC CMG LLB Syd, QC
Geoffrey Sawer, BA LLM Melb

1992
DSc:  Joseph Mark Gani, BSc Lond, PhD ANU

1993
DSc:  Brian Thorley Loton, AC, BMetE Melb, FIE Aust, MAUSIMM MAIME, FAIM
DLitt:  John Arthur Passmore, MA HonDLitt Syd, HonDLitt McM, FAAA, FASSA, FBA
DCA:  Roger Robert Woodward, AC, OBE

1994
DSc:  Emeritus Professor Raymond Chambers, AO, BSc DSc HonDSc N’cle (NSW), FACPA, FASSA
DLitt:  The Most Reverent Richard Henry Goodhew, THL AustColTheol, MA
LLD:  The Honourable Justice Jane Mathews, LLB Syd
EMERITUS PROFESSORS

1978 Austin Keane, MSc Syd, PhD
UNSW, 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 Qld

1988 Brian H Smith, BE PhD Adel,
MIEE, FIEAust

1989 Peter Desmond Rousch, BA BEd
Melb, PhD Wayne State,
FACE, FAIM

1990 Ian William Chubb, MSc DPhil
Oxf

1993 J Lauchlan Carter Chipman, MA
LLB Melb, BPhil, DPhil Oxf,
DipTertiaryEd NE

FELLOWS OF THE UNIVERSITY

1985 Francis Neville Arkell
Ethel Hoskins Hayton
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
Colin Denley
Gerald Anthony Freed, BSc
Manc, MIBME
Winifred Joyce Mitchell, BA MA
NE, PhD UNSW

1989 John Eveleigh, DipFA Slade Lond,
FRSA

1990 Efrem Bonacina, OAM
Giulia Bonacina, BEM
Herbert Flugelman
Ferdinando Lelli

1991 Des Davis, BA Syd, MA N’cle
(NSW)
Harold Hanson
Raymond E Heslehurst, BD Lond,
ThL MTh AustCollTheol
James Barry Kelly, FAIM

1992 Edward Walter Tobin
Cornelius Harris Martin, AO

1993 Noel Gordon Diffey, BBus Riv
Dr Sultan Aly, MBBS, Karachi,
BSc Punjab
Peter George Kell
Aboriginal Studies Resource Officer
Janice Wilson

OFFICE OF DEVELOPMENT & COMMUNITY AFFAIRS

Incorporating:

UNIVERSITY OF WOLLONGONG FOUNDATION LIMITED
AND
CO-OPERATIVE EDUCATION PROGRAM

Executive Director
Peter Rose, BA Macq

Consultant
Brian S Gillett, BA DipEd Syd, HonDLitt

FRIENDS OF THE UNIVERSITY OF WOLLONGONG

Executive Officer
Vacant

ALUMNI OFFICE

Executive Officer
Juliet Richardson, BA Birm

DIVISION OF THE VICE-PRINCIPAL (ADMINISTRATION)

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

ACADEMIC & STUDENT SERVICES BRANCH

Manager
Peter G Wood, BSc DipEd Syd

ACADEMIC SERVICES

RESEARCH OFFICE

Executive Officer, Research
Aapo Skorulis, BSc Macq, DipEd KCAE

SECRETARIAT

Senior Administrative Officer
Lynn M Woodley, BA DipEd UNSW

Administrative Officer
Trevor James, BA

* Correct at time of printing (October 1993) including known appointments for 1994.
STUDENT SERVICES
Senior Administrative Officer
Harry H Alla, BCom UNSW

ADMISSIONS
Administrative Officer
Marie L Lewis, BA

STUDENT RECORDS
Administrative Officer
Marina Evans, BM

WOLLONGONG GRADUATE CONSORTIUM
Administrative Officer
Barbra Milner, BCom

STUDENT WELFARE
Counsellors
Gregory R Hampton, BA Macq, PhD, MAPsS
Maxine Lacey, BA ANU, DipEd UNSW, BLegSt
Dawn Peacock, BA

Careers and Appointments Officer
Patricia Webster, HDipTeach Melb, BA La T, MA Macq, MACE, MAITD

Accommodation Officer
Robyn Wilkes, BA NE

BUILDINGS & GROUNDS BRANCH
Manager
Kevin E Turnbull, BA DipTertiary Ed NE, DipEd

Co-ordinating Engineer
Meng San Wong, BE WA, ME, FIEAust, CPEng

Supervisor Building Construction
Robert (Bob) Slater

Project Controller
Fred Zylstra

Administrative Officer
Barry W Lake, BA

Landscape Supervisor
Martin Bramston

Maintenance Supervisor
Eric J Young

FINANCIAL SERVICES BRANCH
Director
Susan M Smith, BCom, ASA

Administrative Officer
Douglas G Simpson, AssocDipCompAppl

FINANCIAL PLANNING (BUDGETS)
Senior Administrative Officer
Pushpa Perera, BSc Sri Lanka, DipMath MBA Melb

Administrative Officer
Chan Shah, BCom, CPA

ACCOUNTS AND BUSINESS SERVICES
Chief Accountant
Mary Youssif, BCom MStudAccy, FCPA ACIS

Finance Accountant
Lorraine Hegyi, BCom, ACA

Supervisor, Purchasing and Supply
Ross Meaker

PRINTING AND REPRODUCTION
Senior Administrative Officer
Glen Brissett

PERSONNEL SERVICES BRANCH
Manager
Chris Grange, BA UNSW

Senior Personnel Officer
Robyn Weekes, BA, ALLA

Personnel Officers
Irene Burgess (Salaries and Benefits Administration), BCom
Ann Kiceluk (General Staff), BA
Peter Maywald (Employee Relations)

Occupational Health and Safety
Co-ordinator
Jeff Owers
PLANNING AND MARKETING BRANCH

Manager
David Fuller, BEd RCAE, MA Lanc

MARKETING

Administrative Officers
Gillian Curtis
Elisabeth A Hilton, DipPE Lond IE

MANAGEMENT INFORMATION AND PLANNING

Senior Administrative Officers
David Macpherson, BMath GDipAccy

Administrative Officers
Canio Fierravanti, BCom
Aden Steinke, BCom

ADMINISTRATIVE INFORMATION SERVICES

Head
Elizabeth Nowosad, BSc Sus, MA Macq, MSSA, MACS

Computer Systems Officer 3
Trevor Gollan

Computer Systems Officers 2
Clive Foster, BSc(Eng) UNSW
Mark Hall, BA NE
James Meek, BA
Michelle Mildenhall
Rosalind Perry, BA

DIVISION OF THE VICE-PRINCIPAL (INTERNATIONAL)

Vice-Principal (International)
James W Langridge, BBus UTS, DipTertiaryEd NE, MACS

INTERNATIONAL OFFICE

Director
Eric J M Meadows, BA Syd

Assistant Director
Peter R Ball, BA Asian Studies ANU, DipEd CCAE

Administrative Officers
Patricia Tindall, BA ANU
Valri Nunn, MMgt
Lily Soh, BSc UNSW

International Students' Advisor
Diana Wong, SRN

INFORMATION TECHNOLOGY SERVICES

MANAGEMENT

Director
Gregory J Naimo, BE Syd, DipEd UNSW

USER SERVICES

Manager
Gary Kelly

Support Services
Sam Tan (Acting Supervisor) BMath(CompSc)

Sales & Maintenance Services
Allen Chang (Acting UNIX/PC Co-ordinator)
Nigel Spence (Acting Macintosh Co-ordinator)

Training Services
Vicki Ray, BA (LibSoc)

Operations
Sennur Oney (Acting Co-ordinator)

BUSINESS DEVELOPMENT

Manager
Geoff A Hamer, MA Cantab

CAL Liaison Officer
Beth Cavallari, DipTeach DipAMS GradDipEd (Comp in Ed) MEd

FACILITIES AND TECHNICAL SERVICES

Manager
James McKee, BSc MBCS MACS BA

Operations
Elwyn Walker (Operations Supervisor)

Hardware Support
Richard Wilson (Supervisor)
Bruce Robertson (Senior Technical Officer), BMath

Communications Support
Goran Andersson, BMath

Systems Support
Ian C Piper (Senior Consultant), BSc
John D Oliver (Consultant Programmer), PhD Carnegie Mellon
Kirk H Barrett (Consultant Programmer), BCompSc
LIBRARY

University Librarian
John Shipp, BA DipEd Mac, DipArchivAdmin UNSW, AALIA

Deputy University Librarian
Felicity McGregor, BA DipLib UNSW, AALIA

Research Services Librarian
Pam Epe, BA, AALIA

INFORMATION SERVICES DIVISION

Reference Librarian
Sue Pollock, BA DipEd Syd, DipChLib Riv

Senior Librarians
Neil Grant, BA Syd, DipLib UNSW, DipLib Monash
Mary Tow, BA Syd, AALIA

Law Librarian
John Bahrij, BA Macq, DipLibSci KCAE, AALIA

TECHNICAL SERVICES DIVISION

Technology Development Librarian
Neil Cairns, BA NE, DipLib Riv

Senior Librarian
Rod Higham, BA (Lib) Riv

Acquisitions Librarian
Petra Carpenter, BA (Lib & InfoSci) Riv

Systems Manager
Janette Burke, BA (LibStud) SAIT, AALIA

ILLAWARRA TECHNOLOGY CORPORATION LIMITED

Managing Director
James W Langridge, BBus UTS, DipTertEd NE, MACS

Company Secretary
Peter M Beniuk, BCom, CPA ACIM

INFORMATION TECHNOLOGY DIVISION

General Manager
Ian Reinecke, BA Melb, PhD

INTERNATIONAL DIVISION

Manager
William David McGaw, BA Qld, MA Macq

ADVANCED TECHNOLOGIES DIVISION

General Manager
John Weidemier, BEng UNSW, FIEA

TRAINING AND EDUCATION DIVISION

Manager
Kathy Jones, BA DipEd UNSW

KEY CENTRE FOR ADVANCED MANUFACTURING AND INDUSTRIAL AUTOMATION

Director
Guenter Arndt, BEngSc Melb, PhD Monash, CEng, FIEAust, FIMfgE, VDI, CIRP

Manager
William Perry, BE MBA PEng, MIEEEE

Research & Development & Technical Staff
X. Daniel Fang, BE MSc Tsinghua, PhD, CEng, MIEAust, MASME, SnrMSME
Richard Rudziejewski, MA PhD Gdansk
Devi P Saini, BE Jodh, ME Pilani, PhD WA, MIEAust, CEng
Elias Siores, BSc N'cle(UK), MSc PhD Brun, DipEd Lond, MBA, CEng, FWTIA, MIM, MIQA, AINDT

CENTRE FOR STAFF DEVELOPMENT

Head
John R Panter, BA Adv, PhD UNSW

Staff Development Officers
Elizabeth M Ellis, BA Syd, DipRSA TEFLA ACE
Maureen E Bell, BA DipEd UNSW
Sylvia Huntley-Moore, BA DipEd
Ray Stace, BA GDipEdStud MEd, MAITD

Senior Technical Officers
Richard J Caladine, BEng DDIAE, BA QIT
Barry Robson

Photographer
Simone Rose, MCA

Films Officer
Valma M Roberts
CENTRE FOR TRANSPORT POLICY ANALYSIS

Director
Ross Robinson, BA NE, MA DipEd UNSW, PhD
Br Col, MCIT

Senior Research Fellow
Glen D'Este, BSc ANU, PhD N'cle (NSW)

Research Fellows
Sophia A M Everett, MPubPol NE, PhD

Research Associate
Adel Omar

CENTRE FOR RESEARCH POLICY

Director
Stephen Hill, MBA PhD Melb, BSc Syd

Principal Fellow
Tim Turpin, BA PhD La T

Senior Research Fellows
Shantha Liyanage, BSc C'bo, PhD
Penelope Murphy, BA MSc Lond, PhD NÉ(PNG)

CONSERVATORIUM OF MUSIC

Director
Barry Conyngham, MA Syd, DMus Melb

AUSTRALIAN COLLEGE FOR SENIORS

Director
Barry M Russell, BA NE, MA Macq, DipComp
Director NE

Business Manager
Ray Boniface, BCom

Operations Manager
Elizabeth Burgess

STUDENT ACCOMMODATION

CAMPUSS EAST & KOOLOOBONG

Head
Robyn Wilkes, BA NE

INTERNATIONAL HOUSE

Head
Cynthia Halloran, BA Qld, MA ANU

Office Manager
Gary Graham

WEERONA COLLEGE

Head
Phillip Dutton, BA Monash, MEd N'cle(UK), MACE, JP

House Manager
Sandra Comerford

Senior Resident
Naveed Hussain, MCom

RECREATION AND SPORTS ASSOCIATION

Executive Director
Paul L Manning, BEd Syd, MMgt

Facilities Manager
Daniel McGoldrick, DipTeach(PE) BEd MStudEd GDipCom

Facilities Officer
Mary Sparks, GDipCom AssocDipSpSc

Programs Manager
Steve Heslop, BEd

Recreation Officer
Nicole Barlow, BAppSc

Aquatic Centre Managers
Blair Conoghan, BAppSc
Bruce Power, BAppSc

Financial Manager
Ros Robinson, BCom

Administration and Club Officer
Stacey Beer

UNIVERSITY UNION

General Manager
Nigel Pennington, BA

Assistant General Manager
Peter Bottele, BCom
FACILITIES AND SERVICES

MICHAEL BIRT LIBRARY

The Library provides information services which support and enhance the teaching and research activities of the University. Collections include the Main Library, the Law Library, the Curriculum Resources Centre and the University Archives.

The combined collections contain in excess of 500,000 items including books, serials, audio-visual materials and archival sources. In addition to these collections, access to information held in libraries throughout the world is available through inter-library loan and database searching facilities.

Most items from the collection, except material where restrictions have been imposed, may be borrowed. All University of Wollongong staff, students and graduates may borrow from the collection. Graduates of the former Wollongong Teachers' College and the staff and students of other universities may also borrow. Reciprocal arrangements are available for University of Wollongong staff and students to borrow from some other university libraries.

Borrowing rights will be suspended when items are overdue from loan. Overdue items also attract fines. The use of inter-library loans and database searching facilities may require the payment of fees for service. Details of regulations, borrowing conditions and other library services are available from the Information desk in the Library.

Library hours of opening from March to December are: Monday to Friday 8.30 am to 10.00 pm; Saturday 9.00 am to 5.00 pm; Sunday 1.00 pm to 5.00 pm. Curriculum Resources Centre: Monday to Thursday 8.30 am to 7.00 pm; Friday 8.30 am to 4.00 pm.

Hours may vary for Summer session, public holidays and during vacation. These variations are displayed on noticeboards in the Library.

UNIVERSITY UNION

The University Union commenced operations in 1964. It was created to provide a "community centre" for the University. The creation of opportunities for social and cultural interaction and development of the members is a key role of the Union; other 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 are required to pay annual fees to the Union, as part of the enrolment process, unless they are Life Members of the Union.

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

10 Union members (staff, students and life members)
4 University Council appointees
   General Manager
   SRC representative
   Recreation and Sports Association representative
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 General Manager, appointed by the University, is directly responsible to the Board.

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

Food and Beverage:
   Union Food Hall
   Bistro/Lounge Bar
   Tavern Bar and Coffee Lounge
   The Glass House - Coffee Lounge and Asian-style cuisine
   Duck Inn - Burger Bar
   University Club Lounge

Retailing:
   Union Retail Centre and Bookshop
   STA Travel

Financial:
   National Australia Bank
   Illawarra Credit Union

General:
   Union Function Centre
   Cinema/General Purpose Hall
   Meeting and Conference Rooms

Hair Care:
   The Cutting Crew

Medical:
   General Practitioners
   Optometrist
   Dentist

Student Welfare:
   SRC Offices
   Student Services
     - Counselling
     - Careers Advice
     - Accommodation Office
     - Women's Room

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

Asosiasi Pelajar Indonesia
Association of Chinese Students
Campus Christians
Campus East Residents Association
Catholic Society
Croatian Society
Debating Society
Film Group
Geological Society
Hong Kong Students Association
Il Circola Italiano
Indian Students Society
Industrial Relations Association
International House Residents Association
Iranian Students Association
Kooloobong Residents Association
Law Society
South Pacific Students and Friends Society
Students for Christ
Student Life
Thai Students Society
Weerona Residents Association
Wollongong Access Radio to the Public Society
Women's Collective
Writers Club
Writers Society

Union 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. 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.

Union 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 centre provides a happy and stimulating atmosphere where children can stay while their parents are at class and/or work.

Fee relief is available depending on family income. Parent involvement in the daily activities is welcomed but not mandatory. The centre is open from 8.00 am to 6.00 pm Monday to Friday. Kids' Uni cares for children in the 0-6 year old age group. After school care is available. There is also a School Vacation Program. Qualified Early Childhood 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 is 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 of the Centre or phone Kids' Uni on 213072.

Application forms and information sheets can be obtained from the centre.

University Family Day Care
This service provides supervision for children in selected home settings. Human Development Officers service the scheme. This involves regular visits to the homes of caregivers with advice and education. After school care and emergency care are available.

For further information contact the Coordinator on 269211.

STUDENTS' ASSOCIATION

The University of Wollongong Students' Association is the name of the official organisation for students on campus. The Students' Association is run by students and for students. The Students' Representative Council is a 21-member body elected each April, taking office on May 1st of each year to govern the affairs of the Students' Association. In 1993 the Students' Association Executive is as follows:

President
Vice President
Honorary Secretary
Honorary Treasurer
Education Officer
Activities Officer
Women's Officer
Media Officer
Environment Officer
Welfare Officer
Vacant
Samantha Asimakoula
Katie Millington
Vacant
Juan Medin
Andrew Aitcheson (Acting)
Ngoc Hong Tran
Jason Dickie
Carl Runeson
Angela Mintzas
and eleven Representatives.

All these members are available to assist you and to take comments and suggestions regarding the running of the Students' Association services.

The SRC is a legitimate student voice on campus. It provides essential interest and social activities. In services, the SRC provides an on-campus free legal service, casual employment service, childcare, second hand books, cinema concession cards, student discount booklet, bands, social functions, a counter calendar and postgraduate counter calendar, student taxation advice, Austudy forms and advice, a free tea and coffee service, photocopying, thesis binding, daily newspapers, use of computers and printers and a student insurance plan.
The SRC also publishes a fortnightly student newspaper, the *Tertangala*. Although a number of journalists are employed on the *Tertangala* to report on news and events around the University, any student is welcome to make a contribution to the newspaper. Commentary, fiction, poetry and news articles are all welcome. Student classifieds and advertisements can be submitted on any topic for a fee. Enquiries at the *Tertangala* office in the SRC building next to the Duck Inn.

The SRC also funds and encourages a clubs and societies program. Some of the SRC clubs and societies include:

- A.I.E.S.E.C. Australian Chartered Accountants Student Society
- Civil Engineering Society
- Club Italia
- Greek Society
- Indonesian PPIA
- Korean Students' Association
- Latin American Society
- Material & Metallurgy Association
- Mechanical Engineering Social Society
- Movement Society
- Muslim Students' Association
- Pakistan Students' Association
- Women's Action Association
- Women in Engineering Network

The SRC is involved in campaigning for better education, welfare conditions and facilities for students on campus. It has embarked on a series of faculty reviews to continue through 1994 designed to improve facilities.

The SRC also provides advice and assistance on a variety of student problems and concerns. These include advice on Show Cause, academic misconduct, Austudy applications, change of subjects, Social Security, sexual harassment and other legal and housing issues.

The SRC organises regular debates on campus involving public figures from around Australia in which members of the University community are invited to participate.

Finally, the SRC maintains liaison between students of the University and the University Council (the governing body of the University). The SRC is also involved in raising student concerns with a variety of local state and national bodies.

### ABORIGINAL EDUCATION CENTRE

The Aboriginal Education Centre (AEC) was established in 1984 to provide for equity of access, participation and outcome for Aboriginal and Torres Strait Islander people.

As well as HSC and Mature-aged entry the University has a policy which supports enrolment of Aboriginal and Torres Strait Islander students who may not have had an opportunity to complete formal schooling. Each year the AEC runs an Alternative Admissions and Orientation Program. In addition to supporting students on campus, Centre staff are also involved in a Secondary Schools and TAFE Visit Program. Connected with Aboriginal community and organisation contact, these visits are aimed at disseminating information, encouraging Aboriginal and Torres Strait Islander students to achieve their Higher School Certificate, and raising levels of awareness about courses available at the University of Wollongong. Since the establishment of the Centre, there has been a steady increase in the number of Aboriginal and Torres Strait Islander students enrolled in (and graduating from) undergraduate and postgraduate courses.

The Aboriginal Education Centre is involved in teaching and research programs, particularly with the Faculties of Education, Arts, Health and Behavioural Sciences and Law, and conducts information sessions for various community groups both within and outside the University. These include sessions for international students enrolled in Foundation Studies with the Illawarra Technology Centre (ITC). Research and development in various areas relevant to Aboriginal issues is beginning to play a more significant role in the Centre's activities. There are strong independent links established between the AEC, Aboriginal communities and organisations. Centre staff form a bridge and important conduit for communication between Aboriginal and non-Aboriginal people.

The Centre has an establishment of seven staff who have a strong commitment to the education and development of Aboriginal and Torres Strait Islander students:

- Ms Margaret Valadian - Head
- Ms Cilla Rowe - Co-ordinator Berry Campus
- Mr Russell Gluck - Lecturer
- Ms Carole Speechley - Student Support Officer
- Ms Kate Conyngham - Academic Advisor
- Ms Janice Wilson - Aboriginal Studies Resource Officer
- Mrs Anne De Haas - Administrative Assistant

### RECREATION AND SPORTS ASSOCIATION

All students pay compulsory fees to the Recreation and Sports Association (RSA) which automatically makes them members.
Membership entitles students to reduced rates on all facilities and most programs. Students are required to produce their student identification card to obtain the member rate.

The RSA’s aim is to provide a broad range of healthy recreational experiences via its facilities and programs.

Students may participate in recreation programs through Lunchtime Sport, General Interest Courses and Outdoor Adventure Activities.

For those interested in fitness, the RSA offers a range of activities including aerobics, step and circuit classes, weight training and fitness assessments.

The University Recreation Centre comprises a 2 Court stadium which caters for Basketball, Badminton, Volleyball, Indoor Soccer and many other activities. In addition, the RSA run a 50 metre outdoor heated Aquatic Centre, a synthetic hockey surface, ovals, and gymnasium. 1994 will see the completion of swimming pool changerooms, a new purpose built aerobics room overlooking the pool and a new 4 court tennis complex.

Students may also join any of the constituent clubs of the RSA, these include:

Archery, Athletics, Badminton, Basketball, Cricket, Cycling, Hockey, Netball, Outdoors Club, Rugby League, Rugby Union, Sailing, Windsurfing, Scuba Diving, Skiing, Soccer, Squash, Surfing, Table Tennis, Tae Kwon Do, Tennis, Touch, Triathlon, Underwater Hockey, Volleyball, Waterpolo.

The RSA will host the 1994 Australian University Games comprising competition across 18 sports from 25 to 30 September. 3000-5000 student athletes are expected to attend.

All enquiries to the Recreation Centre, Building 13. Open 7 days, telephone 281266 or ext 3361/3362.

CHAPLAINCY SERVICE

A Chaplaincy Service is provided within the University for the benefit of students and staff. 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 in the Chaplain’s office or by phoning 213534. The office is located on the first floor of the Union Building near the Counselling Centre.

Anglican: The Chaplain c/- 4 Moore Street Gwynneville 2500 Tel: 295561
Baptist: Rev J Taylor 216 Jacaranda Avenue Figtree 2526 Tel: 291671 Wollongong Baptist Church Smith Street Wollongong
Congregational: Rev D Bartlett 22 White Place Figtree 2525 Tel: 273622 (office) 717162 (home)
Jewish: Dr H Immerman Shalom College, University of UNSW PO Box 1, Kensington 2033 Tel: (02) 6631366
Presbyterian: Rev Dr D L Ferrington, St Andrew’s Manse, 25 Stanbrook Avenue, Mt Ousley 2519 Tel: 261725 (office) 261458 (home)
Catholic: Rev John Nestor Catholic Presbytery 24 Jerramatta Street Dapto 2530 Tel: (018) 423580
Uniting: Rev K Kestel 55 Francis St Corrimal 2518 Tel: 843605 (office) 843492 (home)

UNIVERSITY SUPPORT SERVICES

UNIVERSITY COUNSELLORS

The University Counsellors offer free and confidential counselling to students or staff who want to talk through and change areas of difficulty, conflict or crisis in their lives. Some of the issues people talk to a counsellor about are:
• I'm depressed and anxious about...
• I want to become more confident and assertive...
• I can't get started with my assignment...
• I'm bored with my course, what can I do?
• I'm having difficulty managing study and a family...
• 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...

The Counsellors can also assist with other problems such as eating disorders, alcohol and other drug problems, racial and sexual harassment, interpersonal conflicts, surviving incest.

Personal development programs are offered in areas such as stress management, assertiveness training, self-confidence building and preparing for university. The Counselling Service also organises networks and programs which are designed to assist particular groups of students develop confidence and succeed at university. Networks are organised for mature age students, women in non-traditional areas and women in honours and postgraduate courses. A variety of orientation programs are also organised at the beginning of each session. Contact the Service for more information.

To make an appointment to see one of the counsellors, telephone 213445, or call in at the office located on the second floor above the Union Retail Centre. The service is free and completely confidential.

INTERNATIONAL STUDENT ADVISER

Support and assistance is available to help international students with the difficulties they might face in adapting to life in a foreign culture. If students are having difficulties it is important that they seek advice. International students often seek assistance with settling in, homesickness, bad news from home or emotional stress which may arise from the pressures of study or problems at home. International students can consult the International Student Adviser or the Counsellors for assistance with any problems. The International Student Adviser can provide advice on a wide range of welfare problems or difficulties with government departments and can also help students meet other students and community members.

To make appointments to see the International Student Adviser telephone 213173, or call in at the office located on the second floor above the Union Retail Centre.

RESOURCES FOR STUDENTS WITH DISABILITIES

Disability Adviser

The Disability Adviser can provide information on resources available at the University for assisting students with disabilities and advice on how particular disabilities affect university study.

Students with Hearing Impairments

Amplification systems are available for students with hearing impairments. The equipment can be used to amplify the speaker's voice in lectures and seminars. The lecturer uses a small portable microphone which is linked by an FM transmitter/receiver to the student who can use headphones, connected directly to his or her hearing aid or use an induction plate. The equipment uses batteries, is unobtrusive and portable. Students who wish to use the amplification systems can borrow a set for the duration of their course. Students can also be provided with note takers for lectures.

Students with Arm or Spinal Injuries

Students who have difficulty writing, because of arm or spinal injuries, can be provided with note takers for lectures. Students can also be provided with dictation equipment which they can use to dictate their assignments for transcription by a typist.

A computer writing tablet is available for use by people who cannot use a keyboard. 'Headmaster' equipment, which enables hands-free operation of a computer, is available for use by students who have difficulty using a pen or a keyboard. Computer software is also available for assisting with the use of a keyboard.

Ergonomic furniture is available for use in lectures and classes and in a room designated for use for students with disabilities located on the ground floor of the Library. A motorised scooter is available to assist students with moving about the campus. A rest room for use by students with disabilities is located in the Communications Building lecture theatre complex.

Students with Vision Impairments

A 'Voyager' print enlarging device and computer scanning and reading equipment (OsCaR) is available with a 'Versa Point' braille embosser with 'Duxbury' braille translation. The computing equipment also has screen enlarging and reading software which
provides access to a range of PC software. A 'Keynote' computer and a 'Braillemate' notetaker are also available for students to use in writing assignments and taking notes in lectures. This equipment is located in the room for students with disabilities in the Library. Photocopy magnification facilities can also be provided.

STANDARDS

STANDARDS is a group that has been set up by students with disabilities for networking and advocacy. The group meets regularly and deals with issues relating to study and access with a disability.

For information and access to these resources contact the Disability Adviser telephone 214352, or call in at the office located on the second floor above the Union Retail Centre. Students with disabilities are advised to contact the Disability Adviser before they commence University.

CASUAL/PART-TIME EMPLOYMENT

The casual and part-time employment service operates out of the Student Representative Council office. Contact 214201.

CAREERS AND APPOINTMENTS SERVICE

A Careers and Appointments Service is located on the 3rd floor of the Union Building. Individual and group advice is given and a careers library is maintained.

Employer Campus Interviews

Employers visit the campus in April, May and September to interview final year students for employment in the following year. Final year students need to familiarise themselves with this program and to read the notice boards outside the Careers & Appointments office. Information is also placed on the NetNews Bulletin Board UOW Careers. A mail out of information goes to all final year students each year.

Job Preparation (Interviews/Resumes)

Workshops are conducted throughout the year to assist students to prepare for the job search. An assistant is available one day per week specifically for preparing resumes and discussing interview techniques etc.

Career advice and career counselling is supplied through an appointment system. The Careers & Appointments Officer is Patricia Webster and the Secretary is Carmelle Scott. Enquiries telephone 213324 or 213325, internal extensions 3324 or 3325 and Facsimile 262399.

ACCOMMODATION

COLLEGIATE

Each residential college has traditionally offered students accommodation supportive of the student's academic goals. They may be thought of as offering accommodation with "extras". Both 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 residences 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 residence and on weekends 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 residences for the first few weeks until the student has time to purchase them locally.) Individual student rooms are cleaned weekly. Laundries with washers, driers 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 residences and pastoral care of the residents is provided by professional staff during business hours, and by postgraduate house tutors after hours. House tutors also help organize residential study groups and are available for informal academic assistance. A shuttle bus service transports residents to and from the main campus during week nights.

International House

Hindmarsh Avenue, North Wollongong, the closest of the University's Halls to the main campus, accommodates 200 students in single and shared study/bedrooms. Accommodation is for a 40-week academic year, including recess periods. Accommodation with reduced services is also generally available throughout December-February recess. This is sometimes an advantage for overseas students who wish to remain in residence during the long summer recess. Fees for 1994 are $5,800 for a single room, and $4,600 for a shared room. Both are due in two equal installments in February and July.
Weerona College
Throsby Drive, a 20 minute walk from campus, accommodates 200 students; 130 in single study/bedrooms, and 70 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 1994 are $5,800 for a single room, and $4,600 for a shared room. Both are payable in two equal instalments due in March and August.

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

Admission to Halls of Residence
Each Residence is administered separately from non-collegiate accommodation by the Head of International House and the Head of Weerona College. Students wishing to live in the Halls of Residence as a first preference will ordinarily be interviewed by the Head of the preferred Residence. Inquiries about the Halls can be made directly to Cynthia Halloran, for International House, (042) 299711 (Facsimile (042) 264370) and Philip Dutton for Weerona College (042) 284022 (Facsimile (042) 296136).

NON COLLEGIATE

Campus East
Cowper Street, Fairy Meadow, is a 40 minute walk from campus (or a shuttle bus service is available). Campus East accommodates 375 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. Fees for Campus East for 1994 are $6,105 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 190 students in 38 furnished houses and apartments. Residents of Kooloobong live independently in individual houses and apartments of 5 students, doing their own cooking and cleaning. Desk, bed, wardrobe, bookshelves in study/bedrooms; refrigerator, stove cooktop, microwave oven in the kitchens; 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 ordinarily not available to first year students. Fees for Kooloobong for 1994 are $4,168 payable in two equal instalments.

Accommodation Office
The University has a Housing Officer who assists students wanting to find private accommodation. The Housing Officer, Diane Armstrong, can be contacted by telephoning (042) 213216.

General
Private accommodation is usually available in the suburbs around the campus. With rooms costing approximately $60 per week, apartments from $120 per week, while house and condominium style apartments, which can be shared by several students, range between $170 and $250 per week, depending on size, style and location.

NSW REQUIREMENTS FOR TEACHERS

Information regarding correct undergraduate degree patterns for the purposes of teaching can be obtained from Dr Michael Wilson, Faculty of Education, telephone 213792.

ARMY RESERVE UNIT

The University of Wollongong Company of the University of New South Wales Regiment (UNSWR) is an Army Reserve Unit whose role is the production of Officers for the reserve. Enlistment is voluntary, and is open to male or female students. Enlistment criteria is that students must hold a HSC or equivalent with a high standard pass in English and three other subjects. All potential recruits must also be Australian citizens. The Regiment parades on a Wednesday evening and the training schedule is designed to avoid clashes where possible 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 the University of Wollongong Company, UNSWR, Military Road, Port Kembla 2505. Telephone (042) 741861 between 8.00 am and 4.00 pm weekdays or Wednesday evenings from 7.00 pm to 9.00 pm.
FRIENDS OF THE UNIVERSITY OF WOLLONGONG ASSOCIATION

This association which was constituted in 1993 has taken over the membership and responsibilities of the limited company formerly charged with the mission -

"To create and enhance, through the Friends’ unique access to both the University of Wollongong and the local community, understanding, pride, enthusiasm and support for the role and achievements of the University”.

The association recruits members of the community and the University who are willing to help achieve this mission. In turn, members are kept informed of the University's plans and achievements and invited to contribute to them.

For further information contact the Executive Officer on (042) 213169.

ALUMNI ASSOCIATION

The Alumni Association offers a means to graduates, diplomates and former staff of the University (who are the alumni) to remain in contact both with the University and with each other. These people have the potential to be the University’s best ambassadors in the community and they themselves have much to gain by keeping in touch.

Alumni Association members receive The Outlook, the University's alumni magazine, twice a year and are invited to reunions and other functions as they occur. Several chapter groups, e.g. Engineering, Commerce, International House and the Campus Chapter as well as some located overseas, are now operational and they organise social and other activities.

Associate Membership of the Alumni Association is open to current students and staff (at a subscription rate of $20.00 per annum) who are then able to benefit from a range of special rates available to alumni. The Association is also a great way for students to meet Wollongong graduates which can be very helpful on a professional level.
STUDENT CHARGES

According to Government regulations, students, both undergraduate and postgraduate, 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 1994 all registered students will be required to pay:

Entrance Charges At First Enrolment:

| University Union ** | $25 |

* For certain categories of students such as international students enrolling on a full fee paying basis and some postgraduate fee paying students, the charges are included in the course fee.

** Life members of these bodies are exempt from the appropriate charge or charges. See section on exemption from payment of fees.

Annual Subscriptions:

| University Union ** | $160 |
| Recreation & Sports Association ** | $76 |
| Students' Representative Council | $36# |

Exemptions

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

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

ii. Exemption from payment of fees for the Recreation and Sports Association will be granted to life members of the Recreation and Sports Association.

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

Other Charges

| Application fee to amend academic record | $80## |
| Replacement of student identification card | $5 |
| Parking Charges (per annum) | $620# |
| Guaranteed Places Category 1 Places | $130 |
| Category 2 Places | $75 |

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.

International Students

International students are required to pay extra fees for a course if they undertake subjects/credit points in addition to the normal full time load. Students pay reduced fees (receive a credit) if they undertake subjects/credit points less than the normal full time load. This does not apply to AIDAB, IDP, Study Abroad or Exchange students. If a student undertakes the normal full time load for a course, the fee does not alter. The full list of fees for international students is available from the International Office.

## Under review at time of printing.

# Payable if student error.
The operative dates for calculation of the number of credit points in which international students are enrolled will be 30 March for Autumn Session and 30 August for Spring Session each year. Students who withdraw from subjects after these dates will still be liable for the fees for those subjects. These dates are known as the International Students Audit Dates.

Re-enrolling Undergraduate and Postgraduate students

Failure to re-enrol by the prescribed date – Charge $40

Late Charges

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 $50
Charges paid subsequent to the second week of session $80

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 (Academic and Student 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 (HECS) 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 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 am to 4.30 pm, 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.
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 enrolls.

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 25%. If a student elects to pay the liability to the University “up front” he/she should make payment of the liability by the date prescribed.

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 with appropriate evidence of exemption.

Note: HECS election payment cannot be changed in autumn session if the student has enrolled in the proceeding summer session.

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 each student’s mailing address 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.

These are:
- fee paying students enrolled in postgraduate courses for which fees are charged in accordance with Commonwealth guidelines;
- students enrolled in non-award courses;
- 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; and
- students who receive a postgraduate exemption scholarship, which includes a special allocation of postgraduate scholarships for the professional development of teachers.

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 EXCHANGE PROGRAM

The Student Exchange Program, co-ordinated by the International Office, gives undergraduate and postgraduate students the opportunity to complete part of their degree overseas by undertaking one or two sessions at some of the best institutions in the USA, UK and Europe. Tuition fees are waived as part of the reciprocal agreements but students must pay for their own accommodation, airfare and living expenses.

Exchange opportunities are available at the following institutions:

University of California (Berkeley, Davis, Irvine, San Diego, Santa Barbara, Santa Cruz, Riverside, Los Angeles)
California State University, Long Beach
University of Colorado, Boulder
Humboldt State University, Arcata
University of Illinois, Urbana-Champaign
Indiana University, Bloomington
University of Kansas, Lawrence
University of Massachusetts, Amherst
University of Miami, Florida
Montana State University
University of Nebraska, Lincoln
University of North Carolina, Chapel Hill
New Jersey State College System

University of Exeter, UK
University of Warwick, UK

Université d'Orléans, France
Other institutions in Europe via the University of Miami.

Some scholarships, funded by the Illawarra Technology Corporation and the University, are available to support the Student Exchange Program.

More information about the Exchange Program is available from the Study Abroad Office, Ground Floor, Administration Building, Monday to Friday 9.00 am to 5.00 pm, telephone (042) 213170.
STUDENT PROCEDURES

General Conduct
Acceptance as a member of the University implies an undertaking on the part of the student to observe the rules, by-laws and other requirements of the University, in accordance with the declaration signed at the time of enrolment.

Smoking is not permitted during lectures, in examination rooms, in the University Library or other designated non-smoking areas. 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, 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 above 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 Security Office, Union Building.

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.

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 requesting an enrolment record, when applying for travel concessions, when notifying a change of address and when requested, for any appropriate reason, by a member of University staff.

Students who lose their Identification Card must notify the Vice-Principal (Administration) as soon as possible. A charge of $5 is charged for a replacement card. Proof of identification must also be produced.
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.

**Parking**
Approximately 2,200 parking spaces are available on campus. These spaces are categorised into Red and Blue areas, with the Red areas closest to campus facilities.

Red parking permits cost $130.00 pa and Blue permits cost $75.00 pa. Half year permits are also available on application at the University Cashier. Purchase of a parking permit allows access to the campus by car/vehicle but does not guarantee an on-campus parking space. A dedicated reserved parking space is available in the Multistorey car park at a premium price yet to be set for 1994 ($620.00 for 1993).

A parking permit costing $20.00 pa gives access to the motorcycle parking areas on campus.

**Transport**
University shuttle bus services link Campus East, International House and Weerona campus with the main University campus.

Wollongong bus operators provide services to the University from all areas of Wollongong (north to Austinmer and south to Shellharbour). The University is located within 15 minutes walking distance from North Wollongong Railway Station and bus operators also service this connection.

Bus services also run from the Bargo, Picton area and the Campbelltown district. Timetables are available from the University or the bus operators.

The University is located 5 kilometres from the Wollongong city centre with easy access from the major road systems.

**Student Travel Concession Passes**

**Train**
Identification cards issued by the Railways of Australia are available to eligible 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.

**Bus**
Applications for private bus concessions are available at the Student Enquiries Office, Ground Floor, Administration Building.

**Student Loans**
The University operates a student loan scheme from funds made available by the Federal Government under the Special Assistance for Students Program. All University of Wollongong students (except international students) are eligible to apply for a short-term loan. Loans are available to cover essential living and study expenses (e.g. accommodation, text books, instruments and other expenses associated with study) but not for cars or overseas excursions. For information and application forms, contact the Student Enquiries Office, Ground Floor, Administration Building, Telephone (042) 213927.

*Note: Student loans are not available to assist payment of liability under HECS.*
EXAMINATIONS

Formal University examinations may take place at the end of each session. Timetables showing the time and place at which individual examinations will be held are posted on notice boards. Misreading of the timetable is not an acceptable excuse for failure to attend an examination. Examination results are posted to each student's mailing address. No information concerning examinations or results will be given by telephone.

EXAMINATION AND ASSESSMENT RULES

PART I - Interpretation

1. In these Rules, unless the contrary intention appears:

(a) "assessment work" means all essays, tests, papers, theses, demonstrations, performances and other work whatsoever whether written or otherwise other than examination papers within the meaning of any Course Rules or Schedules;

(b) "candidate" means any person registered for a degree, diploma, associate diploma or undertaking a non-award program;

(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 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 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

(j) be guilty of any other act of misconduct as defined in Section 3 of the Rules for Student Discipline.
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 Rules, 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 Section 7 of the Rules for Student Discipline.

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

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 Section 10 of the Rules for Student Discipline.

8. The Vice-Principal (Administration) may refer a report pursuant to clause 4 to the Vice-Chancellor, in which event the reference shall be deemed to be a complaint pursuant to Section 12 of the Rules for Student Discipline 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 Rules 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 Rules, 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 Section 27 of the Rules for Student Discipline,

(a) may recommend to the Vice-Chancellor that the candidate receive a zero mark;

(b) 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 on the grounds of lack of due process in the investigation of the complaint.

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.

14. Any assessment work submitted by a candidate must be in accordance with Course Rule 010 (3) which requires that such work must be the work of the candidate and not have been submitted for assessment elsewhere unless otherwise approved; 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 Rules by a candidate.
PART IV - Rules and Procedures for the Conduct of Examinations

16. (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 international student with written approval of the Vice-Principal (Administration), may use standard translation dictionaries; the written approval and the dictionary must be shown to the Examination Supervisor prior to the commencement of the examination.

(k) A candidate who commits any infringement of the Rules governing examinations may be expelled immediately from the examination room, and is liable to such further penalty as may be determined in accordance with the Rules for Student Discipline or Examination and Assessment Rules.

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 Academic Unit Head who has the authority to take whatever action is deemed appropriate in determining the student's overall results. Students should refer to the section on Special Consideration on the next page for more details.

Withheld (WM and WE) Results

Students may be granted a withheld result (i.e. WM or WE grade) on the basis of medical, compassionate or other circumstances (see section on Special Consideration).

Where so granted, students should contact the relevant Academic Unit immediately to ascertain assessment requirements. It is the student's responsibility to make contact with the Unit and failure to do so may result in a fail grade being determined.

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 Academic Unit.

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.

SPECIAL CONSIDERATION AND SUPPLEMENTARY EXAMINATIONS

1. Background
These guidelines set down the current policy in relation to
• the handling of requests for special consideration, and
• the granting of supplementary examinations.

2. Purpose of the Guidelines
The purpose of the guidelines is to bring a measure of equity and consistency into the handling of special consideration requests across the campus.

3. What is special consideration?
A student who is affected by serious illness or other circumstances beyond his or her control may ask that those circumstances be taken into account when performance in an individual subject is being assessed, so that those circumstances do not adversely affect the student's result in the subject.

Special consideration may mean that
a) a student's result is reconsidered without any additional work required, or
b) the student must submit additional written work and/or sit for a supplementary examination.

4. Eligibility
A student who can satisfy the University that he or she has
a) suffered serious illness or other circumstances beyond his or her control which have or are likely to affect his or her academic performance in a subject, or
b) been prevented from meeting scheduled assessment requirements by serious illness or other circumstances beyond his or her control may apply for special consideration, including supplementary assessment.

Special consideration may lead to the University requiring the student to submit additional work, or to sit for a supplementary examination, or both.

5. Method of application
A written application, together with supporting documentation, must be lodged normally no later than 7 days following serious illness or other cause beyond his or her control, with the Student Enquiries Office, which will be responsible for transmitting the request to the appropriate Academic Units.

It is the responsibility of the applicant to check the outcome with the relevant Academic Unit as soon as possible, but not later than two weeks after lodging the application.

6. 'Supporting documentation' means:
   a) a medical certificate, stating in reasonable detail:
      1. the date or dates of any relevant consultations or attendances;
      2. if relevant, the general nature of the complaint and the treatment; and
3. a specific statement of the opinion that, as a result of the complaint or treatment, the student is or was unfit to complete the required assessment or examination on or by the date specified; (medical certificates which do not contain all this information will not be accepted); or

b) a letter from the University Counselling Service or a professional counsellor of equivalent standing setting out the general nature of the problem affecting the student, and the opinion of the person signing the letter, that the student, because of the problem, is or was unfit to complete the required assessment or examination on or by the date specified; or

c) a statutory declaration setting out the facts upon which it is suggested that special consideration should be given, attaching any supporting documents.

A letter from an employer, etc, is not sufficient.

7. Acceptable reasons
The following are considered acceptable reasons for special consideration:

a) valid medical, compassionate and serious unforeseen personal events that prevent a student from meeting scheduled assessment deadlines; or

b) validated conflicts between scheduled assessments and sporting, cultural or other activities at a national or international level, so long as the conflicts are raised well in advance with the relevant Academic Unit.

8. Reasons associated with employment are acceptable only in exceptional circumstances.

9. Processing of applications
The decision to accept or reject an application for special consideration in each subject is to be made by

a) the Head of Department concerned or a member of the academic staff of the Department designated by the Head for the purpose, or

b) the Departmental Assessment Committee, or

c) in a Faculty not made up of separate Academic Units, the Associate Dean, on the advice of the examiners for the subject or course co-ordinator, and/or year director, as appropriate.

10. Basis for granting special consideration
The decision whether or not to grant special consideration must be based on whether or not the circumstances amount to serious illness or circumstances beyond the student’s control which have affected or may affect the student’s performance in the subject. Without limiting the matters that may be considered, the person making the decision may consider:

a) the possibility, based on the student’s performance in other aspects of work required for the subject, of the student achieving at least a PC/PT grade in the subject;

b) the record of the student in other subjects in which the student is or has previously been enrolled; and

c) previous applications for special consideration.

11. Supplementary examinations
a) Early examination/assessment will not be permitted by any Academic Unit on the grounds of lengthening the period available to the student for holidays/sightseeing.

b) Illness or other grounds beyond the student’s control.

Supplementary examinations will normally be granted only:

1. if the student did not sit the standard examination for an acceptable reason, or

2. if the student, after reporting the illness to the Supervisor-in-Charge, left the examination room because of verified illness.

Reasons such as sleeping in, misreading timetables, work commitments, last subject required to complete a course, etc. are normally not acceptable.

c) Religious reasons
Where a student is unable to sit for the standard examination for religious reasons, that student will normally be permitted to sit for either
1. a supplementary examination after the normal examination period, or
2. the standard examination, for the subject, provided that during the time other students are sitting for that examination and until the time the student sits for the examination, the student
   i. is under the constant supervision of a person approved by the University, and
   ii. sits for the examination as soon as possible after the scheduled examination time.

12. Decision
   The decision whether or not to grant a supplementary examination must be made within seven days of receiving the application and the student advised in writing as soon as possible.

13. Timing of Supplementary Assessment
   Supplementary assessment is to be completed at a time convenient to the Academic Unit concerned and it is the responsibility of the applicant to comply with the requirements of the unit; however, the results must be declared within the normal period allowed for the W-M- result i.e. initially within a period of five weeks after the Examination Committee meeting or, in exceptional circumstances, a further five weeks after that period.

14. Responsibility
   It is the responsibility of each student who applies for a supplementary examination:
   a) to be available to sit for the examination at any time during the vacation period immediately following the application; and
   b) to leave a contact address and telephone number with each relevant Academic Unit.

15. Form of Supplementary Assessment
   This can take any form that is appropriate in the circumstances. However, the student must be informed in advance concerning the method of assessment to be used, particularly if there is to be any departure from the format announced at the start of the subject, or from that used in the standard examination. This information must be conveyed to the student in writing. Faculties or Academic Units may determine that SUPPLEMENTARY EXAMINATIONS MAY BE ORAL, but should notify students in advance if this is the case. Students must accept the form of supplementary assessment determined by the Academic Unit.

16. Where a written examination is conducted, Academic Units will ensure that, so far as possible, the security procedures and the venue for the examination, are as similar as possible to those followed in the standard examination periods.

17. Where an oral examination is conducted, a second staff member should be present during the examination.

18. Students should keep originals and copies of all essays, assignments or reports submitted in any subject, as special consideration may involve the reconsideration of that work, and they must be prepared to resubmit such work immediately upon request.

19. Appeal
   A student whose request for special consideration has been rejected may appeal in writing to the relevant Dean within 21 days of the giving of the decision by the Academic Unit.

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

APPLICATION FOR AN ACADEMIC AWARD
   Applications for admission to a degree, diploma or associate 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 an award conferred.

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 an application fee of $80. The fee will be refunded in cases where an error has been made by the University. Applications must also be accompanied by a letter giving relevant details.

An academic record will be amended in special circumstances only and the payment of the application fee will not guarantee that academic record will be amended.

Students should note that where an application to amend their academic record by adding a subject for which they were not enrolled is successful, they are required to discharge their increased Higher Education Contribution Scheme (HECS) charge on the same basis that the original HECS liability was to be discharged i.e. either up-front or deferred payment.

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

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 Course Rules allow for you to apply to have the 'FAIL' amended to 'DISCONTINUED'.

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 submitted before the last teaching day in which the subject is offered; after this time, an $80 charge may apply.

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

3. Reassessment of Mark/Grade
If you feel that the mark or 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 mark or grade, you should approach the lecturer(s) concerned to discuss the matter.

If, after this discussion, you feel the mark or grade is not correct, you should approach the Head of the Unit responsible for the subject to discuss the matter further.

After you have taken these steps and you still feel the mark or grade is not correct, you may write to the Dean of the Faculty, setting out the reasons you believe the mark or 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.

If you are not satisfied with the outcome, you may then approach the Dean of Students and request a further investigation of the matter.

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 reassess the academic quality of the work.
ACKNOWLEDGEMENT PRACTICE/PLAGIARISM

In a university, ideas are important, and it is also important to give people appropriate credit for having ideas.

There are several reasons why you should give people credit when using their ideas; three of the more important of those reasons are:

"fairness to authors and other students, the responsibility of students to do independent work, and respect for ownership rights." ¹

If, in writing an essay or report, you copy a passage from a book word-for-word and don’t give a reference to the book, this is:

- unfair to the author who wrote the passage in the book;
- unfair to other students who do their own work without copying;
- failure to do independent work as expected in a university;
- breach of copyright.

Giving and gaining credit for ideas is so important that a violation of established procedures has a special name: plagiarism. Plagiarism means using the ideas of someone else without giving them proper credit. That someone else may be an author, critic, journalist, artist, composer, lecturer, tutor or another student. Intentional plagiarism is a serious form of cheating. Unintentional plagiarism can result if you don’t understand and use the acceptable scholarly methods of acknowledgement. In either case, the University may impose penalties which can be very severe.

Over many years, procedures have been developed for acknowledging ideas in all forms of expression. In published writings, for example, authors are expected to give references to articles and books on which they have relied, and to give written thanks to people who have helped them in preparing their work.

There are several methods for giving credit in written work and the lecturers and tutors in the academic units in which you study should inform you about methods that are acceptable to them. A good way to gain a better understanding of those methods in a particular discipline is to read articles published in academic journals of that discipline.

The following examples will help you understand some of the common methods for acknowledging your sources. If you have any questions about these methods, check with your lecturer or tutor.

Acknowledging Sources of Quotations

If you copy a paragraph or even a sentence from an article, a book, lecture notes or an essay or report of another student, it should be put in quotation marks and the article, book or other source should be listed in a footnote or in the bibliography or in the references.

Example 1: “The subjugation of thought in Australia through stringent censorship and draconian defamation laws has existed throughout the 200 years of white settlement” (Pollak, 1990, p. 7).

Correct

The bibliography should then include:


Example 1 is presented using the author-date system in which the author of the work and the date the work was published are listed in brackets.

Example 2: “The subjugation of thought in Australia through stringent censorship and draconian defamation laws has existed throughout the 200 years of white settlement.”²

Correct - see the footnote

Example 2 is presented using the footnote system in which the full reference is given as a footnote. You should be aware that, depending on the system your lecturer or tutor prefers, you may use either footnotes at the foot of the page or endnotes at the end of the text.

² Pollak, Michael. Sense and Censorship: Commentaries on Censorship Violence in Australia (Sydney: Reed Books, 1990), p. 7. or as reference number 2 in the List of References at the end of the essay or report.

Example 3: The subjugation of thought in Australia through stringent censorship and draconian defamation laws has existed throughout the 200 years of white settlement.

Wrong and very bad: this is a direct quote from Pollak and therefore should be placed in quotation marks followed by a reference using the author-date system or the footnote or endnote system.

If you use a quote, the words in quotation marks must be copied exactly as they are in the original source.

Example 4: “In Australia, stringent censorship and draconian defamation laws have existed throughout the two hundred years of White settlement” (Pollak, 1990, p. 7).

Wrong: the quote is inaccurate in several places.

If you change or add anything, use square brackets [ ] to indicate the place where the alteration is located.

If you omit something from the quote, use a line of dots .... to indicate the location of the omission.

Example 5: Pollak claims that censorship and defamation law have been the means for “[t]he subjugation of thought in Australia .... throughout the 200 years of white settlement” (Pollak, 1990, p. 7).

Correct.

Acknowledging Sources of Ideas

Even if you are not using the exact words of somebody else, it is wrong to use their ideas unless you give appropriate credit. For example, if you write an essay or paper on the censorship of the press and you structure it using the same set of topics as Pollak uses in his book Sense and Censorship, you should say this in a sentence or note and thus give credit to Pollak.

Example 6: In this essay, the use of censorship against Dorothy Hewett, Terry Hayes, Chris Masters and Brian Toohey will be described.

Wrong: the last four chapters of Pollak’s book are on these individuals, so you should give Pollak credit for having picked them out – and more credit if you used his book for your analysis.

Paraphrasing

This means taking the ideas of somebody else and expressing them with different words. Since you are using your own words, you do not need to use quotation marks. However, you must make enough changes so that what you have written is distinctly different, and you must acknowledge your source.

Example 7: Stringent defamation laws combined with tight censorship practices have meant that independent thought has been under attack since white settlement began in Australia (Pollak, 1990, p. 7).

Correct.

Example 8: In Australia, stringent censorship and draconian defamation laws have led to the subjugation of thought in Australia throughout the 200 years of White settlement (Pollak, 1990, p. 7).

Wrong: this is too close to Pollak’s original wording.

Example 9: Stringent defamation laws combined with tight censorship practices have meant that independent thought has been under attack since white settlement began in Australia.

Wrong: there is no citation of Pollak.

It is often better to avoid paraphrasing altogether and write things in your own words. One good way to do this is to first read the book or article and make brief notes. Then close the book or turn over the article and write what you want to say without looking at the source. In other words, don’t refer to the source material while you are writing, unless you are transcribing a direct quote. Then, afterwards, put in the citations, in the appropriate form and at the appropriate places.

Common Knowledge

It is unnecessary to give a citation to something that is common knowledge. Common knowledge is what ‘everyone knows’ about a particular subject, or which can be found in many sources such as newspapers, magazines, popular journals and radio and television reports.

Example 10: Defamation laws are quite severe in Australia.

Correct: this is common knowledge. No citation is needed.
How to Avoid Plagiarism
Unwitting plagiarism is often the result of poor study methods. The habit of copying verbatim (word-for-word), from a source as you read is dangerous. It is easy to forget that the notes you make are verbatim and to later write them into an essay or report. The only material you should write verbatim are those absolutely delightful, pithy, witty or incisive phrases which you need to make a special point in your essay or report.

The distinction between what needs to be acknowledged and what is common knowledge is not always clear. As you gain experience in expressing yourself, you will learn to discriminate and you will learn the acceptable practices for acknowledgement in the disciplines in which you study. But while you are learning, always play safe and acknowledge, acknowledge, acknowledge.
Teaching at the University involves the active participation of both staff and students and consequently the responsibility to ensure that teaching is conducted in the most efficient and effective manner is shared. The Code of Practice - Students emphasises the responsibilities of students. A separate "Code of Practice - Teaching" has been prepared and distributed to all members of the teaching staff and is also set out in the University Calendars.

Responsibilities of Students

Students of the University have the following responsibilities:

(i) to become familiar with the rules governing the degree in which they are enrolled - these are set out in the University Calendars;

(ii) to become aware of the policies and practices of the Faculty or of the academic unit from which they take subjects - these are set out in the information sheet handed out by the end of the first week of lectures for every subject;

(iii) to take the initiative and consult with appropriate academic staff when problems arise;

(iv) to maintain satisfactory progress in their degrees - required rates of progress are set out in the degree rules;

(v) to meet deadlines for work to be submitted - these are set out in the information sheet handed out by the end of the first week of lectures for every subject;

(vi) to apply themselves to their studies to the best of their abilities;

(vii) to conduct themselves in an orderly and proper manner and not be disorderly in any class or in the Library or in any other place where such activity will adversely affect the working environment of others;

(viii) to attend all lectures, tutorials, seminars and practical work required for each subject in which they are enrolled;

(ix) to submit original work for assessment, without plagiarising or cheating.

Responsibilities of Staff

Teaching staff of the University have responsibilities towards the students they teach, including preparing and presenting material at an appropriate standard within the resources available; informing students, by the end of the first week of formal contact for each subject, of the requirements for the subject and of the method(s) of assessment to be used for the subject; being available for reasonable periods of time during most weekdays of session, the study weeks and the examination periods so that students may discuss aspects of the subject with them; assessing students' work fairly, objectively and consistently across the candidature for the subject; being available to students after marked material has been returned and after the final results have been released so that any student who seeks it can be shown how his/her result was determined.

Plagiarism

Plagiarism is the use of another person's work or idea as if it is your own.

The other person may be an author, critic, lecturer or another student. When it is desirable or necessary to use other people's material, take care to include appropriate references and attribution - do not pretend the ideas are your own. Be sure not to plagiarise unintentionally. The University's practice concerning plagiarism is set out under "Acknowledgement Practice/Plagiarism" in the University Calendars.

Plagiarism has led to expulsion from the University.

Subject Information

In the first week of lectures for every subject, students will receive written information about the subject which will provide details of the requirements of the subject, the method of assessment and all other relevant information about the subject.

Required Reading

The information sheet referred to above will also contain information about the text books for the subject, the reference books and any other required reading. As academic staff are constantly keeping up to date with new developments in their areas of interest, students should be aware that other relevant
material that becomes available during the period in which the subject is taught may also be introduced as required reading.

**Reviewing Assessment Marks and Grades**

Result notices are distributed to students at the end of each session. The notice provides information about the marks and the grades awarded for each subject completed in the session. The range of marks appropriate to each of the grades used are set out in the University Calendar.

Students may, if they wish, obtain their actual marks in each subject from the Student Enquiry Office or from the academic unit concerned.

If a student feels that the grade awarded for a particular subject is not a true indication of the performance in the subject, the student may approach the lecturer concerned and ask to know how the assessment was determined. If the student is still not happy with the result after having discussed the matter with the lecturer, there is a procedure laid down by the University for having the result reviewed. This procedure is set out in a leaflet available from the Student Enquiry Office.

**Late Submission of Work**

Extensions of time to submit material for assessment can only be granted in exceptional circumstances. Written notice is given at the beginning of lectures for each subject of the requirements for the subject and this information includes the dates for the submission of work for assessment. "Pressure of work", either from employment or from other subjects, is not an acceptable reason for seeking an extension of time.

The University’s dates for withdrawing from subjects are very generous and allow adequate time to sort out whether the workload involved in a course can be managed together with other commitments.
CODE OF PRACTICE - TEACHING

The Code of Practice - Teaching sets out the current policies and practices relating to teaching in the University of Wollongong. Its purpose is to make clear what students can reasonably expect and it should minimise difficulties caused by misunderstanding or poor communication.

Certain minimum requirements should be met by all academic staff involved in teaching and these requirements apply to all disciplines in the University. Staff teaching at the University, whether permanent or casual, are expected to follow the practices set out in the Code of Practice - Teaching, which has been compiled in consultation with the Deans and has been endorsed by the Academic Senate.

Responsibilities

Teaching at the University involves the active participation of both staff and students, and consequently the responsibility to ensure that teaching is conducted in the most efficient and effective manner is shared. The Code of Practice - Teaching emphasises both the responsibilities of staff and the associated teaching policies and practices.

The Code of Practice - Students details student responsibilities. Briefly, the list of student responsibilities includes the following: becoming familiar with the rules governing their degree; ensuring that they are aware of the policies and practices of their faculty or of the academic unit from which they take subjects; taking the initiative and consulting with appropriate academic staff when problems arise; seeking assistance as required or recommended; maintaining satisfactory progress; meeting deadlines for submitted work (or seeking to withdraw by the specified dates); not being disruptive in any class, library or any other place where such activity will adversely affect the working environment of others; not cheating; not plagiarising.

Responsibilities of Staff

Staff of the University have the following responsibilities to the students they teach:

(i) to prepare and present material at an appropriate standard and within the resources available;
(ii) to inform students by the end of the first week of formal contact for each subject of the requirements for the subject including the method(s) of assessment to be used;
(iii) to be available for reasonable periods of time during most weekdays of session, the study weeks and the examination periods, so that students may discuss aspects of the subject with them;
(iv) to assess students' work fairly, objectively and consistently across the candidature for the subject;
(v) to be available to students after marked material has been returned, and after the final results have been released, so that students who seek it can be shown how their result was determined.

Information Handouts to Students

Every student in every subject should be given, by the end of the first week of formal contact for the subject, written details about the subject containing at least the following information:

- the name of the co-ordinator for the subject;
- the name(s) of the lecturer(s) for the subject and their location, University phone number and availability during the week to discuss aspects of the subject with students;
- a brief subject outline;
- the lecture times and the tutorial/seminar/laboratory times and any particular attendance requirements;
- the method of assessment for the subject (refer "ASSESSMENT DETAILS" below);
- a list of the major texts and reference books and other required reading known at the time. It should be noted in the handout that the list is not necessarily exhaustive and that other relevant reading may be added to the list as it becomes available during the session.
- any particular policies of the academic unit - e.g. the unit's policies relating to (a) late submission of work; (b) handling of requests for special consideration on the basis of medical certificates or University Counsellor's reports; and (c) supplementary examinations;
- an indication of the amount of time to be spent on the subject each week, noting that the Course Rules state that: 'credit point' is the value attached to a subject as a component of a degree and, for a subject other than a research subject, each credit point has an implied workload of 28 hours over the duration of that subject.
- any material that needs to be purchased (e.g. laboratory manuals) and the costs involved.
Assessment Details

Each academic unit has an Assessment Committee which advises the Head of the unit on the general forms of assessment to be used within the unit.

There are many methods available for assessing student performance and different methods may be used, quite properly, even within academic units. The actual method to be used for a particular subject is determined by the Head of unit in consultation with the co-ordinator and/or lecturer(s) involved in its teaching.

Whatever the methods finally chosen, details must be included in the handout given to students during the first week of lectures.

The handout must include at least the following:

- the type(s) of assessment to be used for the subject;
- the weighting to be given to each component of the assessment in determining the final result;
- whether it is necessary to pass every component of the assessment or any particular component(s) of the assessment in order to be awarded a pass for the whole subject;
- whether the marks of students in particular components of the assessment will be modified or scaled in some way before a final grade is determined;
- any specific attendance requirements with which students need to comply in order to pass;
- whether contributions to tutorials/seminars are to be taken into account and how the contribution is to be assessed;
- details of material to be submitted for assessment during the session;
- the dates for submission of the material for assessment and the penalties applied for late submission;
- the length, style, etc. of the material to be submitted;
- the procedure for the submission of material for assessment: the location of the secure place where it is to be left; how to obtain a receipt; where it can be collected after assessment;
- the following standard statement on plagiarism:

  Plagiarism is the use of another person's work, or idea, as if it is your own. The other person may be an author, critic, lecturer or another student. When it is desirable or necessary to use other people's material, take care to include appropriate references and attribution—do not pretend the ideas are your own. Be sure not to plagiarise unintentionally.

  Plagiarism has led to expulsion from the University."

Determining Assessment Methods

In determining the methods of assessment and weightings to be used for a particular subject and in setting the deadlines for the submission of material for assessment, consideration must be given to the following:

- the ways in which students can monitor their performance during the session. This could be by way of regular assignments, mid-session tests or some other means;
- the desirability of assessment to be based on more than one piece of work;
- the amount of time it will take to assess any material submitted by the students. Material submitted for assessment which is also intended to inform students and/or which is relevant to the final examination for the subject, should be marked and returned prior to the study week before the formal examinations. It is of little use to the students to have this type of assessable work returned after the final examination;
- the ways in which any cases of plagiarism can be detected, particularly in larger classes with many tutorial groups where a number of markers are used.

From 1990 every unit has maintained a sessional assessment register for all subjects taught during the session. The register is available for perusal by students, staff, Deans, Visiting Committees and other interested bodies.

The Place of Written Work

All graduates should be able to express themselves well in writing. To this end, all students should be required to produce some form of written work on a regular basis as part of the assessment of every subject. Students in need of assistance in developing their writing skills should have the need explained by the lecturer.

Staff Availability

Students can expect to have reasonable access to the lecturers involved in teaching any

* In academic units where the assessment is finalised after the class first meets, the date on which the assessment details are to be finalised should be noted in the handout.
subject in which they are enrolled. To this end, every full-time member of the staff should be on campus most days of the week during the sessions in which they are teaching, the study recess and examination periods, and be available to students for consultation during some of this time.

The Head of the unit must be informed where absence from the campus for any reason during any week is likely to exceed two days.

Examinations

The University conducts examinations during specified periods at the end of each session, as set out in the University Calendars. The organisation of these examinations is the responsibility of the Vice-Principal (Administration).

Other tests and practical/laboratory examinations may be conducted at other times during the session, provided:

(a) students are advised at the beginning of the session that the test/examination will be held during one of the normal teaching periods;
(b) the time for the test/examination does not exceed the normal teaching period.

It may be necessary or desirable to conduct mid-session examinations on a Saturday morning, especially for the larger classes. Where this is necessary, students must be informed of the date in the handout provided by the end of the first week of lectures.

Examinations should not be held during the study recess unless there are exceptional circumstances and then only with the approval of the Pro Vice-Chancellor. Requests for such examinations must be made at the beginning of the session so that students can be given adequate notice if the variation is approved.

The Assessment Committee for each academic unit is responsible for reviewing examination papers set within the unit and for reviewing the results of assessments before they are presented to the Faculty Examination Committee. It is expected that all academic staff in the unit will be in attendance at these meetings (refer to "STAFF DEPARTING ON STUDY LEAVE" below).

There are procedures laid down by the University for submitting grades to the Faculty Examination Committee and these are circulated to academic units each session. Although these procedures make provision for withholding results in certain circumstances (see below), it is University policy that the Examination Committees determine a grade for every student in every subject. Except in rare instances, every student should know at the time of release of examination results how he/she fared in every subject undertaken.

The only acceptable reasons for withholding results are as follows:

(a) "WM" grade: given where there are acceptable medical or compassionate reasons ("pressure of work" alone is not an acceptable reason);
(b) "WA" grade: given where, though the work is submitted on time, there are unavoidable delays in assessing the material (e.g. delayed response from an external examiner);
(c) "WO" grade: given where it is in the best interests of the students to withhold an Autumn session result until the end of Spring session.

Extensions of time to submit material for assessment should be given only where there are clearly extenuating circumstances. It is unfair to those who have striven to submit work on time for a student(s) to be given more time to complete work without a compelling case. Each case should be scrutinised closely by the unit and not simply left to an Examinations Committee to ensure fairness. If an Examinations Committee does not accept the reason given for withholding the result, it will declare a FAIL.

‘Pressure of work’ (i.e. workload rather than a job transfer after the specified withdrawal date) should not be accepted as a reason for an extension - the University’s dates for withdrawal from subjects are generous (the last date for withdrawal without penalty is week 8 for a sessional subject, week 2 of the second session of offer for a double session subject and week 3 of the summer session) and allow ample time for students to determine whether they can manage University study together with their non-University commitments.

Reviewing Assessment Marks and Grades

Students must be told how their final marks and grades are to be determined in each subject, or any part of the assessment making up the final marks and grades, in the handout.

Any student who believes that the mark or grade awarded does not reflect their performance in the subject has the right to
approach the lecturer(s) concerned (and, if necessary, the Head of the unit and the Dean) and have the grading explained. A formal procedure for having a mark or grade reviewed has been established by the University and is available to students in the form of a handout from the Student Enquiry Office.

The procedure is reproduced below, for information:

"If you feel that the mark or 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 mark or grade, you should approach the lecturer(s) concerned to discuss the matter.

If, after this discussion, you feel the mark or grade is not correct, you should approach the Head of the unit responsible for the subject to discuss the matter further.

After you have taken these steps and you still feel the mark or grade is not correct, you may write to the Dean of the Faculty, setting out the reasons you believe the mark or 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.

If you are not satisfied with the outcome, you may then approach the Dean of Students and request a further investigation of the matter.

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 the proper procedures have been followed in relation to the assessment of the subject - the Committee's role is not to reassess the academic quality of the work."

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**Staff Departing on Study Leave**

Staff proceeding on (study) leave must ensure that all assessment work and other teaching commitments have been completed, prior to departure, and that marks have been considered by the Assessment Committee of the academic unit. Another member of staff of the unit should be available to answer any subsequent enquiries about the subject if further information about the grade awarded for the subject is sought (refer "REVIEWING ASSESSMENT GRADES" above).
CODE OF PRACTICE - ASSESSMENT

1 RESPONSIBILITIES

Heads of Academic Units

1.1 Heads of academic units have general responsibility for assessment of students enrolled in course-work subjects offered at both undergraduate and postgraduate levels.

1.2 According to the provisions of Course Rule 010 Assessment, the Head shall determine:

(a) the methods for assessing the performance of students in such subjects, and
(b) the standards of achievement required for the approved grades of performance.

1.3 In complying with this Rule, the Head of an academic unit will be advised by the Assessment Committee which comprises all academic staff of the unit.

Academic Staff

1.4 Academic staff carry out assessment under the authority of the Head of the relevant academic unit. The Head of a unit has responsibility to consult with academic staff to ensure that:

(a) they are familiar with the University policy and with this Code,
(b) their assessment methods and practices comply with University policy and provisions of this code,
(c) no later than the end of the first week of formal class contact, information about the methods and practices of assessment that they will use for a subject offered by the unit, will be available to all students enrolled in that subject,
(d) they carry out the assessment fairly, objectively and consistently across the candidature for the subject,
(e) group activities are assessed only by means which will allow the real contribution of each member of the group to be determined, and
(f) they are available to students after marked material has been returned and, unless otherwise approved, after final results have been released, to provide appropriate, helpful and explanatory feedback on performance.

1.5 For subjects in which the assessment methods and practices are finalised after consultation with the enrolled students, the date by which the details are to be finalised should be stated in the Subject Information Sheet. Additionally, upon finalisation of the details, a written copy of those details shall be made available to all enrolled students.

Students

1.6 Students have responsibility to:

(a) comply with instructions issued as part of an assessment process,
(b) comply with provisions of the document "Acknowledgement Practice" and other advice provided by relevant academic units relating to practices for acknowledging the work of others, and
(c) submit for assessment only that work which is their own individual and unassisted work, excepting as otherwise permitted.

2 INFORMATION PROVIDED TO STUDENTS

2.1 By the end of the first week of formal contact for each subject, the Subject Information Sheet shall be provided to every student attending scheduled classes and shall be available to other enrolled students. The Subject Information Sheet must at least include information about:

(a) the methods of assessment to be used for the subject, except as provided for in Section 1.5,
(b) the weight of each component of assessment in determining the final result,
(c) whether there are components of the assessment which must be completed at a specified level of achievement for the subject to be completed satisfactorily,
(d) whether contributions to tutorial or seminar discussions will be taken into
account and how such contribution will be assessed,

(e) details of material to be submitted, and whether assessment of that material will contribute to the final assessment,

(f) the due dates for submission of such material and penalties which may be applied for late submission,

(g) the required length, format and any other relevant details of the material to be submitted,

(h) details of the procedures for submitting the material and for return after assessment,

(i) whether the marks gained in part or all of the assessment will be modified or scaled in any way before the final mark is determined and, if so, what the system of modification or scaling will be and how it will be applied.

Cover Sheets

2.2 It is recommended that:

(a) academic units provide students with cover sheets to accompany any submitted work, and

(b) the sheet should have two tear-off sections, one to provide a receipt for the student upon submission of the work to which the cover sheet is attached, and the other to provide a receipt for the unit upon return of the marked work to the student, but

(c) should an academic unit prefer an alternative system for recording the submission and return of work, it is essential that the system:

(i) provides safeguards against claims of non-submission and non-return, and

(ii) is set out in detail in the Subject Information Sheet, together with information relating to resolution of grievances that may arise from operation of the system.

3 PLAGIARISM

3.1 At enrolment and re-enrolment each year, all students are provided with a copy of the leaflet Acknowledgement Practice.
5 ASSESSMENT OBJECTIVES

5.1 The University has recently adopted a policy which requires approval of clearly enunciated objectives for every Faculty, academic unit, course and subject. The objectives for a subject set out in detail the learning that a student is expected to acquire by completing the subject at a satisfactory standard of achievement.

5.2 Thus, the principal purpose of assessment in a subject concerns assessing how well a student has attained those stated objectives.

6 ASSESSMENT METHODS

6.1 In determining the assessment methods and the weightings to be used for a subject, and in setting deadlines for submission of material for assessment, consideration should be given to the following:

(a) the objectives of the subject,
(b) the required function of the assessment,
(c) the desirability of providing students with feedback, preferably before mid-session and thereafter, so that they may monitor their performance progressively for the duration of the subject,
(d) the need to minimise delay in providing feedback to students, particularly towards the end of the subject,
(e) the desirability of assessment being based on more than one piece of work, and
(f) the ways by which plagiarism can be prevented.

6.2 There are many methods of assessment, each of which can serve a specific purpose and each of which has certain inherent advantages and limitations. Members of staff need to be aware of these advantages and limitations in prescribing the assessment for particular subjects. Staff are encouraged to adopt assessment practices that promote learning and lead to improvement in performance by the students undertaking the assessment.

6.3 Heads should ensure that:

(a) assessment in a subject is conducted by procedures appropriate to the determination of how well each student has achieved the objectives approved for that subject,
(b) as far as is practicable, the procedures promote learning and improve performance of students,
(c) the assessment contains at least one significant piece of work from which the quality of the unaided capability of each student can be assessed, and
(d) attendance at prescribed classes is not a component of assessment of any subject.

6.4 Heads may prescribe that:

(a) participation in class activities may be a component of assessment in a subject, and
(f) attendance at prescribed classes may be a mandatory requirement for satisfactory completion of a subject.

6.5 The Assessment Committee for each academic unit should approve the final form of all assessment systems used in the unit. It also has responsibility for assessing all major components of assessment for each subject, particularly examination papers, either directly or by appointment of an Assessor who shall not be the examiner, or one of the examiners.

7 EXAMINATIONS

7.1 The University conducts examinations on behalf of the academic units during specified periods at the end of each session, as set out in the University Calendars. The organisation of these examinations is the responsibility of the Vice-Principal (Administration). Additionally, academic units may conduct examinations of various kinds either during the normal teaching periods, during the University examination periods or at other times.

7.2 With respect to these latter examinations:

(a) the Subject Information Sheet must inform students about the intention to conduct such an examination. Information about the date, time and place of the examination must be made available to the students as
early as possible and confirmed, particularly should the examination be scheduled at an unusual time such as a Saturday,
(b) when held during a normal teaching period, the total time devoted to the conduct of the examination must not exceed the duration of that period, unless it is possible to arrange for additional time that does not conflict with the requirement for students to attend other scheduled classes,
(c) only with the express permission of the Pro Vice-Chancellor shall an examination be conducted during a study recess period, and request for that permission must be made at the beginning of the relevant session.

8 EXAMINATION PAPERS

8.1 Examination papers are set by one or more members of teaching staff as approved by the Head. In setting an examination paper, the examiner or examiners have responsibility to the Head to ensure that:
(a) the paper is appropriate to the objectives of the subject,
(b) the instructions to students are clear, concise, unambiguous and free from error,
(c) the questions are clearly and unambiguously presented, are free from error and use commonly accepted terminology and language appropriate to the subject,
(d) the questions are fair, answerable and can be answered in the time allowed,
(e) the length of the paper is appropriate to the duration of the examination.

8.2 The Assessment Committee for the academic unit, or the relevant appointed Assessor, has responsibility for reviewing the examination paper to determine whether the requirements set out in 8.1 are satisfied and, if not, to collaborate with the examiner or examiners to ensure that appropriate amendments are made.

8.3 Appropriately set and conducted examinations provide means of assessing:
(a) the quality of unassisted work of each student, and
(b) the capacity of students to work under constraints.

9 ASSESSMENT MARKS AND GRADES

9.1 Unless otherwise approved, the final assessment mark for each student in a subject shall be determined on the scale of 0 to 100% by the methods set out in the Subject Information Sheet issued for that subject.

9.2 While both the general level and range of marks associated with performance of particular quality will necessarily differ between disciplines, it should be possible for a student of genuine distinction to obtain a result of between 90 and 100% regardless of discipline. Examiners should take care to ensure that marks in this range are not reserved for perfection or near perfection, but that they be available to superior students who perform at the highest level that can be reasonably expected under the circumstances of the assessments.

9.3 In determining the final mark for each student in a subject, the Assessment Committee for the academic unit is expected to exercise academic judgement by:
(a) reviewing the results of assessment of each student,
(b) ensuring that any modification or scaling of marks, referred to in 2.1(i), has been applied systematically, and
(c) ensuring that the marks presented to the Faculty Examination Committee for determination and declaration properly reflect the levels of performance of the individual students.

9.4 It is expected that relevant teaching staff in the unit will attend meetings of the Assessment Committee at which these functions are performed.

10 REVIEW OF RESULTS

10.1 A student who believes that the mark awarded for a piece of assessable work, or the mark awarded for a subject, does not fairly reflect their standard of attainment in that work or subject, has the right to an explanation of the mark. In the first instance the student should consult with the lecturer or subject co-ordinator concerned and, if the dissatisfaction remains unresolved, then consult with
the Head of the relevant unit. Should the matter still remain unresolved, the Dean of the relevant Faculty may be consulted.

10.2 A formal procedure for these consultations has been approved and is set out in a document available from the Student Enquiry Counter.
CODE OF PRACTICE - SUPERVISION

1. HIGHER DEGREES

The following broad definitions apply to Doctoral degrees and to Masters degrees by research. Most elements will be applicable to other degrees with a significant research thesis component; some aspects of monitoring also apply to postgraduate course-work degrees.

1.1 Definitions

The desirable end-point for research degrees is sometimes difficult to judge, especially for a student. The decision of when to stop and to commence writing, will be facilitated for students of the University of Wollongong by the following definitions since they make clear the expectations of the University for particular research degrees.

These definitions make clear that research may not be "finished" within the time specified for a candidature, but that what is done must be good: it is possible to envisage, for example, that a degree could be awarded to a student whose work was impeccable but whose ambitious attempt to map in detail the coastline of New South Wales got no further north than Wollongong in the allotted time.

1.1.1 Masters by research

These degrees generally have the objective of training candidates in research methodology appropriate to their field of study, and in the application of such methodology by conducting a specified program of research under appropriate supervision.

Examiners of a Masters thesis should satisfy themselves that the candidate: has a thorough understanding of the relevant techniques in the field demonstrated both by their application and a thorough review of the literature; has managed to demonstrate competence in the chosen field through judicious selection and application of methodology to yield fruitful results; and has the capacity to present well written work.

1.1.2 Doctor of Philosophy

This degree provides training and higher education with the objective of producing graduates with the capacity to conduct research independently at the highest level of originality and quality. Students ought be capable by the end of their candidatures of conceiving, designing and carrying to completion a research program without supervision. The PhD is thus largely scholarly in nature and should uncover new knowledge either by the discovery of new facts, the formulation of theories or the revision of old ideas.

Examiners will expect a thesis to be well written and to reveal clearly an independence of thought and approach and a deep knowledge of the field of study.

2. RESPONSIBILITIES

Research training at a University involves the active participation of both staff and candidates. The responsibility to ensure that it is conducted in the most efficient and effective manner is shared by all parties: the University, its Academic units and staff, and the candidates, all have obligations to each other.

The University will provide each candidate with a copy of the relevant policies at enrolment, including: a copy of this document; the information to be given to the candidate by the Academic unit; the Rules governing the appropriate degree; the Library rules; and the policy relating to intellectual property, as it affects candidates.

2.1 Responsibilities of the University

The University has the responsibility of establishing a policy framework within which Academic unit-specific policies can be developed. The University is responsible for general policies related to:

2.1.1 clearly specified minimum entry standards which apply regardless of discipline, and which are set to ensure that enrolling candidates are likely to have the capacity to succeed given adequate commitment;

2.1.2 access to space and resources which, while varying between different parts of the University, should be made clear to candidates at the outset;

2.1.3 the status of intellectual property arising from the work of candidates as part of their studies;

2.1.4 annual reporting requirements;
2.1.5 procedures by which either the candidate or the supervisor may make representations as appropriate should significant difficulties arise (grievance procedures);

2.1.6 a procedure which, while permitting inexperienced staff to supervise candidates, makes clear a process by which assistance may be sought should it be required;

2.1.7 clear guidelines for examiners outlining, in particular, the University's expectations for the particular degree

2.2 Responsibility of the Academic unit

It is the responsibility of the Academic unit to ensure that:

2.2.1 the candidate meets the minimum requirements set down by the University for admission to candidature;

2.2.2 the proposed research project is appropriate for the degree;

2.2.3 the unit is the appropriate one for the research to be undertaken;

2.2.4 the proposed supervisor is sufficiently expert in the area of research and has the time to be able to offer the candidate proper supervision;

2.2.5 proper supervision can be provided and maintained throughout the research period;

2.2.6 appropriate opportunities are provided, by way of seminars and the like, for candidates to develop their presentational skills as well as facilitate their integration into a cohesive group.

2.3 Responsibilities of the Supervisor

The supervisor has responsibilities which include:

2.3.1 advising the candidate how to make the most effective use of research time; this will involve discussing the nature of research with the candidate and the standard expected of candidates enrolled in particular degrees, the choice of the research topic, the planning of the research program, the literature and sources and techniques;

2.3.2 identifying any shortcomings in a candidate's background and directing appropriate remedial studies when required.

2.3.3 maintaining close and regular contact with the candidate and establishing at the beginning the basis on which contact will be made; this will facilitate the supervisor's role in advising candidates on the rate of their progress, and ensuring that a reasonable timetable is set to permit the degree to be completed in the time limits set by the Rules;

2.3.4 requiring written work from the candidate on a pre-arranged and agreed schedule so that the development of the candidate can be assessed at regular intervals;

2.3.5 monitoring carefully the performance of the candidate relative to the standard required for the degree and ensuring that the candidate is made aware of inadequate progress or of work below the standard generally expected; supervisors should help with developing solutions to problems as they are identified;

2.3.6 using the annual reporting procedures established by the University as the minimum means by which any difficulties and problems discussed with the candidate during the year are noted; and supervisors should indicate the action taken or the advice given. If the problem is not resolved, the Head of the Academic unit, in the first instance, should be involved; the Head and the Chairperson of the Faculty Postgraduate Studies Committee should be notified in writing of continuing problems between reporting periods;

2.3.7 commenting on the content and the drafts of the thesis and, at the time of submission, certify that the thesis is properly presented, conforms to the Rules and is, prima facie, worthy of examination;

2.3.8 advising the Graduate Faculty, through the Head, of the names and credentials of suitable examiners.
2.4 Responsibilities of the Candidate

The responsibilities of the candidate include:

2.4.1 becoming familiar with the University's Rules governing the degree;

2.4.2 discussing with the supervisor the type of help considered most useful and keeping to an agreed schedule of meetings which will ensure regular contact;

2.4.3 undertaking appropriate remedial work identified by the supervisor;

2.4.4 taking the initiative in raising problems or difficulties and sharing responsibility for seeking solutions;

2.4.5 maintaining the progress of the work in accordance with the stages agreed with the supervisor, including in particular the presentation of any required written material in sufficient time to allow for comments and discussions before proceeding to the next stage;

2.4.6 providing annually a formal report to the Graduate Faculty through the Head and the Chairperson of the Faculty Postgraduate Studies Committee;

2.4.7 accepting the responsibility for the final copies of the thesis including the content and ensuring that it is in accord with the requirements for the preparation and submission of theses, including the standard of presentation.

3. ADMISSION

The policy of the University is to direct the majority of research students to work with academic staff who are part of the Research Programs that have been established in recent years. The aim of these Programs is to provide an environment, and infrastructure, for staff and students working in broadly related areas of research to work together as a means of using the University's resources most effectively.

While the basic criteria for admission to a higher degree is the possession a bachelor's degree achieved at a suitable standard in an appropriate discipline, other criteria will also be taken into account in assessing the eligibility of an applicant for admission. Such criteria include: the feasibility and appropriateness of the proposed course of study in the Academic unit; and the availability of supervision, adequate infrastructure and other resources. The University also places emphasis on investigating candidates' interests and background and their match with resources and available expertise in assessing applications for admission.

Since part-time candidates often have other obligations, the criteria for these candidates will also include: availability for study and for interaction with the supervisor; level of motivation; evidence of maturity; and capacity to cope.

4. SUPERVISION

In general, all members of the academic staff of the University (other than those who are themselves candidates for higher degrees) who are currently active researchers, who have proven research records and who have previous experience in supervision will be permitted sole supervision of candidates for higher degrees. In the case of newer, less experienced members of staff, a co-supervisor, who will be a more experienced and, generally, more senior member of staff, will also be appointed. Staff whose previous supervisory experience has been less than satisfactory will not be appointed as sole supervisors.

The supervisor(s) will be responsible to the Head for the supervision of candidates in their charge.

4.1 Leave

4.1.1 Supervisors should ensure that candidates have accurate information about any planned, long, leave (or retirement) during the candidature and about the arrangements to be made to provide for supervision during absences.

4.2 Co-supervision

4.2.1 Co-supervisors should generally be appointed at the outset of the program, particularly if any lengthy absences of the supervisor are planned or if expertise additional to that provided by the supervisor is required; this could be a staff member from the University or from another institution or from industry.

4.2.2 Any co-supervisor should be involved as soon as practicable in the development of the candidate's research plan and should maintain a level of communication with the candidate and the supervisor to allow adequate supervision whenever necessary.
4.2.3 Where a co-supervisor(s) is appointed, the respective roles of the co-supervisor(s) and the place of primary responsibility will be clearly identified; the principal supervisor carries the responsibility of co-ordinating communication between the supervisors and the candidate.

4.3 Advisory Committee

4.3.1 In some cases, eg where the topic is multi-disciplinary or staff inexperienced, an advisory committee could be formed to advise the candidate; again, the place of primary responsibility must be made clear.

5. THE TOPIC

It is anticipated that in most instance, the candidate and the supervisor will reach an agreement on a research/thesis topic prior to enrolment.

If it is not possible to define a topic prior to enrolment, it should be defined and submitted to the Graduate Faculty no later than the end of the first session of enrolment; after the topic has been approved, it may not be changed without further approval of the Graduate Faculty.

Minor changes to the topic may be made at the time of drafting the final version of the thesis to reflect accurately the research.

6. REPORTS

Written annual reports from the candidate and the supervisor are an important and formal means by which any problems concerning the candidature can be identified. They also serve to keep the appropriate committees of the University, the Faculty Postgraduate Studies Committee and the Graduate Faculty, informed.

Each report must be a frank appraisal of the candidate's progress by both the supervisor and the candidate. The annual report is the means by which the University assesses whether the candidature will continue into the following year.

6.1 Procedure

6.1.1 Report forms will be circulated to candidates in September each year to allow time for the supervisor, the Head of the Academic unit and the Chairperson of the Faculty Postgraduate Studies Committee to view and comment on the report prior to the re-enrolment period for the following year; the supervisor will, before completing the report, discuss with the candidate the comments made by the candidate in the report and the comments that will be made by the supervisor.

6.1.2 The Chairperson will recommend to the Graduate Faculty on whether the candidate should be permitted to continue candidature in the following year.

6.1.3 A copy of the report will be forwarded to the candidate by the Chairperson after the supervisor, the Head and the Chairperson have added their comments to the report.

7. GRIEVANCE PROCEDURES

Any problems encountered during the candidature or any disagreements between the candidate and the supervisor in relation to the annual reporting process or to other matters during the candidature that cannot be easily resolved between the candidate and the supervisor are to be referred, by either the candidate or the supervisor, to the Head, in the first instance.

If, after this process, the candidate is not satisfied with the outcome, the candidate may refer the matter, in writing:

(i) to the Chairperson of the Faculty Postgraduate Studies Committee, who may refer the matter to the full Committee for consideration; and then, if necessary,

(ii) to the Dean of the Faculty;

Where the candidate is still not satisfied with the outcome, the candidate should present a case, in writing, to the Chairperson of the Graduate Faculty. If necessary, the Chairperson will refer the matter to the Graduate Faculty for consideration and determination.

8. EXAMINATION

The examination of theses submitted for higher degrees is undertaken, in the case of Doctoral candidates, by at least two examiners who are external to the University. For Masters candidates, at least two examiners are used, no more than one of whom is an internal examiner; the supervisor cannot be an examiner.
Because of the special nature of research degrees, where the candidates could have uniquely expert understanding of the field, they will also have a special relationship with their examiners. The candidates are not examined only on the basis of their understanding of a body of existing knowledge. They are examined by individuals who must judge their approach to research, their construction of hypotheses, their arguments and their analyses and who will be their peers if the degree is awarded. The selection of examiners is therefore of critical importance.

8.1 Selection

8.1.1 Steps should be taken to ensure that the examiners are free from bias, either against the candidate or the supervisor; this will normally be assessed by a general discussion of possible examiners with the candidate and the supervisor(s).

8.1.2 Examiners should normally be still active in research/scholarship in the relevant area thus ensuring that their knowledge of the field remains current;

8.1.3 They should have empathy with the theoretical framework used by the candidate.

8.1.4 They should be known to be familiar with the supervision/examination of research theses.

8.1.5 They should be made familiar with the requirements of the University and the essential parts of the Rules governing the particular degree.

8.1.6 Names of possible examiners and their credentials to examine the particular thesis should be submitted by the Head (who will normally have taken steps to guard against bias, etc.) to the Graduate Faculty for appointment.

Following approval by the Graduate Faculty, formal invitations to examine the thesis will be issued by the Graduate Office. Examiners are normally allowed eight weeks to examine the thesis and provide a report to the Graduate Faculty.

The reports from the examiners are considered by the Graduate Faculty, after receiving the comments of the Head on the reports. The Graduate Faculty determines the outcome of the examination.

In most cases, the names of the examiners and copies of the examiners reports are made available to the candidate after the Graduate Faculty has made its determination. In some instances, a particular examiner may exercise the options given to all examiners and ask not to be identified to the candidate and/or request that all or part of the report not be made available to the candidate; these requests are respected by the University.

9. Appeals

As a result of the complex and special relationship with examiners of research degrees, the University has established a procedure which gives candidates, in certain circumstances, the right of appeal against the examination and evaluation of their candidature. Appeals are permitted on procedural grounds only; appeals by disgruntled candidates simply rejecting the assessment of the merit of their work are not permitted. Further, these procedures do not permit an appeal on grounds of complaint about the inadequacy of supervisory or other arrangements during the period of study; the grievance procedures outlined above should be used at the appropriate time during the candidature for these matters.

9.1 Grounds for Appeal

9.1.1 The only grounds permitted for an appeal against a decision not to award a postgraduate research degree or not to allow re-submission of a thesis for re-examination, are:

(i) procedural irregularities in the conduct of the examination, that may have had an effect on the outcome of the examination;

(ii) circumstances affecting the candidate's performance of which the examiners were not aware;

(iii) documentable evidence of prejudice or of bias on the part of one or more of the examiners.

9.2 Procedures

9.2.1 The appeal must be made by the candidate to the Vice-Chancellor, in writing, within one month of the decision of the Graduate Faculty being made known to the candidate; the candidate must set out fully the grounds for the appeal and provide...
documentary evidence in support of
the appeal.

9.2.2 On receipt of the appeal, the Vice-
Chancellor will, in the first instance,
refer the matter to the Graduate
Faculty for advice on the
circumstances of the case and, if
appropriate, for re-consideration of its
decision in the light of any information
provided by the candidate that was
not known to the Graduate Faculty at
the time it made its original decision.

9.2.3 On receipt of the advice from the
Graduate Faculty, the Vice-Chancellor
will decide whether a case exists, prima
facie.

9.2.4 If the Vice-Chancellor determines that
a case does exist, the appeal, together
with the advice received from the
Graduate Faculty, will be referred to
the Council Committee of Appeal
(Student Matters) for determination.
The Committee will limit itself to
considering the matter only on one or
more of the three grounds outlined
above and will not consider the
academic merits of the examination.
Unless they are relevant to particular
points made in the case put forward by
the candidate, the examiners' reports
will not normally be placed before the
Committee.

9.2.5 The Committee may determine that
the appeal be dismissed or, if it finds
that one of the three grounds for
appeal above is satisfied, it will refer
the matter back to the Graduate
Faculty, through the Vice-Chancellor,
with a direction that the thesis be re-
examined.

9.2.6 The Vice-Chancellor will advise the
candidate of the outcome of the appeal.

10. INTELLECTUAL PROPERTY

The University's Policy on Consultancies and
Intellectual Property sets out, inter alia, the
University's position in relation to intellectual
property and ownership of work developed by
candidates in the course of their candidatures.

10.1 Ownership

10.1.1 The University will have a propriety
interest in any intellectual property
developed by a candidate in the course
of candidature for a degree of the
University.

10.1.2 Where intellectual property has been
created, all reasonable care must be
exercised by the candidate, the
supervisor(s) and the Head not to
disclose or use the property in any way
which would prejudice its protection.

10.2 Agreement

10.2.1 The onus is on the supervisor to fully
inform the candidate, in writing before
enrolment, of any aspects of the
research which are likely to result in
the generation of intellectual property
and/or which is funded by any
contractual arrangement(s) and of any
restrictions on disclosure or
communication with colleagues likely
to result from such arrangements.

10.2.2 If the candidate agrees to take part in
such a project, a written agreement on
the conditions of disclosure etc. should
be concluded over the signatures of
the candidate, principal supervisor
and the Head.

10.2.3 Where patentable intellectual property
is generated unexpectedly during the
candidature and there is no initial
agreement on intellectual property, the
candidate, the principal supervisor
and the Head should meet
immediately and produce a written
understanding on the matter.

10.3 Access to theses

10.3.1 Following examination of the thesis
and subsequent to any corrections
required to the thesis as a result of the
examination process, one copy of the
thesis will be deposited in the
University Library.

10.3.2 At the time of submission of the thesis,
the candidate will be requested to
complete a form to advise the Librarian
on access rights to the thesis.
Normally, the University expects that
free access to all theses deposited in
the Library should be permitted, but
recognises that in exceptional
circumstances, such as commercial
confidences, it may be necessary to
restrict access for a period of time.
Where access is restricted, it should be
for as short a time as possible.

10.4 Other provisions

10.4.1 All other provisions relating to
intellectual property and to the role of
the Illawarra Technology Corporation
LTD in relation to the assessment of and arrangements for the protection of intellectual property are set out in University's Policy on Consultancies and Intellectual Property, copies of which are available from Heads and from the Office of Research and Postgraduate Studies.

10.4.2 Agreement should be reached between the candidate and the supervisor concerning authorship of publications and acknowledgement during and after the candidature. There should be open and mutual recognition of the candidate's and the supervisor's contribution on all published work arising from the project.
POSTGRADUATE ADMISSION,  
ENROLMENT AND  
RE-ENROLMENT

ADMISSION

Application forms for admission are obtainable from the Postgraduate 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 Manager, Academic and Student 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 18 February 1994 except with the approval of the appropriate Dean and the Deputy Vice-Chancellor.

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 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 Postgraduate 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

AUSTRALIAN POSTGRADUATE AWARDS (APA)

A number of Australian Government Postgraduate 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 in 1993 was in the range $14,474 to $18,629 per annum - non taxable. Stipends above the base level will be awarded on the basis of the University's priority areas. There is also provision for a relocation allowance and thesis allowance.

Stipends and allowances are indexed.

A number of awards for full-time postgraduate study leading to the degree of Masters and Honours Masters by coursework may also be available.

The stipend in 1993 was $11,687 tax free with a dependant's allowance, incidentals allowance, thesis allowance and, in some cases, travel and establishment allowance.

The closing date for applications for both Awards is 31 October.

UNIVERSITY POSTGRADUATE AWARDS (UPA)

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.

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 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 Awards are as for the Australian Postgraduate Awards.

The closing date for applications is 31 October.

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.

Further enquiries may be directed to the Research Office, Second Floor, Administration Building (telephone (042) 213079).
CONDITIONS OF UNIVERSITY POSTGRADUATE 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 Doctor of Philosophy degree.

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 by research may hold an award for a period not in excess of two years from the commencement of studies or until the date of submission of the thesis, whichever is earlier;

b) a Doctor of Philosophy candidate may hold an award for three years from commencement of studies or until the date of submission of the thesis, whichever is earlier.

RENEWAL

Awards are renewable annually on submission of a satisfactory progress report. Applications for renewal for a further six months beyond the normal three year tenure (in the case of Doctor of Philosophy candidates only) 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

Students are entitled to 20 days paid recreation leave a year calculated on a pro-rata basis. No more than 20 days recreation leave may be accumulated and leave must be taken during the tenure of the award. The supervisor's agreement must be obtained before leave is taken.

INTERRUPTION

If students are unable to pursue the degree they must notify the University which will arrange to have the award suspended. Students may apply for up to 12 months suspension during the tenure of the award. If the circumstances are beyond their control this may be extended to 2 years.

In exceptional circumstances only, students may apply for 12 months suspension to gain work experience in industry in an area directly relevant to their research.

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
A student is only permitted to undertake a strictly limited amount of paid employment: no more than 180 hours of employment a year during normal working hours (ie 9-5 Monday to Friday). Generally no more than 6 hours employment a week will be permitted. The University will not require a student to undertake employment.

TRANSFER
The scholarship is not transferable to another University.

SICK LEAVE
A student may have up to three months paid sick leave and up to three months paid maternity leave within the tenure of the award. The University may extend an award to compensate for periods longer than two weeks if a medical certificate is provided by the student.

BENEFITS
Stipend:
The 1993 University stipend was $14,474 (non-taxable) and is indexed each year to match the Australian Postgraduate Award base rate. Payment of stipend will be calculated from the date of commencement of study and will be paid fortnightly.

Relocation Allowances
A travel allowance of up to a maximum of economy or student concession airfare(s) for the scholar, spouse and dependents and removal expenses of up to $400 per adult and $200 per child with a maximum of $1,140, 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, on production of receipts.

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.

Thesis Allowance
A scholar may claim reimbursement for an amount of up to $790 to assist with costs for a Doctor of Philosophy thesis and up to $395 for an Honours Master's thesis. Stipends and allowances are indexed.

TERMINATION OF AWARDS
Awards may be terminated at the discretion of the University if progress is not satisfactory.
The University of Wollongong has established a Consortium, along with 15 other Universities, to offer postgraduate professional and graduate education to participants throughout Australia who would otherwise not be able to undertake (because of time, location or other pressures) postgraduate courses at a university or other tertiary institution in the usual manner.

The Consortium is offering courses on a fee-for-subject basis, initially via the medium of broadcast television and later through other means, possibly including satellite, cable television and other modes.

The Consortium, which is based at the University of Wollongong, has combined with the Special Broadcasting Service (SBS Television) to present postgraduate level courses via the SBS network across Australia.

Entrants to the course normally hold a Bachelor degree together with relevant work experience. However, in special circumstances, an applicant holding other acceptable academic or professional qualifications and with relevant work experience may be admitted as a candidate.

EXTERNAL COURSES OFFERED IN 1994 BY THE UNIVERSITY OF WOLLONGONG

Health Policy & Management
Master of Science (Health Policy & Management)
Graduate Diploma in Science (Health Policy & Management)
Graduate Certificate in Health Policy & Management

Total Quality Management
Graduate Diploma in Total Quality Management
Graduate Certificate in Total Quality Management

Additional postgraduate subject
Information in Organisations

In 1994, these offerings will be expanded to include other courses offered by the University of Wollongong and other universities that form the Consortium. These may include; University of Adelaide, Macquarie University, Australian Catholic University, Murdoch University, Bond University, Royal Melbourne Institute of Technology, University of Canberra, University of South Australia, University of Central Queensland, Edith Cowan University, Swinburne University of Technology, Flinders University of South Australia, Victoria University of Technology, La Trobe University, University of Western Sydney.

For further information, please contact:

Wollongong Graduate Consortium
PO Box 2000
Wollongong NSW 2500

Telephone: (042) 21 4444
Facsimile: (042) 21 4477

COURSE DETAILS (UNIVERSITY OF WOLLONGONG)

MASTER OF SCIENCE (HEALTH POLICY & MANAGEMENT)
(For further details see Public Health & Nutrition section)

Subjects
The Australian Health System: Policies and Politics
Health Services Organisation and Management
Health Information Systems
Social Foundations of Public Health
Economics of Health Care
Statistics in Health Research
Financial Management for Health Services
Epidemiology
Health Services Planning & Evaluation
Legal Studies for Professionals
Health Research Methodology
Elective
Major Project

Course Requirements
Satisfactory completion of at least 96 credit points; eleven core subjects (66 credit points); one elective subject (6 credit points); and the Major Project (24 credit points).

GRADUATE DIPLOMA IN SCIENCE (HEALTH POLICY & MANAGEMENT)
(For further details see Public Health & Nutrition section)

Subjects
The Australian Health System: Policies and Politics
Health Services Organisation and Management
Social Foundations of Public Health
Economics of Health Care
Statistics in Health Research
Financial Management for Health Services
Epidemiology
Elective

Course Requirements
Satisfactory completion of at least 48 credit points of coursework.

GRADUATE CERTIFICATE IN HEALTH POLICY & MANAGEMENT
(For further details see Public Health & Nutrition section)

Subjects
The Australian Health System: Policies and Politics
Health Services Organisation and Management
Health Information Systems
Social Foundations of Public Health
Economics of Health Care
Financial Management for Health Services

Course Requirements
Satisfactory completion of at least 24 credit points of coursework.

GRADUATE DIPLOMA IN TOTAL QUALITY MANAGEMENT
(For further details see Total Quality Management section)

Subjects
Quality Improvements Systems and Implementation
Organisational Behaviour
Statistical Thinking
An Overview of Quality Management
Management of Change
Industrial Quality Management
Plus, further subjects yet to be determined

Course Requirements
Satisfactory completion of 48 credit points including a 6 credit point overview of quality management.

GRADUATE CERTIFICATE IN TOTAL QUALITY MANAGEMENT
(For further details see Total Quality Management section)

Subjects
Quality Improvements Systems and Implementation
Organisational Behaviour
Statistical Thinking
An Overview of Quality Management

Course Requirements
Satisfactory completion of 24 credit points of specified coursework.
COURSE RULES

GENERAL RULES

001. Preliminary

(1) These Rules may be cited as the Course Rules.

(2) The General Rules govern registration, enrolment, progression through and qualification for undergraduate and postgraduate courses offered by the University, and are to be read in conjunction with an appropriate Part of the Rules.

(3) Rules for undergraduate courses are provided in:

Part 1 Associate Diploma and Diploma Rules
Part 2 Bachelor Degree Rules

(4) Rules for postgraduate courses are provided in:

Part 3A Graduate Certificate Rules
Part 3 Graduate Diploma Rules
Part 4 Masters Degree Rules
Part 5 Honours Masters Degree Rules
Part 6 Doctoral Degree (by thesis) Rules
Part 7 Doctoral Degree (by publication) Rules
Part 8 Higher Doctoral Degree Rules

002. Commencement

These Rules became operative on 1 January 1991.

003. Interpretation

(1) In the interpretation and implementation of these Rules, Council will normally act on the recommendation of appropriate authorities within the University.

(2) In these Rules, unless the contrary intention appears:

(a) 'Council' is the Council of the University of Wollongong;

(b) 'approved' or 'approval' means approval by Council, or under authority delegated by Council;

(c) 'candidate' is a person registered for a course;

(d) 'undergraduate' refers to candidates or courses for associate diplomas, diplomas and bachelor degrees;

(e) 'postgraduate' refers to candidates or courses for graduate certificates, graduate diplomas, masters degrees, honours masters degrees and doctoral degrees;

(f) 'course' is the subject or combination of subjects which a candidate takes for an associate diploma, a diploma or a degree;

(g) 'joint course' is an approved course leading to the conferral of two degrees as separate awards upon a candidate who has complied with the joint Course Requirements and the two individual Course Requirements inclusively;

(h) 'combined course' is an approved course leading to the conferral of two degrees as a single award upon a candidate who has complied with the combined Course Requirements;

(i) 'full time candidate' is a candidate enrolled for a program which, for each session of registration, is three eighths or more of an annual requirement for course completion in normal minimum time;

(j) 'part time candidate' is a candidate who is not a full time candidate;

(k) 'external candidate' is a part time candidate registered for a course which has been approved for offer in an external mode; 

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

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

(n) 'year' or 'academic year' or 'annual' refers to the period comprising autumn session, the following spring session and the following summer session;

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

(p) 'subject' is a self-contained unit of study identified by a unique number in the relevant Schedules;

(q) 'research subject' is a subject at 900 level with a value of 24 or more credit points, being either a thesis or a minor thesis, and taken for an honours masters degree or a doctoral degree;

(r) 'thesis' is a research subject with a value of 48 credit points;

(s) 'minor thesis' is a research subject with a value of 24 or 36 credit points;

(t) 'credit point' is the value attached to a subject as a component of a degree and, for a subject other than a research subject, each credit point has an implied work-load of 28 hours over the duration of that subject;

(u) 'weighted average mark' is the average of marks gained by a candidate in a program, programs or course and weighted by credit point value and by level;

(v) 'sessional subject' is a subject, other than a research subject, offered during one of autumn session, spring session or summer session;

(w) 'double session subject' is a subject, other than a research subject, offered for the duration of two sessions, excepting as permitted by the provision of Rule 212;

(x) 'triple session subject' is a subject, other than a 100 level subject or a research subject, offered for the duration of three consecutive sessions;

(y) '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 at fourth year level;

'800 and 900 level subjects' are subjects or research subjects at postgraduate level;

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

(aa) 'co-requisite subject' is a subject 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;

(bb) 'Head' means the Head of the relevant academic unit or the relevant Course Co-ordinator;

(cc) 'Supervisor' is a person approved to supervise the work of a candidate in a research subject;

(dd) 'Academic Adviser' is a person approved to advise candidates on programs and courses of study;

(ee) 'major study' in a course for a bachelor degree, is an approved combination of subjects with a minimum value of 48 credit points offered by one or more academic units, and including 300 level subjects with a value of at least 24 credit points which must be completed satisfactorily at Pass grade or better;

(ff) 'specialisation' refers to the subject matter which is studied in the major study of a 144 credit point course or as a major strand in other courses;
'advanced standing' is credit or exemption granted to a candidate;

'credit' is the number of credit points granted towards a course for work completed satisfactorily outside that course;

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

'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;

'exemption' is the waiving of the requirement that a subject prescribed for a course be completed satisfactorily and is granted, as exemption A, B or C, on the basis of the satisfactory completion of an appropriate subject, subjects or other work at an approved tertiary institution or other establishment, as follows:

exemption A: the subject is regarded as having been completed satisfactorily for all purposes;

exemption B: the subject is regarded as having been completed satisfactorily for all purposes except the satisfying of a pre-requisite requirement;

exemption C: the subject is regarded as having been completed satisfactorily, but not for the purposes of either the satisfying of a pre-requisite requirement or the accrual of credit points; and

'leave of absence' is a period of leave from the University for which prior approval has been obtained.
course, or should other restrictions or limitations be applied to that course.

(5) A person admitted as a candidate shall register for the particular course for which admission was sought and shall be then subject to all relevant Rules and requirements.

(6) A candidate for a postgraduate course under Parts 5 or 6 of the Rules shall enrol as a full time candidate or as a part time candidate, or for approved courses, as an external candidate.

(7) Continuation of registration is contingent upon compliance with any approved conditions imposed at initial registration or thereafter.

(8) Except with approval, and then under approved conditions, a candidate shall not be registered concurrently for more than one course in this University or other tertiary institution.

(9) A person who, in the opinion of Council, has an unsatisfactory academic record in, or who is suspended, excluded or expelled from, any tertiary institution shall not be permitted to register for any course.

(10) Except with approval in exceptional circumstances, a candidate is subject to the course time limits set out in Attachment A following these Rules.

(11) A candidate who changes registration from one type of candidature referred to in Rule 004(6) to another shall be subject to approved time limits.

(12) A person who has not completed requirements for a course after expiration of the maximum period of registration set out for that course in Attachment A following these Rules and for whom continuance of registration has not been approved shall not be permitted to register again for that course.

005. Enrolment Requirements

(1) During prescribed periods in each year, a candidate shall enrol in a program in accordance with requirements of these Rules and pay any required charges. Prior to the initial registration for a course, a candidate must consult with an Academic Adviser.

(2) A candidate may enrol in a subject provided that:

(a) the conditions for enrolment specified in the appropriate Schedule are satisfied, save that a pre-requisite or co-requisite requirement may be waived by the Head;

(b) the candidate is not excluded by any restriction that may be imposed on the number of candidates to be enrolled in that subject;

(c) the subject is available in the nominated session or sessions;

(d) the candidate is not suspended, excluded or expelled from any tertiary institution;

(e) Council has determined that there are appropriate and sufficient personnel and resources to enable the candidate to undertake the subject; and

(f) the candidate is not indebted to the University.

(3) Except with approval, a candidate may not enrol in the same, or substantially the same, subject more than twice.

(4) Except with approval, a candidate shall not enrol in an annual program with a value of less than 12 credit points excepting that a candidate who needs less than 12 credit points to complete a course must enrol for all subjects needed to complete that course.

(5) Except with approval, a candidate shall not enrol in a program which, for that candidate:

(i) in the first autumn session and the first spring session of registration for an undergraduate course leading to an award other than the degree of Bachelor of Laws, has a value that exceeds:

(a) 48 credit points for the autumn session and the spring session combined;

(b) 24 credit points for autumn session;
(c) 24 credit points for spring session;

(ii) in the subsequent sessions of registration for an undergraduate course leading to an award other than the degree of Bachelor of Laws, which has a value that exceeds either:

(a)  (A)  52 credit points for the autumn session and the spring session combined;
       (B)  30 credit points for autumn session;
       (C)  30 credit points for spring session;
       (D)  14 credit points for summer session, or

(b) exceeds a prescribed program for:
       (A)  a year by more than 4 credit points;
       (B) autumn session by more than 6 credit points;
       (C) spring session by more than 6 credit points;
       (D) summer session by more than 2 credit points.

(iii) in any session of registration for a course leading to the award of the degree of Bachelor of Laws either alone or as part of an approved joint course, has a value that exceeds:

(a)  32 credit points for any autumn or spring session;
(b)  14 credit points for summer session;

(iv) in any session of registration for a postgraduate course which either

(a) has a value that exceeds:

(A)  54 credit points for the autumn session and the spring session combined;
(B)  30 credit points for autumn session;
(C)  30 credit points for spring session;
(D)  14 credit points for summer session, or

(b) exceeds a prescribed program for:
       (A) a year by more than 4 credit points;
       (B) autumn session by more than 6 credit points;
       (C) spring session by more than 6 credit points;
       (c) summer session by more than 2 credit points.

For the purposes of Rule 005(5), half the value of a double session subject shall be deemed to be taken in each of the two sessions during which the subject is offered and one third the value of a triple session subject shall be deemed to be taken in each of the three sessions during which the subject is offered.

A candidate enrolled in a subject in contravention of the conditions for enrolment specified in the appropriate Schedule shall be withdrawn from that subject unless permitted by the Head to remain enrolled.

A candidate who, in a particular year, is not permitted to enrol in a subject pursuant to these Rules may apply for permission to enrol in a subsequent year.

A candidate who is refused continuation of registration, through suspension, exclusion or expulsion as prescribed in Attachment B following these Rules, may not enrol in any subject.
006. Schedules of Subjects and Research Subjects

Subjects approved for courses referred to in Rule 001(3) and (4) are listed in the Schedules in Attachment Z following these Rules. The Schedules are:

Undergraduate Schedules:
(a) Schedule Z1 for associate diplomas;
(b) Schedule Z1 for diplomas;
(c) Schedule Z2 for bachelor degrees; and

Postgraduate Schedule:
(d) Schedule Z3 for postgraduate courses.

007. Variation of Registration

(1) After consultation with an Academic Adviser a candidate may apply to the Vice-Principal (Administration) for permission to change registration from one course to another.

(2) Permission for a candidate to change registration is contingent upon any restriction that may be imposed on the number of candidates to be registered for a particular course.

(3) Variation of enrolment associated with change of registration is contingent upon restrictions imposed by relevant provisions of Rules 005 and 008.

(4) Upon change of registration, a candidate becomes subject to Rules relating to the course to which registration is changed.

(5) At the end of a session, a candidate for a postgraduate degree under Part 5 or 6 of these Rules or for an honours bachelor degree may apply to change candidature from full time to part time or from part time to full time.

(6) At any time prior to the submission of the thesis in the relevant research subject, a candidate for an honours masters degree may apply to change registration to a doctoral degree.

(7) Except with approval to the contrary, restrictions imposed on enrolment or registration of a candidate prior to, or at the time of a change of registration shall continue to apply after change of registration. For a candidate for an undergraduate course, Rule 011(2)(b) will apply immediately upon change of registration should there be no provisions to the contrary.

008. Variation of Enrolment for Subjects Other Than Research Subjects

(1) After consultation with an Academic Adviser, a candidate may withdraw from a subject in a program by notifying the Vice-Principal (Administration) provided such withdrawal is made no later than the last day of the week prescribed in Rule 008(3) of the session in which offer of the subject is completed.

(2) Where a variation referred to in Rule 008(1) is withdrawal from:
(a) an autumn session or spring session subject before the end of the eighth week of the session of offer; or
(b) a summer session subject before the end of the third week of the session; or
(c) a double session or a triple session subject until the last day of the second week of the second session in which the subject is offered;

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

(3) Where a variation referred to in Rule 008(1) is the withdrawal from:
(a) an autumn session or spring session subject after the end of the eighth week but before the end of the twelfth week of the session of offer; or
(b) a summer session subject after the end of the third week but before the end of the fifth week of the summer session; or
(c) a double session or a triple session subject after the end of the second week but before the end of the eighth week of the second session in which the subject is offered;

the candidate shall be determined to have failed that subject but no mark shall be recorded unless withdrawal is for acceptable medical, personal or other reasons. In this latter case, the
candidate will be deemed to have discontinued the subject without penalty for the purposes of Rules 005(3) and 011(2) to (4) and only the subject and date of discontinuance will appear on the academic record of the candidate.

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

(5) Permission for a candidate to enrol in an additional subject for a program is contingent upon restrictions imposed by relevant provisions of Rules 005 and 008(6) and (7).

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

(a) an autumn session or spring session subject after the expiration of the second week of the session; or

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

(c) a double session or a triple session subject after the expiration of the second week of the first session in which the subject is offered or after the expiration of the first week should the first session of offer be summer session.

(7) Under no circumstances may a candidate enrol in:

(a) an autumn session or spring session subject after the expiration of the fourth week of the session; or

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

(c) a double session or a triple session subject after the expiration of the fourth week of the first session in which the subject is offered or after the expiration of the second week should the first session of offer be summer session.

009. Requirements for Theses and Minor Theses

(1) A candidate enrolled for a research subject shall carry out work for the thesis or minor thesis under supervision as set out in Attachment C1 following these Rules.

(2) The requirements for research subjects are set out in Attachment C2 following these Rules.

(3) The requirements for preparation and submission of theses and minor theses are set out in Attachment C3 following these Rules.

(4) The examination of theses and minor theses shall be conducted according to the requirements set out in Attachment C4 following these Rules.

010. Assessment

(1) In a subject, other than a research subject, the methods of assessment of performance of a candidate shall be determined by the Head.

(2) In a research subject, the methods of assessment of performance of a candidate shall be determined by the provisions of Attachment C4 and C5 following these Rules.

(3) Any material presented by a candidate for assessment in a subject must be the work of the candidate and not have been submitted for assessment elsewhere unless otherwise approved.

(4) (a) Standards of achievement required for the approved grades of performance in a subject, other than a research subject, shall be determined by the Head.

(b) Heads may require students to satisfy minimum attendance levels at lectures, seminars, tutorials, practicals, laboratories or for other modes of instruction. Failure to comply with such requirements may constitute grounds for failure in the subject concerned.

(5) A mark and an approved grade of performance as set out in Attachment D following these Rules, shall be determined and declared for each subject in which a candidate is enrolled.
Subjects satisfactorily completed at Pass Conceded or Pass Terminating grade may comprise no more than one sixth of the minimum credit point value of an undergraduate course.

Should performance in a subject be affected by illness or other cause beyond the control of a candidate, the circumstances should be reported to the Vice-Principal (Administration) in writing, supported by evidence, normally no later than seven days following the illness or other cause. The circumstances shall be referred to the Head and may be taken into account when assessment of the candidate in that subject is made.

A candidate who satisfactorily completes a subject listed in the appropriate Schedule shall count only once the subject or the number of credit points attached to the subject in that Schedule towards the course.

Except with prior approval, a candidate who satisfactorily completes a subject shall not count that subject, nor the number of credit points attached to that subject, towards a course unless that subject is listed in the appropriate Schedule.

A candidate may enrol in a program in accordance with provisions of Rule 005 provided, for a candidate not in the first year of registration, that the rate of progress is at least the minimum specified by the relevant Rule 011(2), (3) or (4).

The required minimum rate of progress by a candidate in an undergraduate course is:

(a) in the first year of registration, satisfactory completion of subjects having a credit point value of at least one half the credit point value of the subjects offered to completion in the program for the year; and

(b) in each subsequent year of registration, satisfactory completion of subjects having a credit point value of at least two-thirds the credit point value of the subjects offered to completion in the program for the year.

The required minimum rate of progress by a candidate in one of the postgraduate courses listed in Parts 3A, 3 and 4 of these Rules is satisfactory completion of subjects having a credit point value of at least one half the credit points attached to the subjects offered to completion in the program for the year.

The required minimum rate of progress by a candidate in one of the postgraduate courses listed in Part 5 of these Rules is satisfactory completion of subjects, excluding research subjects, having a credit point value of at least one half the credit points attached to the subjects offered to completion in the program for the year.

The required minimum rate of progress by a candidate in any course listed in Part 6 of these Rules which includes a coursework component, is satisfactory completion of all subjects, excluding research subjects, offered to completion in the program for the year.

A candidate whose rate of progress is less than the minimum specified in the relevant Rule 011(2), (3) or (4), is subject to provisions set out in Attachment B following these Rules.

Unless exceptional circumstances apply, a candidate whose rate of progress is less than that specified in Rule 011(4)(b) may not continue registration in that degree; a candidate not meeting this requirement may be permitted to register for a course under part 5 of these Rules, subject to satisfying Rule 011(4)(a).

A candidate who is subject to Rule 011(5) and is not refused registration may continue registration after consultation with an Academic Adviser to determine a suitable program.

A candidate who has completed, at an approved tertiary institution or other establishment, one or more subjects or other work approved for the purpose
of this Rule may apply for such advanced standing as provided in Attachment E following these Rules.

(2) With prior approval, a candidate may be permitted to enrol for a subject at another tertiary institution and, on satisfactory completion of that subject, have it counted towards a course of this University.

(3) Except with approval, a candidate who has been granted specified credit for a subject or subjects satisfactorily completed at this University or elsewhere shall not be permitted to count substantially corresponding subjects towards a course of this University.

(4) Except when advanced standing is granted, a candidate shall not be eligible to obtain standing towards a course by satisfactory completion at this University of a subject which corresponds substantially with a subject or subjects completed satisfactorily previously and counted towards a qualification at an approved tertiary institution.

013. Leave of Absence

(1) A candidate for one of the courses listed in Rules 102 or 202(a):

(a) becomes eligible to apply for leave of absence at the beginning of the second year of registration; and

(b) may be granted leave of absence for one year provided written application is made to the Vice-Principal (Administration) before the end of the fourth week of the first session for which leave is sought.

(2) A candidate for one of the honours degrees listed in Rule 203(5) may be granted leave of absence for one or two sessions provided that written application is made to the Vice-Principal (Administration) before the end of the fourth week of the first session for which leave is sought.

(3) A candidate for one of the courses listed in Rules 3A02, 302, 402, or 502 may be granted leave of absence for one or two sessions provided that written application is made to the Vice-Principal (Administration) before the end of the fourth week of the first session for which leave is sought.

(4) A candidate for one of the courses listed in Rule 602 may be granted leave of absence for up to four sessions provided that written application is made to the Vice-Principal (Administration) before the end of the fourth week of the first session for which leave is sought.

014. Conferral of Awards

(1) A course award may be conferred upon a candidate who has complied with relevant parts of these Rules, satisfied any requirement set out in Attachment F following these Rules and is not indebted to the University, provided that, in addition, a candidate for an undergraduate course has:

(a) been registered for that course for at least one year; and

(b) has completed the requirements for the 300 level subject component of the major study while so registered, or for prescribed courses, satisfactorily completed subjects with a value of at least 24 credit points while so registered.

(2) A candidate who has qualified more than once at this University for the same course award, excepting as set out in Rule 014(3), and excepting for those course awards set out in Attachment G following these Rules, shall receive only a statement of the additional qualification setting out the subjects completed and the marks and grades attained.

(3) A candidate who has qualified twice at this University for the same course award of degree of bachelor or honours degree of bachelor may be awarded the degree of Bachelor of Letters or the honours degree of Bachelor of Letters, as appropriate.

015. Ownership of Work and Intellectual Property

(1) The University reserves the right to retain, at its discretion, the original or one copy of any work submitted for assessment in a course, competition or
a subject, other than a research subject, conducted by the University.

(2) The University retains the right to intellectual property resulting from work undertaken by a candidate excepting that the candidate may negotiate with the University for ownership of some or all of the intellectual property.

(3) A candidate retains copyright over a thesis submitted for assessment in a subject or for an award, subject to the requirements prescribed in Attachment C3 following these Rules.

016. General Saving Clause

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

017. Application for Amending Rules

Should an amendment be made to either or both these Rules or the Attachments following these Rules, the amendment shall apply from the date of implementation, but not retrospectively, to all candidates, unless determined otherwise by Council.

018. Appeal

(1) A candidate may appeal against any decision made under these Rules.

(2) An appeal should be made in writing to the Vice-Principal (Administration) within 14 days of notification of the decision referred to in Rule 018(1).

(3) An appeal shall conform with approved guidelines.

PART 3A – GRADUATE CERTIFICATE RULES

3A01. Preliminary

Part 3A of these Rules applies to a candidate registered for a graduate certificate and is to be read in conjunction with relevant provisions of the General Rules and Attachments A, B, D1, D2, E, Z, Z2 and Z3 following these Rules.

3A02. Graduate Certificates and the Abbreviations

Part 3A of these Rules controls postgraduate courses leading to the graduate certificates:

Graduate Certificate in Adult Career Development
Graduate Certificate in Business Information Systems*
Graduate Certificate in Engineering
Graduate Certificate in Management
Graduate Certificate in Migration and Development
Graduate Certificate in Health Policy and Management
Graduate Certificate in Higher Education
Graduate Certificate in History Education
Graduate Certificate in Total Quality Management

3A03. Course Requirements for the Graduate Certificate

To qualify for award of a graduate certificate, a candidate shall:

(a) accrue an aggregate of at least 24 credit points by the satisfactory completion of subjects approved by the Head and prescribed in one of the courses listed in the relevant Schedules in Attachment Z3 following these Rules; and

(b) be subject to any provisions of the Course Requirements for that particular graduate certificate.

* Subject to approval.
PART 3 - GRADUATE DIPLOMA RULES

301. Preliminary

Part 3 of these Rules applies to a candidate registered for a graduate diploma and is to be read in conjunction with relevant provisions of the General Rules and Attachments A, B, D1, D2, E, Z, Z2 and Z3 following these Rules.

302. Graduate Diplomas and the Abbreviations

Part 3 of these Rules controls postgraduate courses leading to the graduate diplomas:

- Graduate Diploma in Adult Education and Training: GDipAdultEd
- Graduate Diploma in Arts: GDipArts
- Graduate Diploma in Commerce: GDipCom
- Graduate Diploma in Computer Based Learning: GradDipCBL
- Graduate Diploma in Education: GDipEd
- Graduate Diploma in Educational Studies*: GDipEdStudies
- Graduate Diploma in Engineering: GDipEng
- Graduate Diploma in General Practice: GDipGenPrac
- Graduate Diploma in Law: GDipLaw
- Graduate Diploma in Mining Management: GDipMinMgt
- Graduate Diploma in Natural Resources Law: GDipNatResLaw
- Graduate Diploma in Nursing: GDipNursing
- Graduate Diploma in Public Health: GDipPH
- Graduate Diploma in Science: GDipSc
- Graduate Diploma in Statistics: GDipStat
- Graduate Diploma in Total Quality Management: GDipTQM

303. Admission and Registration Requirements

(1) A candidate shall comply with the relevant provisions of Rules 004 and 303(2) or (3).

(2) An applicant for registration for the Graduate Diploma in Educational Studies must have qualified for a three year teaching diploma or the equivalent from an approved institution and have at least one year, or the equivalent, of acceptable professional experience.

(3) An applicant for registration for the Graduate Diploma in Science with specialisation in Community Health or in Mental Health must have qualified for an approved three year health profession diploma or the equivalent from an approved institution and have at least one year, or the equivalent, of acceptable professional experience.

304. Course Requirements for the Graduate Diploma

To qualify for award of a graduate diploma, a candidate shall:

(a) accrue an aggregate of at least 48 credit points, including at least 6 credit points at a level other than 900 level, by the satisfactory completion of subjects approved by the Head and prescribed in one of the courses listed in the relevant Schedules in Attachment Z3 following these Rules; and

(b) be subject to any provisions of the Course Requirements for that particular graduate diploma.

305. Conferal of Awards

(1) A Graduate Diploma in Law with specialisation other than Court Policy and Administration, shall not be conferred upon a candidate who is registered for the degree of Bachelor of Laws.

(2) Candidates for the Honours degree of Bachelor of Arts (specialising in Japanese) may have the Graduate Diploma in Arts conferred upon them if they satisfactorily complete the first year of the two year program.

PART 4 - MASTERS DEGREE RULES

401. Preliminary

Part 4 of these Rules applies to a candidate registered for a masters degree and is to be read in conjunction with relevant provisions of the General Rules and Attachments A, B, D1, D2, E, Z, Z2 and Z3 following these Rules.
402. Masters Degrees and the Abbreviations

Part 4 of these Rules controls postgraduate courses leading to the masters degrees:

- Master of Arts (MA)
- Master of Business Administration (MBA)
- Master of Commerce (MCom)
- Master of Computer Science (MCompSc)
- Master of Creative Arts (MCA)
- Master of Education (MED)
- Master of Engineering Studies (MEngStud)
- Master of Information Technology and Communication (MInfoTech)
- Master of Laws (LLM)
- Master of Mathematics (MMath)
- Master of Mining Management (MMinMgt)
- Master of Nursing (MNursing)
- Master of Policy (MPol)
- Master of Public Health (MPH)
- Master of Science (MSc)
- Master of Statistics (MStat)

403. Course Requirements for the Masters Degree

(1) To qualify for award of a masters degree, a candidate shall:

(a) undertake an approved course recommended by the Head;

(b) accrue the required number of credit points by satisfactory completion of subjects comprising the course as set out in Rule 403(2), (3) or (4); and

(c) be subject to any provisions of the Course Requirements for that particular masters degree.

(2) For a candidate who has satisfactorily completed a relevant major study or approved work equivalent to a relevant major study, the course shall comprise subjects having a value of at least 72 credit points of which:

(a) at least 48 credit points at 900 level shall be for subjects selected from the relevant Schedules in Attachment Z3; and

(b) the credit points constituting the remainder of the program shall be for subjects at 200, 300, 400, 800 or 900 level selected from the relevant Schedules in Attachments Z2 or Z3; a maximum of 12 credit points may be for subjects at the 200 level.

(3) For a candidate for a degree of Master of Business Administration or Master of Science with specialisation in Science Administration, the course shall comprise subjects having a value of at least 96 credit points, selected from the relevant Schedules in Attachment Z3.

404. Conferral of Awards

(1) Awards shall be conferred in accordance with the relevant provisions of Rules 014, and 404(2) and (3).

(2) Prior to the conferring of a masters degree upon a candidate who holds a graduate diploma of this University and which was a component of the masters degree, the candidate shall surrender the testamur for that graduate diploma and in doing so shall surrender all rights relating to that graduate diploma.

(3) Prior to the conferring of the degree of Master of Business Administration upon a candidate who holds a degree of Master of Management of this University, the candidate shall surrender the testamur for the degree of Master of Management and in doing so shall surrender all rights relating to that degree.

PART 5 - HONOURS MASTERS DEGREE RULES

501. Preliminary

Part 5 of these Rules applies to a candidates registered for an honours masters degree and is
to be read in conjunction with relevant provisions of the General Rules, and Attachments A, B, C, D1, D2, E, Z, Z2 and Z3 following these Rules.

502. Honours Masters Degrees and the Abbreviations

Part 5 of these Rules controls postgraduate courses leading to the honours masters degrees:

Honours Master of Arts MA(Hons)
Honours Master of Commerce MCom(Hons)
Honours Master of Education ME(Hons)
Honours Master of Engineering MEngSc(Hons)
Honours Master of Environmental Science ME(Hons)
Honours Master of Information Technology MInfoTech (Hons)
Honours Master of Laws LLM(Hons)
Honours Master of Nursing MNursing (Hons)
Honours Master of Science MSc(Hons)
Honours Master of Total Quality Management MTQM(Hons)

503. Course Requirements for the Honours Masters Degree

(1) To qualify for award of an honours masters degree, a candidate shall:

(a) undertake an approved course as recommended by the Head;

(b) accrue the required number of credit points by satisfactory completion of subjects comprising the course as set out in Rule 503(2) and (3);

(c) be subject to any provisions of the Course Requirements for that particular honours masters degree; and

(d) satisfactorily complete such examinations and other work as may be prescribed.

(2) For a candidate who has completed a bachelor degree at a standard of Honours Class II Division 2 or higher or approved equivalent qualification, the course shall comprise subjects having a value of at least 48 credit points at 900 level selected from the relevant Schedules in Attachment Z3.

(3) For a candidate who has completed a bachelor degree but has not satisfied the requirements stipulated in Rule 503(2), 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 at 900 level shall be selected from the relevant Schedules in Attachment Z3; and

(b) subjects having a value of at most 48 credit points shall be selected from the relevant Schedules in Attachments Z2 and Z3, save that, other than in exceptional approved circumstances, no credit points shall be for 100 or 200 level subjects and, at most, 24 credit points shall be for 300 level subjects.

504. Conferral of Awards

(1) Awards shall be conferred in accordance with the relevant provisions of Rules 014 and 504(2).

(2) Prior to the conferring of an honours masters degree upon a candidate who holds a graduate diploma of this University and which was a component of the honours masters degree, the candidate shall surrender the testamur for that graduate diploma and in doing so shall surrender all rights relating to that graduate diploma.

505. Outside Work

A full time candidate may be permitted to undertake teaching in the University or other work which, in the judgment of Council, will not interfere with pursuit of the course.

PART 6- DOCTORAL DEGREE RULES

601. Preliminary

Part 6 of these Rules applies to a candidate registered for a doctoral degree by thesis and is to be read in conjunction with relevant provisions of the General Rules and
602. **Doctoral Degrees and the Abbreviations**

Part 6 of these Rules controls postgraduate courses leading by thesis to the doctoral degrees:

- Doctor of Philosophy  
  PhD
- Doctor of Creative Arts  
  DCA
- Doctor of Education  
  EdD
- Doctor of Public Health  
  DPH

603. **Admission and Registration Requirements**

1. An applicant shall comply with the provisions of Rules 004 and 603(2) to (4).

2. An applicant for registration as a candidate for a doctoral degree shall have qualified for a bachelor degree with Honours Class II, Division 2 or higher of this University or possess an approved equivalent qualification from another institution.

3. Notwithstanding any other provisions of these Rules, the Head shall recommend whether the applicant is fit to undertake study leading to the award of a doctoral degree and certify that the unit has the necessary resources to provide supervision in the discipline in which the applicant proposes to study.

4. A candidate shall register as a full time candidate for a doctoral degree except that:
   - (a) a member of the full time staff of the University may be accepted as a part time candidate for the degree; and
   - (b) 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 opportunity to pursue study in the relevant academic unit may be accepted as a part time candidate for the degree, in which cases a minimum period for the duration of study shall be prescribed.

604. **Course Requirements for Doctor of Philosophy, Doctor of Creative Arts, Doctor of Education and Doctor of Public Health.**

A candidate for a degree by thesis of Doctor of Philosophy, Doctor of Creative Arts, Doctor or Public Health or Doctor of Education shall enrol in a research subject comprising a thesis and undertake an approved study which may include specified course and/or practical work and/or performance as recommended by the Head.

605. **Outside Work**

A full time candidate may be permitted to undertake teaching in the University or other work which, in the judgement of Council, will not interfere with pursuit of the course.

**PART 7 - DOCTORAL DEGREE BY PUBLICATION RULES**

701. **Preliminary**

Part 7 of these Rules applies to a candidate for a doctoral degree by publication and is to be read in conjunction with the relevant provisions of the General Rules and Attachments B, C, Z and Z3 following these Rules.

702. **Doctoral Degree and the Abbreviation**

Part 7 of these Rules controls the postgraduate course leading by publication to the doctoral degree:

- Doctor of Philosophy  
  PhD

703. **Requirements for Doctor of Philosophy by Publication**

1. A person may apply for admission as a candidate for the degree of Doctor of Philosophy by publication provided that person:
   - (a) (i) is a graduate of this University or of the University of New South Wales at the Wollongong University College; and
   - (ii) has standing of not less than eight years after admission to the first degree for which the
candidate has qualified; or
(b) is not a graduate of this University but is a member of the full time academic staff with standing of not less than eight years after admission to a first degree of another University.

(2) An application, accompanied by the prescribed charge, shall be made in writing to the Vice Principal (Administration) and shall include:

(a) identification of the academic unit with which the contribution to scholarship is considered to be most closely associated;

(b) five copies of a list of published works on which the claim for admission to the degree is based;

(c) five copies of the works listed in 703(2)(b), all works, apart from quotations, to be presented in, or translated into, English, unless otherwise approved; and

(d) a statement, which shall be an overview of normally not less than 5,000 words, setting out ways in which the collective publications provide an original and significant contribution to knowledge and incorporating:

(i) details of sources from which the works were derived;

(ii) details of the extent to which work of others has been availed upon;

(iii) details of the extent to which the applicant was responsible for the initiation, conduct and direction of any joint works submitted as part of the application;

(iv) evidence that the publications have standing as significant contributions to knowledge; and

(v) a declaration identifying any of the works referred to in Rule 703(2)(b) which have been submitted for any qualification of any tertiary institution.

704. Course Requirements for Doctor of Philosophy by Publication

A candidate for the degree of Doctor of Philosophy by publication shall enrol in a research subject comprising a thesis in accordance with the provisions of Attachment C1 following these Rules.

705. Examination

(1) Should Council be satisfied that the submitted work is sufficiently high quality to be prima facie worthy of examination for the degree, it shall appoint examiners as prescribed in Attachment C4 following these Rules.

(2) The examination shall comprise examination of the submitted published work and an oral examination on that work and on the general relevant field of knowledge to which it pertains and shall be conducted as prescribed in Attachment C5 following these Rules.

PART 8 - HIGHER DOCTORAL DEGREE RULES

801. Preliminary

Part 8 of these Rules applies to a candidate for a prestigious higher doctoral degree and is to be read in conjunction with relevant provisions of the General Rules and Attachments B, C, Z and Z3 following these Rules.

802. Higher Doctoral Degrees and the Abbreviations

Part 8 of these Rules controls postgraduate courses leading to the higher doctoral degrees:

Doctor of Laws LLD
Doctor of Letters DLitt
Doctor of Science DSc

803. Requirements for Doctor of Laws, Doctor of Letters and Doctor of Science

(1) A person may apply for admission as a candidate for the degree of Doctor of
Laws, Doctor of Letters or Doctor of Science provided that person:

(a) (i) is a graduate of this University or of the University of New South Wales at the Wollongong University College; and

(ii) has standing of not less than eight years after admission to the first degree for which the candidate has qualified; or

(b) is not a graduate of this University but is a member of the full time academic staff with standing of not less than eight years after admission to a first degree of another University.

An application shall be made in writing to the Vice Principal (Administration) and shall include:

(a) identification of the academic unit with which the contribution to scholarship is considered to be most closely associated;

(b) five copies of a list of published and/or unpublished works on which the claim for admission to the degree is based;

(c) five copies of the works listed in 803(2)(b), all works, apart from quotations, to be presented in, or translated into, English, unless otherwise approved; and

(d) a statement, which shall be an overview of normally not less than 5,000 words, setting out ways in which the collective works provide an original and significant contribution to knowledge and incorporating:

(i) details of sources from which the works were derived;

(ii) details of the extent to which work of others has been availed upon;

(iii) details of the extent to which the applicant was responsible for the initiation, conduct and direction of any joint works submitted as part of the application;

(iv) evidence that the publications have standing as significant and sustained contributions to knowledge; and

(v) a declaration identifying any of the works referred to in Rule 803(2)(b) which have been submitted for any qualification of any tertiary institution.

**804. Examination**

(1) Should Council be satisfied that the submitted work is sufficiently high quality to be prima facie worthy of examination for the degree, it shall appoint examiners as prescribed in Attachment C4 following these Rules.

(2) The applicant may be required to respond orally or in writing to questions concerning the work.

(3) The examination of the work submitted shall be rigorous and conducted as prescribed in Attachment C5 following these Rules.

**ATTACHMENTS REFERRED TO IN THE COURSE RULES**

**A. Time Limits for Course Completion**

(1) The minimum and maximum time limits for completion of courses listed in Attachment A(2) to (7) apply except when approved to the contrary in exceptional circumstances. For postgraduate courses, the time limits do not include summer sessions.

(2) A candidate may be registered for an undergraduate course for a maximum period of three times the normal minimum duration for completion of that course, excluding approved leave of absence. The normal minimum duration for an undergraduate course with value of 144 credit points is three years and pro rata for most courses having other credit point values.

(3A) A candidate for a graduate certificate may be registered for that certificate for no more than:

(a) two consecutive sessions as a full-time candidate; or
(3) A candidate for a graduate diploma or a 48 credit point masters degree may be registered for that diploma or degree for no more than:

(a) four consecutive sessions as a full time candidate; or

(b) eight consecutive sessions as a part time candidate.

(4) A candidate for a 72 or a 96 credit point masters degree may be registered for that degree for no more than:

(a) six consecutive sessions as a full time candidate; or

(b) twelve consecutive sessions as a part time candidate.

(5) A candidate for a 48 credit point honours masters degree may be registered for that degree for:

(a) no less than two consecutive sessions, and no more than four consecutive sessions as a full time candidate; or

(b) no less than three consecutive sessions, and no more than eight consecutive sessions as a part time candidate.

(6) A candidate for a 96 credit point honours masters degree may be registered for that degree for:

(a) no less than three consecutive sessions, and no more than six consecutive sessions as a full time candidate; or

(b) no less than five consecutive sessions, and no more than twelve consecutive sessions as a part time candidate.

(7) A candidate for a doctoral degree under Part 6 of these Rules by thesis may be registered for that degree for:

(a) no less than four consecutive sessions, and no more than eight consecutive sessions as a full time candidate; or

(b) no less than six consecutive sessions, and no more than twelve consecutive sessions as a part time candidate;

except that:

(c) a candidate who, before registration, was engaged upon approved study may be exempted from not more than two sessions;

(d) in special circumstances, a candidate may be permitted to devote not more than one calendar year to study at another institution provided that the work shall be supervised in an approved manner; and

(e) in exceptional cases, a candidate may apply to be exempted from not more than two of the sessions stipulated in Attachment A(7)(a) or (b).

B. Refusal of Registration

(1) A candidate may be refused registration by reason of:

(a) suspension from this University for a defined period; or

(b) exclusion from this University for a defined period; or

(c) expulsion from this University.

(2) A person who is:

(a) suspended may be re-admitted to this University at the conclusion of the defined period of suspension;

(b) excluded must apply for admission to this University at the conclusion of the period of exclusion should re-admission be sought; and

(c) expelled shall not be re-admitted except by permission of Council.

(3) The period of suspension will comprise one or more sessions and the remainder of the session in which the suspension is applied.

(4) The period of exclusion will comprise one or more years and the remainder of the year in which the exclusion is applied.

(5) Any record of performance issued by this University in respect of a person
refused registration as prescribed in Attachment B(1), shall include detail of such suspension, exclusion or expulsion.

C1. Supervision for Theses and Minor Theses

(1) A candidate for an honours master degree by thesis, or by coursework and either thesis or minor thesis, or for a doctoral degree, shall carry out the thesis or minor thesis work required for the research subject under the direction of a supervisor or supervisors, of whom at least one shall be a full time member of the academic staff, appointed under approved conditions.

(2) Should the supervisor be absent from the University for a period exceeding six weeks, that supervisor shall recommend an alternative supervisor to be appointed under approved conditions for the period of absence.

(3) Work in a research subject, other than field work, shall be carried out in an academic unit of this University save that in special cases a candidate may be permitted to conduct work at other places where suitable facilities are available; such permission will be granted on the condition that direction of the work remains entirely under the control of the supervisor appointed pursuant to Attachment C1(1).

(4) After consultation with the Head and on written application from a candidate, a change of supervisor may be approved.

(5) 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.

C2. Requirements for Research Subjects

(1) A candidate shall, not later than one session after registration, submit the title of the thesis or minor thesis through the Head for approval; upon approval, the title may not be changed except with further approval.

(2) A candidate enrolled for a research subject shall submit annually to Council, through the Head, a report on progress of work for the thesis or minor thesis.

(3) A candidate shall submit to the Head two months written notice of intention to submit the thesis or minor thesis.

(4) On completion of a research subject, a candidate shall submit a thesis or minor thesis embodying the results of the work undertaken in the subject.

(5) The thesis or minor thesis shall be presented in a form which complies with the requirements set out in Attachment C3 and shall include a certificate indicating the extent to which the work has been performed by the candidate.

(6) The candidate may submit for consideration any relevant work that has been published.

(7) A candidate may not submit as the major part of a 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 this University and recommended by the examiners that it be submitted for the honours masters degree.

(8) A candidate submitting a thesis for a doctoral degree must comply with the following additional requirements:

(a) the majority of the work submitted shall have been completed subsequent to registration for the degree;

(b) the work shall comprise an original and significant contribution to knowledge of the subject;

(c) the thesis must present an account by the candidate of the study; and

(d) in special cases, study carried out jointly with other persons may be accepted, provided Council is satisfied that the contribution by the candidate to the joint study is adequate.

C3. Procedures Governing the Preparation and Submission of Theses and Minor Theses

(1) A candidate required to submit a thesis for an honours masters degree or a doctoral degree 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 in Attachment C3(4), together with a certificate from the supervisor stipulating that the thesis is in a form suitable for submission to the examiners. All copies of the thesis shall include a summary of approximately 200 words and a certificate signed by the candidate stipulating that the work has not been submitted for a degree to any other university or institution.

The theses and other relevant work may be submitted for examination to the Vice-Principal (Administration) provided the candidate has completed the required minimum period of registration and is registered for the degree.

Theses are to be prepared in accordance with the following specifications, save that variation may be approved after consultation with the supervisor:

(a) the text of the thesis, normally in English, shall be in double-spaced typescript;

(b) 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;

(c) 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;

(d) there shall be a title sheet set out in accordance with the approved style sheet.

The bound copies of the thesis shall be presented in the following manner:

(a) the thesis shall be bound in boards, covered with buckram;

(b) the lettering on the spine binding will be 10 mm in height and will be:

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

(ii) 70 mm from the bottom and across - the degree;

(iii) underneath the degree, the year of submission of the thesis; and

(iv) evenly spaced between the degree and the top, reading upwards, the name of the author, initials of given name or names first followed by family name;

(c) no other lettering or decoration is permitted on the spine or elsewhere on the binding;

(d) in the binding of a thesis which includes mounted photographs, graphs, or similar method, or contains a back-pocket, packing shall be inserted at the spine to ensure even thickness of the volume;

(e) a completed and signed “Declaration Relating to Disposition of Thesis” as prescribed in Attachment C3(8), shall be affixed to the inside of the front cover of each copy of the thesis submitted for examination;

(f) the thesis shall be presented in a permanent and legible form as original typescript, offset printing, or copy by other approved technique.

Following examination of the thesis, with recommendation in accordance with Attachment C4(6)(a), (b), (d) or (e), the unbound copies shall be returned to the candidate, who shall make necessary corrections, if any, and present to the Vice-Principal (Administration) two copies of the thesis, bound in accordance with Attachment C3(4).

The degree will not be conferred until the two bound copies are lodged with the Vice-Principal (Administration) and appropriately accompanied by a letter from the Head certifying that, if required, corrections have been satisfactorily completed.
(7) No thesis submitted for a higher degree shall be retained in the Library for record purposes only but, within copyright privileges of the author, shall be public property and accessible for consultation at the discretion of the Librarian.

(8) To stipulate the wishes of a candidate for a higher degree regarding utilisation of the contents of the thesis, the candidate is required to complete a "Declaration Relating to Disposition of Thesis" available from the Vice-Principal (Administration):

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

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

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

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

(9) The abstract submitted with a doctoral thesis shall be forwarded by the Librarian to University Microfilms International for inclusion in Dissertation Abstracts Information Service.


C4. Examination of Theses and Minor Theses

(1) Council shall appoint at least:

(a) three examiners of the thesis, of whom at least one shall be normally a member of the relevant academic unit and at least two shall be external to the University for a candidate for a higher doctoral degree;

(b) two examiners of the thesis, each of whom shall be external to the University for a candidate for a doctoral degree; and

(c) two examiners of the thesis or minor thesis, not more than one of whom shall be internal to the University for a candidate for an honours masters degree.

(2) A supervisor of a candidate may not be an examiner of a thesis or minor thesis submitted by that candidate.

(3) A supervisor of a candidate who has submitted a thesis or minor thesis shall provide a certificate indicating:

(a) whether the supervisor is in agreement with the statement submitted by the candidate in accordance with Attachment C2 (5); and

(b) whether, in the opinion of the supervisor, the thesis is presented in a form that complies with the requirements of Attachment C3 and is prima facie worthy of examination.

(4) An examiner of a thesis or minor thesis for an honours masters degree shall be asked to report on:

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

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

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

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

(5) An examiner of a thesis for a doctoral degree by thesis shall be asked to report on:

(a) whether the thesis provides evidence that the candidate conducted original research;
whether the thesis demonstrates that the candidate has made a significant contribution to the knowledge of the subject concerned;

whether the thesis reveals that the candidate has a broad understanding of the discipline within which the work was conducted;

whether the thesis contains material suitable for publication;

whether the candidate has presented the thesis in a manner and level appropriate to the field of research; and

whether the literary standard of the thesis is adequate.

After examining a thesis or minor thesis, an examiner may recommend that:

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

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

(c) 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 be required to attend an oral examination to determine whether a satisfactory standard of competence in the work has been attained; or

(e) in the case of a candidate for a doctoral degree, the candidate be permitted to submit the thesis for an honours masters degree; or

(f) the candidate be not awarded the degree.

Each examiner shall make an independent report on the submitted work or works.

Prior to the oral examination of an applicant for a doctoral degree by publication or an applicant for a higher doctoral degree, should such examination be deemed necessary, each examiner shall present questions for the examination.

Should the examiners be not satisfied with the performance of the candidate in an oral examination, Council may permit the candidate to present for that examination on a second occasion at a time to be determined by the examiners.

Should the examiners not agree in their recommendations or should, for any other reason, further opinion on the merit of the submitted work be needed, Council may appoint an additional examiner or examiners who shall make an independent report on the submitted work and who may, at the discretion of such examiner or examiners, conduct an oral or written examination on that work and on the general relevant field of knowledge.

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 applicant may be admitted to the degree.

Should the application for admission to the degree fail, the person may make one only additional application after a period of not less than three years from the date of the original application.

An applicant for admission to the degree shall not be present at the relevant deliberations of Council.

The approved grades of performance and associated ranges of marks for 100, 200, 300 and 400 level subjects (except for subjects referred to in Attachment D1(2)) are:
Satisfactory Completion:

<table>
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<tr>
<th>Grade</th>
<th>Range</th>
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<tr>
<td>High Distinction</td>
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<tr>
<td>Distinction</td>
<td>75% - 84%</td>
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<tr>
<td>Credit</td>
<td>65% - 74%</td>
</tr>
<tr>
<td>Pass</td>
<td>50% - 64%</td>
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<tr>
<td>Pass Terminating</td>
<td>45% - 49%</td>
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<tr>
<td>Pass Conceded</td>
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</table>

Unsatisfactory Completion:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fail</td>
<td>0% - 44%</td>
</tr>
</tbody>
</table>

For marks in the range 45-49% either a Pass Terminating or a Pass Conceded grade shall be determined and declared. A Pass Terminating grade in a subject precludes a candidate progressing to any subject, for which that first subject is a pre-requisite, unless the Head determines otherwise.

The performance in some subjects approved for this purpose will be determined as:

<table>
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<tr>
<th>Satisfactory Completion:</th>
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<tr>
<td>Satisfactory, or</td>
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<table>
<thead>
<tr>
<th>Unsatisfactory Completion:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsatisfactory.</td>
</tr>
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</table>

Such subjects will not be included in the determination of classes of honours as prescribed in Attachment D1(3).

For subjects in which specified assessment components must be satisfactorily completed for the subject to be satisfactorily completed, failure to satisfactorily complete one or more such components will result in failure of the subject and the mark determined will be the aggregate of marks gained for the components, or 44, whichever is least.

For 900 level research subjects, performance will be determined as satisfactory or unsatisfactory for each candidate at the completion of the nominated duration of each subject, and after the completion of assessment as set out in Attachment C.

E. Advanced Standing

(1) An application for advanced standing shall be made on the prescribed form and lodged as directed.

(2) An application for advanced standing for qualifications not herein covered will be determined on merit.

(3) Unspecified credit may be converted to specified credit at any level on the recommendation of the Head.

(4) Qualifications completed more than ten years prior to application may attract up to the maximum advanced standing available as:

(a) specified credit or exemption on the recommendation of the Head;

(b) unspecified credit determined on the basis of the activities of the applicant subsequent to obtaining the qualification.

Notwithstanding the provisions of the Rules or any part of Attachment E, advanced standing additional to the maximum prescribed may be approved.
Sections E1. to E3. refer to undergraduate courses and are contained in the Undergraduate Calendar.

E4. Advanced Standing towards Postgraduate Courses

(1) The maximum advanced standing allowable towards courses listed under Parts 3 (Graduate Diplomas), 4 (Masters Degrees) and 5 (Honours Masters Degrees) of these Rules is 25% of the total credit point requirement for that course, except as provided in (2) below.

(2) Honours Masters Degree

A candidate for the degree of honours masters under the provision of Rule 503 (3), who has completed other relevant qualifications, may be granted up to 48 credit points of advanced standing in respect to the requirements set out in Rule 503 (3)(b).

Sections F. & G. refer to undergraduate degrees and are contained in the Undergraduate Calendar.

Z. Schedules

All subjects approved for inclusion in a course leading to an award are listed in one or more of the Schedules of subjects.

A candidate is strongly urged to read the details of each subject in which that candidate is interested. In particular, when selecting a program a candidate needs to ensure compliance with any special requirements for subjects the candidate may wish to take subsequently.

Information relating to 'pre-requisites' or 'co-requisites' specifies the minimum requirements to be satisfied for enrolment in the various subjects. A candidate who believes there are grounds for requesting waiver of a pre-requisite or a co-requisite requirement because of appropriate subjects completed satisfactorily, should present a case for waiver to the Head.

In the column headed 'Session Offered' the following abbreviations are used:

1 - sessional subject offered in autumn session;
2 - sessional subject offered in spring session;
3 - sessional subject offered in summer session;
A - double session subject offered in autumn session and the following spring session;
B - double session subject offered in spring session and the following summer session;
C - double session subject offered in spring session and the following autumn session;
D - double session subject offered in summer session and the following autumn session;
X - triple session subject offered in autumn session and the following autumn session;
Y - triple session subject offered in spring session and the following spring and summer sessions;
Z - triple session subject offered in summer session and the following summer and autumn sessions;
Z1. Schedules of Subjects for Associate Diplomas and Diplomas
Z2. Schedules of Subjects for Bachelor Degrees
Z3. Schedules of Subjects for Postgraduate Courses
FACULTY OF ARTS
FACULTY OF ARTS

PRINCIPAL OFFICERS

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Sub Dean: Graham C Barwell
Faculty Officer: Mr Warren Mahoney

MEMBER UNITS

The Faculty of Arts is made up of the following Units and Associate Units:

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

RESEARCH COURSES AVAILABLE

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

POSTGRADUATE PROGRAMS

Programs are available in the Faculty in the following areas:

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<thead>
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<th>Program</th>
<th>Page</th>
</tr>
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<tbody>
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<tr>
<td>History</td>
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<tr>
<td>History &amp; Education</td>
<td>105</td>
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<td>International Relations</td>
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<td>Journalism</td>
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<td>Multicultural Studies</td>
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<td>Philosophy</td>
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<td>Politics</td>
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<td>Post-Colonial Literatures</td>
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<tr>
<td>Science and Technology Studies</td>
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<tr>
<td>Social Policy</td>
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<tr>
<td>Sociology</td>
<td>138</td>
</tr>
<tr>
<td>Technology Policy &amp; Management</td>
<td>131</td>
</tr>
</tbody>
</table>
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Sub-Dean
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Lecturer
David Blackall, DipApplSc CSU, DipEd MA

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Associate Head
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Research Fellows
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Rogelia Pe Pua, BS MA PhD Philippines

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Ms Shirley Nixon, BA(Hons), Member University Council
CULTURAL STUDIES

COURSES OFFERED

The following postgraduate courses are available:

1. Honours Master of Arts
2. Master of Arts

POSTGRADUATE PROGRAM

The following postgraduate courses are available:

1. Honours Master of Arts
2. Master of Arts

SCHEDULE OF PROGRAMS

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

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<td>Texts, Readers and Audiences: Textual Theory and Practice in the Cultural context</td>
<td>8</td>
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<td>ENGL925</td>
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<td>8</td>
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<td>8</td>
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<td>Advanced Studies in Gender &amp; Genre</td>
<td>8</td>
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<tr>
<td>ENGL918</td>
<td>Directed Study either Session 1 or 11</td>
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<td>ENGL924</td>
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</tr>
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* Not on offer in 1994.
POSTGRADUATE PROGRAM IN CULTURAL STUDIES
leading to the Master of Arts or Honours Master of Arts (Cont’d)

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<td>SOC921</td>
<td>Special Topic Session I OR</td>
<td>8</td>
</tr>
<tr>
<td>SOC922</td>
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For further details, see Course Requirements below.

COURSE REQUIREMENTS

1. HONOURS MASTER OF ARTS

2. MASTER OF ARTS

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

The objectives of this program are to provide students with the ability to analyse and decode cultural phenomena and to examine communication practices within contemporary society.

The Masters program is an interdisciplinary course – taught mainly by English and Sociology staff and supported by other Departments within the Faculty of Arts. The course prepares graduates to enter business, government, academic and media fields, and related professions.

Pass degree entry

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

Honours degree entry

(i) Honours graduates with a grade of at least Class II, Division 2 or its equivalent in an appropriate area (as assessed by a course panel) may enter this coursework MA with a notional accreditation of 48 credit points. Candidates will undertake each of the prescribed topics and choose two of the Optional Topics from the schedule above. (One year full-time, two years part-time.)

(ii) Pass graduates or equivalent with a credit average or better may undertake a 96 credit point Honours MA coursework program. The initial 48 credit point part of the program will be considered a qualifying course, with subjects at the appropriate level being chosen from offerings in the English and Sociology schedules in consultation with the course co-ordinator. The subsequent 48 credit points will be undertaken according to the rubric applying to the MA Honours course, See (ii) below. (Two years full-time, three years part-time.)

Description

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

The program aims to:

(i) introduce students to the central theoretical and critical issues (both historical and contemporary) in Cultural Studies;

(ii) develop in students the ability to analyse cultural context and communicate accurately within it, and to lead students to consider historical changes (and to develop innovative approaches) to communication practices. The development of new kinds of communication practices has become crucial for organisation and productivity in both government and commerce;

(iii) provide students with conditions in which they can employ practical analyses of cultural conditions;

(iv) develop a critical awareness of analytic skills and the underlying cultural dimensions which make communication effective.
SUBJECT DESCRIPTIONS

ENGL912 Cross-cultural Perspectives.
Experiences of Asia
Autumn session; 8 credit points, (3 hr seminar per wk)
Assessment: 3 essays 33.3% each.
A survey of the various kinds of texts concerned with representing other cultures (travel writing, ethnography, colonial fiction, etc); analysis of the interaction of language and culture, literary conventions, modes of textual production, socio-cultural perceptions and critical reactions; theorising on constructions of culture as essence and interchange.
Textbooks:
Desai, A, Bye Bye Blackbird, Orient
Dening, G, Islands & Beaches, Melbourne, UP.
Forster, E M, A Passage to India, Penguin.
Heyerdahb, T, Fatu Hiya.
Jhabvala, R P, A Backward Place, Penguin.
Kipling, R, Kim, Oxford.
Koch, C J, Across the Sea Wall, Angus & Robertson.
Melville, H, Typee, Penguin.
Newbey, E, A Short Walk in the Hindu Kush, Picador.
Said, E, Orientalism.
Assorted critical readings will be available in class.
Co-ordinator: Dr P Sharrad.

ENGL917 Gender and Genre: The Textual Production of Gendered Subjectivities*
8 credit points
Assessment: one major sessional essay 50% and two seminar papers 25% each.
A study of a series of texts with special reference to their construction/representation of gender. At the same time the subject will consider the conventions by which those texts are constructed, their generic characteristics, and the relationship between the two analyses, i.e. how generic conventions are instrumental in the construction of gender roles in a text. The feminist writings which have guided the investigation of textual constructions of gender will also be studied.
Textbook:
Other texts to be advised at the commencement of the subject.
Recommended Reading:

* Not on offer in 1994.

Co-ordinator: To be advised.

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

ENGL920 Texts, Readers and Audiences:
Textual Theory and Practice in the Cultural Context
Autumn session (3 hrs seminar per wk).
Assessment: 1 major sessional essay 50%; 1 seminar paper 25%; 1 in-class textual exercise 25%.
This subject aims to provide a working knowledge of contemporary theoretical approaches to modes of “reading” texts as cultural products. Students will be introduced to a range of theorists whose work has been fundamental to the development of critical theories of textuality and of reading in the mid to late twentieth century. Concepts particularly relevant to the study of texts as both cultural product and process will be addressed in detail.
Textbook:
Other material will be supplied.
Co-ordinator: Dr J Pugliese.

ENGL924 National Cinemas
Spring session; (3 hr seminar per wk)
Assessment: four written assignments 25% each.
A study of the projection of socio-cultural identities in the national cinema. The focus will be on Australian cinema, prior to and since government initiatives to invest in the industry, but the subject will also investigate the production of cultural identity in other national cinemas - Germany, and Third-world countries.
Textbooks:
Co-ordinator: To be advised.
ENGL925 Writing the Gendered Body
Spring session; (2 hr seminar per wk)
Assessment: 1 essay 60%, 1 seminar paper 40%.
A study of a series of texts with special reference to their representation of the human body as socially and culturally constructed through race, social class and gender, with particular emphasis on the latter. At the same time the subject will examine the part literary texts themselves play in bodily construction.

Textbooks:
Atwood, M, Bodily Harm, Virago, 1983.

Jolly, E, The Sugar Mother, Penguin.
Kafka, F, Metamorphosis and Other Stories.
Shakespeare, W, Twelfth Night.
Winterson, J, Sexing the Cherry, Virago, 1989.
Woolf, V, Orlando.

Note: The program for the subject will specify further "readings" for each week: (i) primary material poems, short fiction; (ii) critical/theoretical articles and chapters.

Co-ordinator: Associate Professor D Jones.

ENGL926 Technologies of the Alien:*
Representations of the "other" in Science Fiction Film
Autumn session; (3 hr seminar per wk)
Assessment: one essay 40%, two seminar papers 30% each.

This subject will focus on Science Fiction film as an exploration of definitions of "otherness". It will examine the ways in which Science Fiction, as a genre, has been used to explore social issues and conflicts such as the relationship between technological development and social responsibility, the bodily inscription of gender, the Cold War, and the construction of the postmodern subject. It will also analyse the effectiveness of the Science Fiction film in the 20th century in dramatising these explorations.

Films
The Thing 1951.
The Day the Earth Stood Still 1951.
War of the Worlds 1953.
Forbidden Planet 1956.
I Married a Monster from Outer Space 1958.
Star Wars 1977.
Close Encounters of the Third Kind 1977.
Alien 1979.
Blade Runner 1982.
Born in Flames 1982.
Star Trek VI.

Textbooks

Co-ordinator: To be advised.

SOC910 Postgraduate Sociology Seminar
Autumn session; 8 credit points (2 hrs seminars)
Assessment: seminar presentations and 3,000 word essay.
The subject matter will explore contemporary theoretical and substantive issues in sociology. The subject will provide a means of exploring particular areas of current debate within the discipline.

Textbook: To be advised.

Co-ordinator: Professor J Bern.

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.

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.

Co-ordinator: Refer to Head of Department.

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.

See SOC921.

SOC942 Advanced Race and Ethnic Studies
Autumn session; 8 credit points (3 hrs; lecture/seminars)
Assessment: 2 seminars and long essay.

This subject introduces students to theories of ethnicity, 'race' and racism, in relation to other dimensions of social structure, in particular class and gender relations. Within an analysis of the Australian context, the significance of culture and ideology is explored. This includes an analysis of the subjective and structural dimensions of racial oppression and liberation movements, as well as an analysis of the broader theoretical and substantive relationship between culture, identity and resistance. These theories and issues will relate to the situation of ethnic minorities in Australia, and international and historical comparisons will be made.

Co-ordinator: Dr E Vasta.

* Not on offer in 1994.
SOC946 Practical Communication and Communications Theory

*Autumn session; 8 credit points (3 hrs lectures/ seminar)*

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

This subject aims to lift professional communication skills and understanding by relating practical issues to theoretical models, concepts, and ideas. It seeks to undertake this by exploring various debates, and theoretical constructs which help relate individuals to society. Practical work will include: interviewing, participant observation, role-playing, analysing visual and phenomenological material. The theoretical traverse will examine various accounts, models and theories of communication and aims to raise students' ability to encode and decode communication issues.

**Co-ordinators:** Dr T Jagtenberg and Mr P Walton.

SOC947 Cultural Theory

*Spring session; 8 credit points (2 hrs seminar/wk)*

**Assessment:** major essay/research paper, seminar project and participation.

This subject aims to introduce students to the work of leading cultural theorists. Key concepts to be explored will include cultural production, transmission, and reception of cultural forms; hegemony; the notions of “High” and “Popular” culture; discourse in cultural contexts; forms and modes of cultural production within the Media; the relationship between ‘race’/ethnicity and culture; gendered cultures; the relationship between feminism and culture; the technological mediation of culture; cultural production as social/political intervention, etc. Students will explore the implications, value and impact of particular cultural theories and will be encouraged to construct their own interventions.

**Co-ordinators:** Dr E Vasta and Dr T Jagtenberg.

SOC950 Advanced Studies in the Individual in Society

*Autumn or Spring session; 8 credit points (3 hrs lectures, seminars, workshops)*

**Assessment:** 1 major essay, 1 seminar project, participation.

This subject examines fundamental aspects of human identity and explores the extent to which an individual is ‘socially constructed’. The individual is located in the historical, cultural, and institutional context of ‘modern’/‘post-modern’ times through a consideration of contemporary myths, ideologies and practices which provide structure and meaning to daily life (e.g. love, gender, truth). The course broadly addresses the question of how personal identity is achieved in the context of change and uncertainty. These issues involve cross-cultural exploration of different models of self, identity and relationship. Students have the opportunity to explore a range of perspectives including interactionist, structuralist, post-structuralist and post-modern approaches to questions of identity. This also involves some consideration of ‘non-western’ traditions and questions about the ecological status of human identity.

**Co-ordinator:** Dr T Jagtenberg.

SOC959 Advanced Studies in Gender in Society

*Spring session; 8 credit points (1 hr lecture, 2 hr seminar per wk)*

**Assessment:** 1 essay, 1 written assignment, seminar participation.

This subject takes as its focus current debates about the constitutions of humans as gendered subjects. Through the reading of key texts students will explore the debates within contemporary sociological thought on the complex interrelation of social structures, social institutions and social practices in the constitution of femininity and masculinity. Among the debates to be addressed include those about the sexual division of labour, the contradictory position of women in relation to the family and the state, and the nature and role of sexuality in the constitution of femininity and masculinity. Each year the subject concentrates on a particular aspect of gender relations in Australia. The focus will be on the interaction of the state and other social institutions in the continuing redefinition yet reproduction of gender division. Examples will be drawn from current literature. Students with little or no background in the study of gender relations should consult the lecturer for preliminary reading.

**Co-ordinator:** Ms R Albury.

SOC990/ENGL902 Minor Thesis

24 credit points

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

**Co-ordinator:** Refer to Head of Department.
The past generation has witnessed the demise, in some quarters, of virtually the entire corpus of traditional frameworks of cultural meaning about the history and nature of science, elaborated over the past 350 years. What previously counted as master narratives of, and signposts to, the essence of scientific progress and rationality have come to be seen as problematic, historically contingent discursive weapons and strategies for the defense (or sectional co-optation) of the institution of science, by practitioners and their cultural allies. Accordingly, the previously received cultural meanings of science have become objects of study in the newer critical history and sociology of science. This subject surveys the previously received wisdom - including some of its internal conflicts - and examines the grounds of its deconstruction and collapse, as seen from within recent critical theoretical developments in the history, philosophy and sociology of science. Topics will include:

1. Traditional master narratives of the history of science - idealist/Marxist/functionalist - and their deconstruction from Bachelard, through Kuhn to post-Kuhnian history and sociology of science; the common ‘whiggish’ discursive ‘deep structure’ of formally opposed ‘internalist’ and ‘externalist’ narratives of science.

2. The lingering cult and symbolism of method: the discursive dynamics and rhetorical functions of method discourse (Feyerabend/Schuster); the abortive careers of ‘born-again’ method narratives from Popper to Lakatos and Laudan.

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

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

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

Textbooks:
Various books and articles will be used.

Co-ordinator: Associate Professor J Schuster.
COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Arts by Research
3. Honours Master of Arts (Cultural Studies)
4. Honours Master of Arts by Coursework (Post-Colonial Literatures)
5. Master of Arts (Cultural Studies)

POSTGRADUATE PROGRAM

Post-Colonial Literatures

CURRENT RESEARCH AREAS

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

Alternative and community theatre/drama
Aboriginal writing
Australasian theatre
Australian literature
Canadian literature
Canon formation and literary history
Caribbean literature
Communication studies

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN POST-COLONIAL LITERATURES

leading to the Honours Master of Arts

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<th>Number</th>
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<tr>
<td>ENGL902</td>
<td>Dissertation (20,000 words)</td>
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<td>ENGL903</td>
<td>Post-colonial literary issues</td>
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<td>ENGL906</td>
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<td>ENGL907</td>
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<tr>
<td>ENGL908</td>
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<td>Optional subjects (six of the following):</td>
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<td>ENGL910</td>
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POSTGRADUATE PROGRAM IN POST-COLONIAL LITERATURES (Cont’d)

leading to the Honours Master of Arts

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<th>Number</th>
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<td>HIST933</td>
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For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

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<td>ENGL999</td>
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COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Time Limits

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

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

Length of Dissertation

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

Candidates for the PhD degree enrol in ENGL999.

2. HONOURS MASTER OF ARTS BY RESEARCH

Qualification Requirements

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

Master of Arts Preliminary

Students enrolling in the Master of Arts (Preliminary) will normally be required to take six (6) subjects chosen from the subjects on offer in ENGL400 (English Honours) and Postgraduate coursework subjects. Students who do not have a background in literary theory should include ENGL920 Texts, Readers and Audiences, in their programs. For a description of this subject, see the Cultural Studies entry of this Calendar.

Time Limits

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

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

Length of Dissertation

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

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

3. HONOURS MASTER OF ARTS (CULTURAL STUDIES)

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

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

Entry from BA (Pass)

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. The course will consist of ENGL902, ENGL903, ENGL907, ENGL908 and six of the optional subjects.

Entry from BA (Hons)

Students with an Honours degree of at least Class II, Division 2 standard or its equivalent in an appropriate area may enter the coursework Master of Arts with an accreditation of 48
points. Such a degree will run over one year full-time, or two years part-time. Their course will normally consist of the dissertation and the three subjects ENGL903, ENGL907 and ENGL908.

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.

5. MASTER OF ARTS (CULTURAL STUDIES)

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

SUBJECT DESCRIPTIONS

Post-colonial Literatures

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

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

Textbooks:
Ashcroft, Griffith and Tiffin (eds), The Empire Writes Back, Methuen.
Buchan, J, Prester John, Penguin.
Harris, W, The Palace of the Peacock, Faber.
Rhys, J, Wide Sargasso Sea, Penguin.
Tutuola, A, The Palm-wine Drinkard, Faber.
Co-ordinator: Dr P Sharrad.

ENGL906 Twentieth Century Post-Colonial Writers
Autumn session; 8 credit points (3 hrs per wk, seminar)
Assessment: 4 written assignments 25% each.
A Study of the poetry of a group of modern writers.
Textbooks:
Atwood, M, Selected Poems (The Journals of Susanna Moodie).
Ezekiel, N, Selected Poems, O.U.P.
Walcott, D, Another Life, Three Continents Press, 1982.
Co-ordinator: Associate Professor J Wieland.

ENGL907 Literature from Colonising Societies
Autumn session; 8 credit points (3 hrs per wk, seminar)
Assessment: 4 written assignments 25% each.
This subject 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:
van Herk, A, No Fixed Address.

New Zealand:
Grace, P, Selected Stories, Penguin.

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

Textbooks:
Fuentes, C, Distant Relations, Arena.
Grace, P, Potiki, Penguin, NZ.
Harrex & O’Sullivan, (eds) Kamala Das, CRNLE.
Joaquin, N, Tropical Gothic.
Ogali, O, Veronica my Daughter, Three Continents.
Rushdie, S, Shame, Picador.
Soyinka, W, Aké, Arrow.

Co-ordinator: Dr P Sharrad.

ENGL909 Deconstructing Australia: Cultural Dissidence and the Ethics of Difference
Spring session (2 hr seminar per wk).
Assessment: 4 written assignments 25% each.
Drawing upon poststructuralist, feminist and postcolonial theories of culture, this subject will focus upon a range of texts which, in the context of Australian culture, raise questions concerning the politics of identity, gender roles, sexuality and history. The selected texts, as forms of cultural dissidence, articulate new spaces from which an ethics of difference can be broached.

Textbooks:
Fiction/Poetry
Castro, B, After China.
Derrida, J, Positions.
Langley, E, The Pea-Pickers.
Narogin, M, Doin’ Wildcat, Hyland House.
Stow, R, Visitants.
Walwicz, A, Boat, UQP.
White, P, The Twyborn Affair.

Films:
Moffatt, T, Night Cries
Pavlou, K, The Killing of Angelo Tsakos
Pellizzari, M, Rabbit on the Moon.
Tan, T, Silk Dreams.

Co-ordinator: Dr P Sharrad.

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

Textbooks:
Jolley, E, Miss Peabody’s Inheritance, St. Lucia, UQP, 1984.

Co-ordinator: Associate Professor D L M Jones.

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

Textbooks:
Dening, G, Islands & Beaches, Melbourne, UP.
Desai, A, Bye Bye Blackbird, Orient.
Forster, E M, A Passage to India, Penguin.
Thor Heydahsl, Fatu Him.
Jhabvala, R P, A Backward Place, Penguin.
Kipling, R, Kim, Oxford.
Koch, C J, Across the Sea Wall, A&R.
Melville, H, Typee, Penguin.
Newby, E, A Short Walk in the Hindu Kush, Picador.

Co-ordinator: Dr P Sharrad.
ENGL915 Drama and Arts Theatre in Other Cultures
Spring session; 8 credit points (3 hr seminar/workshop per wk)
Assessment: 4 written assignments 25% each.
An examination of examples of drama and theatre from cultural traditions other than the 'western'. The examples used each time the course is presented will be drawn from: Asian Drama (Japanese Noh and Kabuki; Indonesian Wayang and its modern developments; 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. Aboriginal drama and other examples of Post-Colonial "indigenous" drama in Commonwealth counties.)
Textbooks:
Davis, J, No Sugar, Currency.
Davis, J, et al, Plays from Black Australia, Currency.
Merritt, R, The Cake Man, Publication details to be advised.
Ngema, M, Asinimali in Woza Africa!, D Naloun (ed), Georges Brazillier.
Co-ordinator: Mr M Scott.

ENGL916 Nineteenth Century Literature of the United States
Spring session; 8 credit points (3 hrs per wk lecture and seminar)
Assessment: 3 written assignments 30%, 30% and 40%.
This subject studies the development of American Literature from independence to the end of the 19th Century. What makes American Literature distinctively American? How did America shake off the cultural domination of Britain? What conditions exist in a post-colonial society, and what conditions are needed to stimulate the growth of a truly national literature.

Textbooks:
Poe, E A, The Fall of the House of Usher and other Tales, Signet.
Melville, H, Moby-Dick, Signet.
James, H, Daisy Miller, Penguin.
Dreiser, T, Sister Carrie, Signet.
Other material (selected poems by Walt Whitman and Emily Dickinson) will be supplied.
Please note:
Texts are listed in the order in which they will be presented in lectures.
Co-ordinator: Dr R Harland.

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

ENGL 921 Turning Points: Selected Post-Colonial Fiction
Autumn session, 8 credit points (2 hr seminar with extra classes to equivalent of 3 hrs per wk).
Assessment: 3 essays 33.3% each.
A survey of major fiction texts of post-colonial writing in English, especially 'first' novels from emerging nations and fiction that has, by virtue of critical attention or popular regard, become seminal in creating the literary corpus of post-colonial studies. Texts will be placed in cultural and historical context. Attention will be paid to the interaction between colonial experience and literary form and technique, and critical responses surveyed for various constructions of a post-colonial 'tradition'. Students will also undertake a special area study with texts to be arranged.
Textbooks:
Achebe, C, Things Fall Apart.
Cooper, J F, The Last of the Mohicans.
Edgeworth, M, Castle Rackrent.
Eri, V, The Crocodile.
Schreiner, O, The Story of an African Farm.
Rao, R, Kanthapura.
Lanning, G, In the Castle of my Skin.
Ihmaera, W, Pounamu, Pounamu.
Atwood, M, Surfacing.
Co-ordinator: Dr P Sharrad.
ENGL922 Research Methods
Autumn session; 8 credit points (3 hr seminar per wk)
Assessment: one essay 30%, class exercises 70%.
This subject is concerned with the practicalities of research at postgraduate level: development of a research topic, appropriate research models and techniques, planning and writing the dissertation, advanced bibliographic and textual study skills, computer skills, and editing. A theoretical component will examine the relationship between critical theory and research method in English studies. Part-time students are advised to take this subject in the year in which they intend to submit the dissertation.
Textbooks:
Readings from the Department
Co-ordinator: Dr K M Newey.

ENGL923 Indigenous Literature in Canada, New Zealand and Australia
Spring session; 8 credit points (3 hr seminar per wk)
Assessment: 4 assignments 25% each.
In recent years attention has turned towards the questions which teaching indigenous writing in the academy raises. Who can teach the literature of Aborigines, Maoris, Inuits and Native Indians? Who has the right to speak for them? Is there a common voice for all indigenous cultures? How do we approach the literature as outsiders without appropriating the right of indigenous peoples to speak for themselves? These critical questions will be addressed through the literature produced by indigenous writers themselves. This subject will study indigenous writing in the context of world movements, but it will focus on insights which can be achieved through a comparative process – specifically, on the experiences of Australian, New Zealand and Canadian indigenous critics and artists. The subject will also attempt to place such literature in the context of wider cultural and critical investigations – such as weighing up the impact of Afro-American literary theory on "Black" studies generally; and by studying the impact and damage homogenizing theoretical frameworks such as post-colonialism produce on indigenous literature and politics.
Textbooks:
Anthologies:
(Other texts will be supplied)
Novels:
Armstrong, J, Slash.
King, T, Medicine River, Penguin.
Grace, P, Mutuwhenua, Penguin.
Recommended Reading:
Hodge and Mishra, Dark Side of the Dream: Australian Literature & the Postcolonial Mind.

ENGL924 National Cinemas
Spring session (3 hr seminar per wk).
Assessment: 4 written assignments - 25% each.
A study of the projection of socio-cultural identities in the national cinema. The focus will be on Australian cinema, prior to and since government initiatives to invest in the industry, but the subject will also investigate the production of cultural identity in other national cinemas - Germany, and Third-world countries.
Textbooks:
Co-ordinator: To be advised.

HIST933 Culture & Politics in Indonesia, 1865-1988
Autumn Session; 12 credit points (3 hrs per wk)
Assessment: 2 tutorial papers of 2000 words each, 1 research essay of 5000 words.
The subject is designed around the issue of becoming modern, focussing on the upheaval and violence of Indonesia’s transition into the modern world and the politics of culture in Indonesia. This course will look at Indonesian cultural history through Pramoedya Ananta Toer’s novel This Earth of Mankind. The subject begins with the Javanese background of the novel, particularly aspects of Javanese culture, starting with the late nineteenth century. It will then discuss, at an advanced level, aspects of nationalism and the Indonesian Revolution, the politics of culture in post-Revolution Indonesia, particularly the role of Communism, and finally the way history and culture are viewed in New Order Indonesia.
Textbook:
Co-ordinator: Dr A Vickers.

Mudrooroo, Writing from the Fringe: a Study of Modern Aboriginal Literature.
Co-ordinator: Dr G Turcotte.
CURRENT RESEARCH AREAS

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

- Australian history, with emphasis on labour, feminist, regional, social and political themes
- Modern South East Asian history
- 19th and 20th century British social and political history, and relations with the USA
- French history from 1650
- Italian history from 1856
- Historiography, including labour, Marxist and communist
- 20th Century Russian History

POSTGRADUATE PROGRAMS

History
History and Education

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN HISTORY
leading to the Master of Arts

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>HIST904</td>
<td>Reading Course on Themes in Australian History</td>
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<tr>
<td>HIST912</td>
<td>Australian Labour Historiography</td>
<td>12</td>
</tr>
<tr>
<td>HIST913</td>
<td>The Making of the Modern Australian Woman</td>
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<td>HIST914</td>
<td>Australian Regional History</td>
<td>12</td>
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<tr>
<td>HIST915</td>
<td>Comparative Settler Capitalism</td>
<td>12</td>
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<tr>
<td>HIST921</td>
<td>Britain and Total War: 1939-1945</td>
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<td>HIST931</td>
<td>Labour and Industry in Southeast Asia Since 1945</td>
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<td>HIST932</td>
<td>The Vietnam Wars 1920-1985</td>
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<tr>
<td>HIST933</td>
<td>Culture &amp; Politics in Indonesia, 1865-1988</td>
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<tr>
<td>HIST936</td>
<td>Australians and War</td>
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</tr>
<tr>
<td>HIST951</td>
<td>Philosophy of History</td>
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</tbody>
</table>

For further details, see Course Requirements below.

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

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>EDGA820</td>
<td>New Approaches to Teaching and Learning in History</td>
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<tr>
<td>EDGA821</td>
<td>Curriculum Development and Evaluation Project</td>
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<tr>
<td>HIST934</td>
<td>The Re-making of Australian History</td>
<td>12</td>
</tr>
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For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECT

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>HIST973</td>
<td>Major Thesis</td>
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</table>
COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY
For this degree, candidates enrol in the subject HIST973.

2. HONOURS MASTER OF ARTS
For this degree, candidates enrol in the subject HIST973.

3. MASTER OF ARTS
The Department of History and Politics offers a program of postgraduate level subjects leading to the degree of Master of Arts in 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 subjects will be taught on the basis of three hours of seminars/lectures/tutorials per week, with individual tutorial consultation. Subjects on offer will vary from year to year according to the availability of specialist staff.

4. GRADUATE CERTIFICATE IN HISTORY EDUCATION
Candidates should have completed at least a minor sequence in History, or its equivalent, and be practising teachers.

The course consists of the three subjects as set out in the relevant schedule shown above.

Successful students will receive a Graduate Certificate of History Education. This will stand as half credit towards either a Master of Arts or a Master of Education Degree—the former for students who wish to pursue studies in content further, the latter for those who wish to extend their studies in method.

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

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

SUBJECT DESCRIPTIONS

EDGA820 New Approaches to Teaching and Learning in History
Refer to entry under Faculty of Education.

EDGA821 Curriculum Development and Evaluation Project
Refer to entry under Faculty of Education.

HIST904 Reading Course on Themes in Australian History
Autumn or Spring session; 12 credit points (one hr supervision per wk).
Assessment: 2 x 4000 word essays each 40%, 1 x 1000 word paper 20%.
This subject is designed to enable students to undertake a sustained reading program in selected themes in Australian History under close supervision. Enrolment, selection of appropriate themes and readings are subject to the approval of the Head of the Department.
Textbooks: To be advised.
Co-ordinator: Professor J Hagan.

HIST912 Australian Labour History
Spring session; 12 credit points (3 hrs of lectures/tutorials)
Assessment: 9,000 words in essays/tutorial papers.
This subject acquaints 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 also considers labour performed outside the market, so-called domestic labour, and the tactics and ideologies of the labour movement. The intellectual sources of Australian labour historiography are critically evaluated. 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 are addressed in any one year.
Textbooks: To be advised.
Co-ordinator: Dr A Wells.

HIST913 The Making of the Modern Australian Woman
Autumn session; 12 credit points (2 hr seminar per wk)
Assessment: 9,000 words in essays/tutorial papers.
This subject looks at those elements in Australian social history from the 1890s to the
present that had particular significance in forming the experiences of present day Australian women. It covers the demographic transition and migration patterns, economic changes, political changes, ideologies of population and consumerism and the rise of professionals as social managers.

Preliminary Reading:
Matthews, J, Good and Mad Women, Allen and Unwin, 1983.

Textbook:
Co-ordinator: Ms J Castle.

HIST914 Australian Regional History*
Autumn or Spring session; 12 credit points (3 hrs lecture/tutorials per wk)
Assessment: 1 x 4,000 word essay, 1 x 3,500 word research paper, 1 x 1,500 word tutorial paper, examination.

Using methods developed by regional specialists, this subject examines the impact of national political and social force in Australian History at the local and regional level. Extensive use is made of case studies and students are expected to apply regional methodology in a research project of their own. Where relevant, some comparisons are made with other countries.

Textbooks: To be advised.
Co-ordinator: Dr J McQuilton.

HIST915 Comparative Settler Capitalism *
Autumn session; 12 credit points (3 hrs lecture/seminar per wk)
Assessment: 1 x 1500 word tutorial paper 15%, 1 x 2000 word tutorial paper 20%, 1 x 6000 word research essay 60%, tutorial participation 5%.

This subject examines the formation and evolution of white settler societies between 1750-1945. While the central example will be Australia, considerable attention will be directed towards comparisons with South Africa, New Zealand, Canada and Argentina.

Textbook:
Co-ordinator: Dr A Wells.

HIST921 Britain and Total War, 1939-1945
Spring session; 12 credit points (2 hr seminar per wk)
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. Where appropriate, comparisons are 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 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:
Co-ordinator: Dr I McLaine.

HIST931 Labour and Industry in Southeast Asia*
Autumn or Spring session; 12 credit points (3 hrs 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 is some scope for students to specialise in an area of particular interest to them.

Textbooks:
Co-ordinator: Dr M Beresford.

* Not on offer in 1994.
HIST932 The Vietnam Wars  
Spring session; 12 credit points (3 hrs of lectures/seminars)  
Assessment: 9,000 words in essays/tutorial papers.  
The French conquest of Indochina in the late nineteenth century, the economic changes wrought by colonialism up to 1940 and the accompanying cultural reappraisals in Vietnamese intellectual circles, establish the background to the First, Second and Third Indochina Wars, 1945-89. The Japanese occupation, the 1945 August Revolution in Vietnam, the French attempt to recolonise and the similarly-fated US intervention of 1955-1975 are studied closely along with Vietnamese and Cambodian society and politics since 1945 and foreign relations with the USA, China, ASEAN and the USSR.  
Textbooks:  
Co-ordinator: Dr M Beresford.  

HIST933 Culture & Politics in Indonesia, 1865-1988  
Autumn Session, 12 credit points (3 hrs per wk)  
Assessment: 2 x 2000 word tutorial papers 20% & 30%, 1 x 5000 word research essay 50%.  
The subject is designed around the issue of becoming modern, focussing on the upheaval and violence of Indonesia's transition into the modern world and the politics of culture in Indonesia. This subject looks at Indonesian cultural history through Pramoedya Ananta Toer's novel This Earth of Mankind. The subject begins with the Javanese background of the novel, particularly aspects of Javanese culture, starting with the late nineteenth century. It then discusses, at an advanced level, aspects of the nationalism and the Indonesian Revolution, the politics of culture in post-Revolution Indonesia, particularly the role of Communism, and finally the way history and culture are viewed in New Order Indonesia.  
Textbooks:  
Co-ordinator: Dr A Vickers.  

HIST934 The Re-making of Australian History  
Autumn session; 12 credit points (3 hrs lecture/seminar per wk)  
Assessment: Essay 60% tutorial papers 30%, tutorial participation 10%.  
This subject will examine the re-writing of the following themes in Australian history: nationalism and racism; Aboriginal pre-history and white relations; the role of women in society; the influence of literature, art and mass communications; and local and family history. It will also discuss the social and technical sources of these changes.  
Textbooks:  
Co-ordinator: Professor J Hagan  

HIST936 Australians and War  
Autumn session; 12 credit points (3 hrs lectures/tutorials per wk)  
Assessment: 1 x 3000 word essay 40%, 1 x 3000 word research exercise 40%, 1 x literature review 20%.  
This subject examines the impact of war on Australian society. The Home Front is the major area of study although some reference is made to more traditional areas of military history. Four conflicts form the focus of the subject, the South African War, the two world wars and the Vietnam conflict. Themes examined include enlistment, conscription, the place of women in war time Australia and the digger myth.  
Preliminary Readings:  
McKernan, M, All In! Australia During the Second World War, Nelson, West Melbourne, 1983.  
Scott, E, Australia During the War, Vol 11, Official History of Australia During the War of 1914-1918.  
Textbooks:  
McKernan, M and Browne, M, Australia, Two Centuries of War and Peace, Australian War Memorial, Canberra, 1988.  
Co-ordinator: Dr J McQuilton.  

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

Preliminary Reading:

Co-ordinator: Dr I McLaine.

**HIST973 Major Thesis**

48 credit points

In addition to completing a major thesis, postgraduate students in the Department of History and Politics are required to attend a postgraduate seminar series to which visitors, postgraduates, and staff members contribute. Until further notice, the seminars will be of about two 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 Master of Arts Honours shall give at least two, and candidates for doctoral degrees shall give three, work-in-progress seminars over the course of their candidature.

Co-ordinator: Refer to Head of Department.
COURSE OFFERED

The following postgraduate course is available:

1. Master of Arts

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN INTERNATIONAL RELATIONS
leading to the Master of Arts

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<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>Core Subjects:</strong></td>
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<tr>
<td>INTR900</td>
<td>International Law and Diplomacy</td>
<td>8</td>
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<tr>
<td>INTR910</td>
<td>Politics of International Relations</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>INTR930</td>
<td>Organizational Behaviour</td>
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<tr>
<td></td>
<td><strong>Elective Subjects:</strong></td>
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<tr>
<td>INTR901</td>
<td>Practical Diplomacy</td>
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<tr>
<td>INTR911</td>
<td>Politics in the South Pacific</td>
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<tr>
<td>INTR912</td>
<td>Pacific Rim and Pacific Basin</td>
<td>8</td>
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<tr>
<td>INTR921</td>
<td>Advanced International Economics</td>
<td>8</td>
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<tr>
<td>INTR922</td>
<td>Advanced Topics in Economics</td>
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<tr>
<td>INTR931</td>
<td>Strategic Planning and Policy</td>
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<td>INTR932</td>
<td>Selected Topics in Management</td>
<td>8</td>
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<tr>
<td>INTR940</td>
<td>Case Study in International Politics A</td>
<td>8</td>
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<tr>
<td>INTR941</td>
<td>Case Study in International Politics B</td>
<td>8</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>
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</tbody>
</table>

*Not all of these subjects are available each year – refer to Department of History and Politics before enrolment.

For further details, see Course Requirements below.

COURSE REQUIREMENTS

1. MASTER OF ARTS

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

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

In addition to formal course requirements, students take part in regular simulations and professional seminars, exchanges with other institutions, including the Australian Department of Foreign Affairs and Trade, as well as placements. Special classes are provided in relevant computing and (where appropriate) English language, study, analytical, public speaking and other skills. A special centre (with computing, video and short-wave radio facilities, plus a range of pertinent periodicals) has been set aside for use by students in the program.
Course Requirements
48 credit points gained from subjects in the INTR schedule of postgraduate subjects (or such greater number as may be required in individual cases). Except with the permission of the Head of Department, students are required to complete the following four subjects in order to graduate in the program:

INTR900 International Law and Diplomacy
INTR910 Politics of International Relations
INTR920 Advanced International Economic Relations
INTR930 Organisational Behaviour

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

Students may, with the permission of the Course Co-ordinator, apply to enrol in other subjects contained in the Postgraduate Calendar.

SUBJECT DESCRIPTIONS

INTR900 International Law and Diplomacy
Autumn session; 8 credit points (3 hrs per wk 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: To be advised
Co-ordinator: To be advised.

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

Textbooks: To be advised.
Co-ordinator: To be advised.

INTR910 Politics of International Relations
Spring session; 8 credit points (3 hrs per wk of lectures, seminars and tutorials)
Assessment: 7,500 words of essays and tutorial papers.
Theories and concepts of international relations: utopian, legal, realist, Marxist, Neo-Marxist, globalist), 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.

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

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

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

INTR912 Pacific Rim and Pacific Basin
Spring session; 8 credit points (3 hrs per wk of lectures, seminars and tutorials)
Assessment: 7,500 words of essays and tutorial papers.
The subject analyses aspects of relations between advanced, industrialising and less developed countries on the Pacific Rim and in the Pacific Basin. Particular attention is paid to the foreign relations, including relations with advanced industrial and industrialising countries, and regional as well as inter-regional co-operation, of 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 communications, fisheries, and the law of the sea). Particular attention is 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 Asia-Pacific co-operation; and other questions of particular concern to countries on the Pacific Rim and in the Pacific Basin.

Textbooks: To be advised.
Co-ordinator: Professor E P Wolters.

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

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

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

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

INTR931 Strategic Planning and Policy
Spring session; 8 credit points (2 hrs lectures per wk)
Assessment: examination and essays.
The subject uses case studies as a key teaching vehicle and examines strategy in the context of, for profit and not for profit organisations. Key topic areas may include: strategy formulation, choice and implementation; strategy and competitive advantage; interrelationships, diversification, integration, acquisition and internal development; global strategies.
Textbooks: To be advised.
Co-ordinator: To be advised.

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

INTR940 Case Study in International Politics A
Autumn session; 8 credit points (minimum one hr/wk by personal arrangement with member(s) of staff)
Assessment: 7,500 words of research papers.
This subject is intended to provide students with an opportunity to engage in detailed research on a particular aspect of international relations approved by the 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 requires the approval of the Head of Department, and may be determined by the availability of suitably qualified staff.
Textbooks: To be advised.
Co-ordinator: Professor E P Wolters.
INTR941 Case Study in International Politics B  
Spring session; 8 credit points (minimum one hr/wk by personal arrangement with member(s) of staff)  
Assessment: 7,500 words of research papers.  
This subject is intended to provide students with an opportunity to engage in detailed research on a particular aspect of international relations approved by the 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 requires the approval of the Head of Department, and may be determined by the availability of suitably qualified staff.  
Textbooks: To be advised.  
Co-ordinator: Professor E P Wolfers.

INTR950 Australia: Making of a Nation  
Spring session; 8 credit points (3 hrs of lectures/seminars)  
Assessment: 7,500 words in essays/seminar papers.  
This subject is intended to provide a detailed examination of twentieth century Australia, in the light of notions of dependency and autonomy, in order to assess the extent to which nationhood has been achieved. The subject begins with an analysis of concepts of the nation, nationalism, the state and cultural identity. Economic processes, key industries and relations with the international economy are analysed. The distinctive features of modern Australian political institutions, as well as internal and external policies are identified, and changes examined. The nature of Australian cultural traditions, including social, racial and class differences, are discussed. The subject concludes by returning to the question of national identity and the real and imagined quality of Australian independence.  
Textbooks: To be advised.  
Co-ordinator: To be advised.

INTR957 Post-War Economic and Social Development of Southeast Asia*  
Spring session; 8 credit points (3 hrs of lectures/seminars)  
Assessment: 7,500 words in essays/seminar papers.  
This subject traces the development of industry and the labour movement in Southeast Asia since the Second World War. It covers some major issues of economic development faced by countries of the region from the end of the colonial period to the present day and includes discussion of the colonial economic legacy, the formation of new social classes and their role in independence struggles, post-independence industrialisation strategies, the role of the state in economic life, trade unionism and political movements among the working class, ownership and control of industrial capital, factors influencing technological change, the emergence of capitalist and socialist industrial systems in the region. The subject adopts a comparative approach and focuses particularly on the rise of the Pacific Basin economy and development of possible regional trading blocs.  
Textbook:  
Co-ordinator: Dr M Beresford.

INTR958 Selected Topics on Post-War Developments in Southeast Asia  
Spring session; 8 credit points (3 hrs of lectures/seminars)  
Assessment: 7,500 words in essays/seminar papers.  
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 is on a 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 is possible, subject to the availability of suitably qualified staff.  
Textbooks: To be advised.  
Co-ordinator: Dr M Beresford.

* Not on offer in 1994.
COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Arts (Journalism) by Research
3. Honours Master of Arts (Journalism) by Coursework
4. Master of Arts (Journalism)

POSTGRADUATE PROGRAM

Journalism

CURRENT RESEARCH AREAS

Journalism practice and history
Australian media structure
Journalism and multi-media applications

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN JOURNALISM
leading to the Master of Arts or Honours Master of Arts by coursework

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>JOUR901</td>
<td>News and Feature Writing</td>
<td>6</td>
</tr>
<tr>
<td>JOUR902</td>
<td>Journalistic Method and Practice</td>
<td>6</td>
</tr>
<tr>
<td>JOUR903</td>
<td>Journalism, Ethics and Standards</td>
<td>6</td>
</tr>
<tr>
<td>JOUR904</td>
<td>Journalism, History and Structure</td>
<td>6</td>
</tr>
<tr>
<td>JOUR931</td>
<td>Radio Journalism</td>
<td>6</td>
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<tr>
<td>JOUR932</td>
<td>Television Journalism</td>
<td>6</td>
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<tr>
<td>JOUR933</td>
<td>Journalism, Research and Investigation</td>
<td>6</td>
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<tr>
<td>JOUR934</td>
<td>Print Production and Publication</td>
<td>6</td>
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<tr>
<td>JOUR935</td>
<td>Electronic Sub-editing and Production</td>
<td>6</td>
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<tr>
<td>JOUR936</td>
<td>International Journalism</td>
<td>6</td>
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<tr>
<td>JOUR937</td>
<td>Journalism, the Arts and Leisure</td>
<td>6</td>
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<tr>
<td>JOUR938</td>
<td>Journalism, Science and Technology</td>
<td>6</td>
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<tr>
<td>JOUR939</td>
<td>Journalism, Economics and Business</td>
<td>6</td>
</tr>
<tr>
<td>JOUR941</td>
<td>Journalism and Institutions</td>
<td>6</td>
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<tr>
<td>JOUR942</td>
<td>Current Affairs Journalism</td>
<td>6</td>
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<tr>
<td>JOUR943</td>
<td>Directed Readings in Journalism</td>
<td>6</td>
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<tr>
<td>JOUR945</td>
<td>Applied Journalism Project</td>
<td>6</td>
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<tr>
<td>JOUR947</td>
<td>Advanced Journalism</td>
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<tr>
<td>JOUR948</td>
<td>News Design</td>
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<tr>
<td>JOUR949</td>
<td>Multicultural Journalism</td>
<td>6</td>
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<tr>
<td>JOUR951</td>
<td>Public Journalism</td>
<td>6</td>
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<tr>
<td>JOUR953</td>
<td>Photojournalism</td>
<td>6</td>
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<tr>
<td>JOUR954</td>
<td>Journalism and Multi-media</td>
<td>6</td>
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<tr>
<td>JOUR955</td>
<td>Journalism and the Law</td>
<td>6</td>
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<tr>
<td>JOUR991</td>
<td>Major Journalism Project</td>
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<td>JOUR992</td>
<td>Major Journalism Presentation (Honours students only)</td>
<td>24</td>
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<td>LAW960</td>
<td>Law for Professionals</td>
<td>6</td>
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</tbody>
</table>

Not all courses are offered in each academic year.
For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECT

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR999</td>
<td>Thesis</td>
<td>48</td>
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</tbody>
</table>
COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY
Candidates for this degree enrol in JOUR999.

2. HONOURS MASTER BY RESEARCH
Candidates for this degree enrol in JOUR999.

3. HONOURS MASTER OF ARTS

4. MASTER OF ARTS

1. The purposes of the Master of Arts in Journalism are:

(a) to provide a sound education in vocational journalism;
(b) to allow pass graduates in journalism to proceed to higher studies in that discipline;
(c) to provide the same opportunity for those whose professional experience is judged as an equivalent in attainment to a pass degree;
(d) to assist students in categories (b) and (c) to prepare for, and adjust to, structural and technological change in their profession;
(e) to promote a critical and scholarly evaluation of the profession through teaching and research.

2. Students shall be admitted under the rules covering the Master of Arts degree, with the additional provisions below:

(a) admission to candidates shall be on the recommendation of the Professor of Journalism, who may take into account professional experience and recommend an advanced standing;
(b) pass students are required to complete successfully a program of studies approved by the Professor of Journalism which must total 72 points, except where advanced standing is given. As well as fulfilling the requirements of the pass degree, Honours students must undertake a major presentation or other advanced studies approved by the Professor of Journalism to the total value of 24 credit points;
(c) honours students are required to complete successfully a program of studies approved by the Professor of Journalism which must total 96 credit points, except where advanced standing is given. As well as fulfilling the requirements of the pass degree, Honours students must undertake a major presentation or other advanced studies approved by the Professor of Journalism to the total value of 24 points.
(d) students shall discuss their proposed program with an academic adviser from the School of Journalism prior to enrolment;
(e) the Master of Arts in Journalism shall be available both as a full-time and part-time program. Full-time pass students are expected to complete the degree in three academic sessions, and part-time pass students in six sessions. Full-time honours students are expected to complete the degree in four academic sessions. Part-time honours students are expected to complete the degree in eight sessions.

Major Presentation
The topic for a major presentation by honours students must be approved by the Professor of Journalism or the Professor's nominee. The length of the presentation should be at least 15,000 words, or its equivalent, and the candidate may submit 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 and Feature Writing
Autumn or Spring session; 6 credit points (3 hrs newsroom work + 3 hrs practical work)
Assessment: written assignments and practical work.
This subject develops news and feature
writing skills from basic news stories to extended feature writing for newspapers and magazines. Attention will also be given to subjective aspects of news and feature writing, including the use of comment and opinion; colour stories; editorial writing; the contribution of 'new journalism'; writing human interest stories.

Textbooks:

JOUR902 Journalistic Method and Practice
Autumn or Spring session; 6 credit points (3 hrs per wk plus fieldwork)
Assessment: written assignments, practical exercises and an essay.
This subject considers the basic attributes of news, the nature of news content, notions of news value, the conventions of news sources, and the structure of news gathering. It introduces students to the initiation and conduct of a news assignment, the structure and conventions of a news round, use of recording devices, checking stories, interview techniques, working with photographers and camera teams, presentation of news copy, follow-ups, competition and co-operation in news gathering, news management and news manipulation.

Textbooks:
There are no prescribed textbooks for this course. Readings and other materials will be issued in class.

JOUR903 Journalism, Ethics and Standards
Autumn session; 6 credit points; (3 hrs lectures and practical work)
Assessment: written assignments, one hr examination in class.
This subject examines the ethical framework which governs the work of journalists. It considers the nature, efficacy and administration of ethical codes relevant to journalism, particularly the Australian Journalists' Association's Code of Ethics and the Australian Press Council's Statement of Principles. Other aspects of professional conduct and professional standards considered include breach of privacy; confidentiality; protection of sources; standards of accuracy, objectivity and subjectivity in journalism.

Textbooks:

JOUR904 Journalism, History and Structure
Spring or Autumn session; 6 credit points (3 hrs lectures)
Assessment: written essays, 1 hr examination in class.
This subject provides an historical context for studying the contemporary structure of the Australian media and the professional milieu in which Australian journalists work.

Principal subjects covered include the origins of British and American journalism; the development of the press in Colonial Australia; the emergence of contemporary news organisations; the growth of electronic media organisations in Australia and the transformation of Australian media ownership in the 1980s.

Textbooks:

JOUR931 Radio Journalism
Autumn session; 6 credit points (3 hrs lectures, field and studio work)
Assessment: assignments and studio work.
This subject provides advanced skills in writing, editing, producing and presenting radio news and current affairs programs. The course has a strong practical component and will involve use of the School's radio studio.

Textbooks:

JOUR932 Television Journalism
Spring session; 6 credit points (3 hrs lectures, field and studio work)
Assessment: assignments and assessment of field work.
This subject provides advanced skills in writing, editing, producing and presenting television news and current affairs programs. A primary emphasis will be placed on techniques for gathering television news in the field.

Textbooks:

JOUR933 Journalism, Research and Investigation
Autumn or Spring session; 6 credit points (3 hrs lectures and practical work)
Assessment: written and field assignments.
This subject is designed to develop a range of research and investigative skills for practical journalism. It will include the use of data bases, information retrieval, statistical analysis packages, library and archive work, registry offices and other sources of public information. The use of survey material in journalism will be studied, particularly the presentation of this data in a news format. The organisation of news investigation teams, the techniques that they use, and what they produce will be analysed.
Textbooks:

JOUR934 Print Production and Publication
Autumn session; 6 credit points (3 hrs lectures and workshop production)
Assessment: assignments and workshop assessment.
This subject provides advanced skills in copy editing, proofreading, application of house styles in preparing news copy, typographical style, and use of graphics. It will conclude with a brief introduction to computer editing.
Textbooks:

JOUR935 Electronic Sub-Editing and Production
Spring session; 6 credit points (3 hrs lectures and workshop)
Assessment: assignments and workshop assessment.
This subject provides advanced skills in preparing copy, sub-editing, layout and design for electronic print production. The final segment of the subject is devoted to writing, editing, illustrating, sub-editing and publishing a newspaper.
Textbooks:

JOUR936 International Journalism
Autumn or Spring session; 6 credit points (3 hrs lectures and seminars)
Assessment: assignments and one hr examination in class.
This subject comprises three parts: (a) The organisation and technology of international news gathering; (b) a comparative account of the organisation of news gathering in other countries, particularly the nations of East and South East Asia and the Pacific and (c) news coverage of limited conflict.
Textbooks:

JOUR941 Journalism and Institutions
Spring or Autumn session; 6 credit points (3 hrs lectures and practical work).
This subject describes and analyses the institutional relationships instrumental to the professional practice of news reporting and writing. It looks particularly at the basic institutions of government, the law, education, public order, religion, sport and leisure, the economy, and international relations. The subject provides an institutional basis for practical courses in print and electronic media journalism.
Textbook:

JOUR942 Current Affairs Journalism
Spring session; 6 credit points (3 hrs lecture/field work)
Assessment: Assignments and fieldwork.
This subject provides practical instruction in preparation of current affairs programs in radio, television and multi-media applications. The subject will give a broad introduction to current affairs production in each of the three media areas. Field and practical work will provide opportunities for specialisation in one of the three media areas.
Textbook:
There is no set text.

JOUR943 Directed Readings in Journalism
Autumn, Spring and Summer sessions; 6 credit points (1 hr tutorial, directed reading)
Assessment: tutorial paper and major written evaluation of the selected reading program.
This subject enables students to extend their knowledge of the history, theory and practice of journalism by directed reading courses in selected topics. These readings are designed to complement and develop topics studied in earlier subjects. Topics available include: the journalism of Colonial Australia; structure of the Australian news media; news media management; current affairs radio and television; principles of layout and design; the role of the editor; studies of individual journalists and their work.
Textbooks:
There are no prescribed textbooks. Reading lists for each topic will be distributed in class.

JOUR945 Applied Journalism Project
Autumn, Spring and Summer sessions; 6 credit points (one hr tutorial, directed research)
Assessment: written evaluations of progress; final research report which may include electronic media and print production material.
This subject provides a shorter alternative project for final session students not wanting to undertake the major project, or electing to do additional course work, or wanting to develop skills acquired in previous vocational
subjects. Project areas available include: historical issues in Australian journalism; defamation law; structure of Australian news gathering; electronic news gathering; electronic print production.

Textbooks:
There are no prescribed textbooks for this course.

JOUR948 News Design
Spring session; 6 credit points (3 hrs lecture/fieldwork)
Assessment: assignments and publications.
This subject provides practical instruction in art work and design as they apply to news publications, both in print and electronic forms. Students are instructed in the latest digital software for producing print, electronic and multi-media news materials.

Textbooks:
There is no set text.

JOUR949 Multicultural Journalism
Spring session; 6 credit points (3 hrs lecture/fieldwork per wk)
Assessment: assignments and publications.
This course provides an historical, cultural and social background for students wanting to work in Australia's growing multicultural media. It will give practical instruction in multicultural print, electronic and multi-media news applications. Particular emphasis is placed on differences between multicultural media and traditional media.

Textbooks:
There is no set text.

JOUR951 Public Journalism
Autumn or Spring session; 6 credit points (3 hrs lectures and workshops)
Assessment: written assignments and fieldwork.
This subject examines the organisation and practice of journalism in the area of public affairs. Subjects studied include political journalism, the press gallery system, local government and industrial reporting, political lobbying, the role of press secretaries, the role of corporate and public affairs directors, the role of political consultants.

Textbooks:

JOUR953 Photojournalism
Autumn or Spring session; 6 credit points (3 hrs lectures, practical and laboratory work.)
Pre-requisites: JOUR901 and JOUR902.
Assessment: written assignments and practical work.
This subject inculcates basic skills in photojournalism through a combination of lectures, demonstrations, laboratory work and field work. It emphasise distinctive aspects of news organisation applicable to photo-journalistic work, ethical requirements of photojournalism, and the development of new techniques such as electronic and digitalised cameras and video frame-grabbing.

Textbooks:

JOUR954 Journalism and Multi-media
Autumn or Spring session; 6 credit points (3 hrs lectures, practical and laboratory work).
This subject prepares journalists for the impact on their profession of rapidly-developing interactive multi-media technology. It emphasises both theoretical and practical aspects of multi-media relevant to print and electronic media journalism. Particular attention is given to prospective changes generated by interactive multi-media to news gathering, news delivery, and news presentation.

Textbook:

JOUR955 Journalism and the Law
Autumn session; 6 credit points (hrs as required for external delivery of SBS Consortium courses)
Assessment: long essay and problem assignments.
This subject describes and analyses the legal framework within which Australian journalists work. It considers in detail the principal elements of media law which influence the conduct of news gathering and presentation. Subjects covered include the constitutional basis of press freedoms, the Australian judicial system, defamation, contempt, privilege, intellectual property, obscenity, blasphemy, official secrets legislation, restrictions on publications and broadcasting, Freedom of Information legislation.

Textbooks:
MODERN LANGUAGES

COURSES OFFERED

The following postgraduate courses and diplomas are available:

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

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 Italian novel and Society
- Federico De Roberto and The "Secondo Ottocento"
- The Italian "Melodramma"
- Methods and materials for teaching Italian at the secondary and tertiary level
- Italo-Australian literature
- Multilingual broadcasting in Australia
- Italian lexicography
- Contrastive linguistics: English-Italian

Honours Master of Arts

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<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<td>MLCF975 or</td>
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<tr>
<td>MLCI975</td>
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</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in MLCF975 or MLCI975.

2. HONOURS MASTER OF ARTS

Students entering the program with an honours degree at a standard of at least Class II, Division 2 will be required to complete MLCF975 or MLCI975.

3. GRADUATE DIPLOMA IN ARTS (EUROPEAN STUDIES)

The purpose of the Graduate Diploma in Arts 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 Course Rules 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 Modern 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 Modern Languages who shall assess the applicant's aptitude for the course.
MULTICULTURAL STUDIES

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Arts by Research
3. Master of Arts*
4. Graduate Certificate in Migration and Development

POSTGRADUATE PROGRAM

Multicultural Studies

* Not on offer in 1994.

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN MULTICULTURAL STUDIES
leading to the Master of Arts*

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<td>CMS901*</td>
<td>Issues in Multicultural Research</td>
<td>12</td>
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<tr>
<td>CMS902*</td>
<td>Migration and Australia</td>
<td>12</td>
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<tr>
<td>CMS903*</td>
<td>Social Policy in a Multicultural Society</td>
<td>8</td>
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</tbody>
</table>

* Not on offer in 1994.

For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECT

<table>
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<tbody>
<tr>
<td>CMS999</td>
<td>Thesis</td>
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</tr>
</tbody>
</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in CMS999.

2. HONOURS MASTER OF ARTS

Candidates for this degree enrol in CMS999.

3. 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.

4. GRADUATE CERTIFICATE IN MIGRATION AND DEVELOPMENT

This certificate is offered only by distance learning via the Wollongong Graduate Consortium in collaboration with SBS. The course is concerned with aspects of 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:

- Ethnic Affairs
- Aboriginal Affairs
- Migration Issues
- Occupational Health
- Curriculum Development
- Welfare Issues
- Multicultural Education
- Racism
- Community Language
- Theoretical Considerations of Class, Ethnicity and Gender
- Workforce Structures
- Ethnicity and Industrial Relations
- Law and Culture
contemporary processes of globalisation, linking issues of social, economic, political and cultural change as they relate to Australia and the Asia-Pacific region. This course is run in conjunction with the Department of Sociology. For further details on this course only, contact (042) 214 444.

SUBJECT DESCRIPTIONS

CMS901 Issues in Multicultural Research
Double session (A); 12 credit points (4 hrs per wk 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.
Co-ordinators: Professor S Castles, Mr M Morrissey.

CMS902 Migration and Australia
Double session (A); 12 credit points (4 hrs per wk 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.
Co-ordinator: Professor S Castles.

CMS903 Social Policy in a Multicultural Society
Double session (A); 8 credit points (4 hrs per wk 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 change 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.
Co-ordinator: Mr M Morrissey.

CMS999 Thesis
48 credit points
PHILOSOQHY

COURSES OFFERED

The following postgraduate courses are available:

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

POSTGRADUATE PROGRAMS

Philosophy

CURRENT RESEARCH AREAS

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

Aesthetics
The definition of art
Make-believe
Truth in fiction
New Guinea tribal art
Epistemology and Metaphysics
Coherence theories of knowledge and truth
Perception
Realism and irrealism
Identity
Essentialism
History of Philosophy
Kant
The Empiricists
Logic
Modal logic
Deviant logics
Ethics (Theoretical and Applied)
Responsibility: action, motive, intention, justification and excuse
The doctrine of double effect

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN PHILOSOPHY
leading to the Honours Master of Arts or Master of Arts (Applied Ethics)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>Master of Arts</td>
<td></td>
</tr>
<tr>
<td>Core</td>
<td>PHIL923 Minor Thesis</td>
<td>24</td>
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<tr>
<td>Electives</td>
<td>PHIL933 Advanced Logic</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>PHIL943 Advanced Political Philosophy</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>PHIL953 Advanced Philosophy of Value</td>
<td>6</td>
</tr>
</tbody>
</table>
POSTGRADUATE PROGRAM IN PHILOSOPHY
leading to the Honours Master of Arts or Master of Arts (Applied Ethics) (Cont’d)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL963</td>
<td>Advanced Epistemology and Metaphysics</td>
<td>6</td>
</tr>
<tr>
<td>PHIL973</td>
<td>Advanced Philosophy of Mind and Action</td>
<td>6</td>
</tr>
<tr>
<td>PHIL983</td>
<td>Advanced Philosophical Problems</td>
<td>6</td>
</tr>
</tbody>
</table>

(ii) Master of Arts (Applied Ethics)

Core
- PHIL935  Applied Ethics  8
- PHIL955  Theoretical Ethics  8
- PHIL923  Minor Thesis  24

Electives
- PHIL965  Bioethics  8
- PHIL975  Professional Ethics and Responsibility in Health Care  8
- PHIL985  The Ethics of Institutional Dispute Resolution  8
- PHIL995  Environmental Ethics  8

For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

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

COURSE REQUIREMENTS

1. GRADUATE DIPLOMA IN ARTS

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

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

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

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

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

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

2. MASTER OF ARTS (APPLIED ETHICS)

The Master of Arts (Applied Ethics) aims to provide professionals and others who have a general interest in applied ethics with a philosophical education in one or more areas of applied ethics. Applied areas on offer in 1994 (subject to enrolments) are: Bioethics, Professional Ethics and Responsibility in Health Care, The Ethics of Institutional Dispute Resolution and Environmental Ethics. From 1994 the Department hopes to offer a Business Ethics option.
It has become increasingly obvious with the proliferation of ethics committees and the demand for public accountability that health care professionals, public policy makers, lawyers, public servants, business people, scientists, researchers, and so on, are required to make well-reasoned, informed judgements about issues that are essentially ethical. Such judgements require philosophical expertise - one needs to be able to recognize the factual and evaluative complexity of the issues, to recognize evaluative issues as evaluative, critically to evaluate competing ethical claims, and to reason to a conclusion soundly. Yet the development of such expertise is typically not included in the professional training of people who are called to act as ethical decision-makers. The Master of Arts (Applied Ethics) helps make good this lack.

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

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

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

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

3. HONOURS MASTER OF ARTS

(a) Honours Master of Arts by Research

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

4. DOCTOR OF PHILOSOPHY

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

SUBJECT DESCRIPTIONS

PHIL913 Advanced Philosophical Topics

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

Pre-requisites: Entry is restricted to students seeking admission to the Honours Masters degree who do not have at least an Honours Class II, Division 2 degree in Philosophy.

Assessment: essays and written examinations as laid down in the requirements for such components as are approved or prescribed.

An approved or prescribed selection of courses provided by the Department under other designations deemed by the Head of the Department to be appropriate as a foundation for postgraduate studies, given the background and intended pursuits of the individual student.

Textbooks

As laid down in the requirements for the component courses.

Co-ordinator: Dr R Dunn.
PHIL923 Minor Thesis
Double session (A); 24 credit points.

PHIL933 Advanced Logic
Double session (A); 6 credit points (variable combination of seminars, lectures and lecture discussions).
Assessment: examination, assignments and/or essays as determined by the subject co-ordinator.
An advanced study of issues in philosophical logic.
Co-ordinator: Dr J Burgess.

PHIL935 Applied Ethics
Autumn session; 8 credit points (3 hrs per wk)
Pre-requisite: Bachelor's degree (pass or honours) in any field, or equivalent. Not to count with PHIL 206.
Assessment: 60% major research assignment, 40% seminar participation and papers.
A systematic study of a range of problems of applied ethics. Among the topics for discussion will be a selection of the following: Discrimination and Affirmative Action; Animal Rights and the Environment; Sexual Issues; Civil Disobedience; Punishment; Censorship; Warfare; Nuclear Deterrence; Hunger and Welfare; Suicide and Death.
Textbooks:
No set text. Selected reading material will be prescribed by the lecturers.
Co-ordinator: Dr J Burgess.

PHIL943 Advanced Political Philosophy
Double session (A); 6 credit points (variable combination of seminars, lectures and lecture discussions).
Assessment: examination, assignments and/or essays as determined by the subject co-ordinator.
An advanced study of issues in political philosophy.
Co-ordinator: Dr H Beran.

PHIL953 Advanced Philosophy of Value
Double session (A); 6 credit points (variable combination of seminars, lectures and lecture discussions).
Assessment: examination, assignments and/or essays as determined by the subject co-ordinator.
An advanced study of issues in the philosophy of value - eg. ethics or aesthetics.
Co-ordinator: Dr S Uniacke.

PHIL955 Theoretical Ethics
Spring session; 8 credit points (3 hrs per wk)
Pre-requisite: Bachelor's degree (pass or honours) in any field, or equivalent. Not to count with PHIL251 or PHIL301.
Assessment: 60% major research assignment, 40% minor participation and papers.
A systematic study of some central issues in moral philosophy and moral psychology. Among the topics for discussion will be a selection of the following: subjectivist and objectivist theories of morality; facts and values; moral realism; consequentialism; virtues and vices; evaluative thinking and motivation; morality and self-interest.
Textbooks:
No set text. Selected reading material will be prescribed by the lecturers.
Co-ordinator: Dr R Dunn.

PHIL963 Advanced Epistemology and Metaphysics
Double session (A); 6 credit points (variable combination of seminars, lectures and lecture discussions).
Assessment: examination, assignments and/or essays as determined by the subject co-ordinator.
An advanced study of issues in epistemology and metaphysics.
Co-ordinator: Dr J Burgess.

PHIL965 Bioethics
Spring session; 8 credit points (3 hrs per wk)
Pre-requisite: Bachelor's degree (pass or honours) in any field, or equivalent.
Assessment: 60% major research assignment, 40% seminar participation and papers.
A systematic study of a range of problems in bio-medical ethics. Among the topics for discussion will be a selection of the following: euthanasia; abortion; in vitro fertilization and anonymous donor programs; human embryo and foetal research; genetic engineering; surrogacy; moral problems of decision-making in health care and the allocation of health resources; organ transplantation; experimentation involving human subjects.
Textbooks:
No set text. Selected reading material will be prescribed by the lecturers.
Co-ordinator: Dr J Burgess.

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

PHIL975 Professional Ethics and Responsibility in Health Care
Spring session; 8 credit points (3 hrs per wk)
Pre-requisite: Bachelor's degree (pass or honours) in any field, or equivalent.
Assessment: 60% major research assignment, 40% seminar participation and papers.
A systematic study of a range of problems within the health care system. Among the topics for discussion will be a selection of the following: responsibility and autonomous professional practice - agent responsibility and negligence; informed consent and problems surrounding confidentiality; the health-care
practitioner and the role of patient advocacy; the relationship between personal and professional ethics - role conflict and role ambiguity.

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

Co-ordinator: Ds S Dodds.

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

PHIL985 The Ethics of Institutional Dispute Resolution
Spring session; 8 credit points (3 hrs per wk)
Pre-requisite: Bachelor's degree (pass or honours) in any field, or equivalent.
Assessment: 60% major research assignment, 40% seminar participation and papers.
A systematic study of the ethical problems faced by participants in adversarial systems, mediation, arbitration, conciliation and related processes. The subject will critically examine conventional justifications for the conduct of lawyers in the adversary system. These will be contrasted with the ethical obligations of decision makers in emerging alternative systems of dispute resolution.

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

Co-ordinator: Dr J Burgess.

PHIL995 Environmental Ethics
Spring session; 8 credit points (3 hrs per wk)
Pre-requisite: Bachelor's degree (pass or honours) in any field, or equivalent. Not to count with PHIL255.
Assessment: 60% major research assignment, 40% seminar participation and papers.
A systematic study of problems of environmental ethics. Among the topics for critical discussion will be a selection of the following: the place of humankind in nature and the ethical principles that ought govern our treatment of the environment; the ethics of research using non-human animals, and the use and production of non-human animals for food, clothing, etc; the nature and extent of our moral obligations to the third world and to future generations; 'deep' versus 'shallow' theories of environmental ethics; whether a new, environmental ethic is necessary.

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

Co-ordinator: Dr J Burgess.

PHIL999 Major Thesis
Double session (A); 48 credit points.
COURSES OFFERED

The following postgraduate courses are available:

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

POSTGRADUATE PROGRAM

Politics

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN POLITICS
leading to the Master of Arts

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>POL902</td>
<td>Advanced Topics in Australian Politics</td>
<td>12</td>
</tr>
<tr>
<td>POL903</td>
<td>Issues in Australian Public Policy</td>
<td>12</td>
</tr>
<tr>
<td>POL914</td>
<td>Power and the Modern State</td>
<td>12</td>
</tr>
<tr>
<td>POL922</td>
<td>Advanced International Relations</td>
<td>12</td>
</tr>
<tr>
<td>POL931</td>
<td>From Revolution to Reform in State Socialist Societies</td>
<td>12</td>
</tr>
<tr>
<td>POL932</td>
<td>Contemporary Chinese Politics</td>
<td>12</td>
</tr>
<tr>
<td>POL941</td>
<td>Politics and Government in the South Pacific</td>
<td>12</td>
</tr>
<tr>
<td>POL984</td>
<td>Power and the Modern State: Advanced Topics</td>
<td>8</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECT

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

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in POL951.

2. HONOURS MASTER OF ARTS

Candidates for this degree enrol in POL951.

3. MASTER OF ARTS

The Master of Arts program is intended to enable graduates with suitable grounding in Politics and/or related disciplines (such as History, Philosophy, Sociology, Law, Economics) to undertake advanced studies in Politics, either for its own sake or as a relevant background to careers in social science teaching, public administration, journalism, and public affairs in government and the private sector.

Intending applicants should consult the Professor of Politics before enrolling in order to ascertain their eligibility as well as the subjects on offer each year.

Course requirements are a minimum of 48 credit points chosen from the Politics schedule.

Teaching will emphasise small-group discussions, flexibility and independence.
SUBJECT DESCRIPTIONS

POL902 Advanced Topics in Australian Politics
Autumn session; 12 credit points (3 hrs per wk lectures and tutorials)
Assessment: 9,000 words of essays and tutorial papers.
The subject provides opportunities for detailed study at an advanced level of significant issues, institutions and processes in and affecting politics in Australia. The focus is on public policy and on the exploration and application of significant theoretical questions. Systematic comparisons are made with other advanced industrial countries. Students are helped and encouraged to undertake small-scale research projects of their own.
Textbook: To be advised.
Co-ordinator: Refer to Department.

POL903 Issues in Australian Public Policy
Spring session; 12 credit points (4 hrs per wk lectures and tutorials)
Assessment: review of 1000 words 10%, essay of 2,500 words 25%, critique of 2500 words 25% and research paper of 3000 words 40%
This subject examines, at an advanced level, the policy options for Australian Governments in the 1990s in the light of contemporary policy debates: the Accord, equal opportunities, tariff policy, privatisation, reducing the size of the government sector, deregulation and environmentally sustainable growth. It focuses on Government - industry relations and the options for politically achievable macro and micro reform. Consideration will be given to the limitations created by the structure of the international political system.
Textbook:
Stewart & Jennett (eds), Hawke and Australian Public Policy, 1990.
Co-ordinator: Dr S Reglar.

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

Textbook:
Held, D, et al (eds), States and Societies, Milton-Keynes: Open University, Texts, 1983.
Co-ordinator: Refer to Department.

POL922 Advanced International Relations
Spring session; 12 credit points (3 hrs per wk, lectures, seminars and tutorials)
Assessment: 9,000 words of essays, seminar and tutorial papers.
Theories, concepts and approaches to the advanced study of international relations. Competing conceptions of and change in, the international order. Alliances, blocs and other forms of international co-operation (including regional and functional) co-operation. Security, diplomacy, foreign policy, and the role of government in international economic relations. Non-government influence and relations, including the development and impact of foreign and international opinion on issues such as human rights; the role of the press and mass communications; and the growth and consequences of other transnational links. Students are encouraged and helped to undertake small-scale research projects of their own, focussing on Australia and the Asia-Pacific region(s).
Textbook: To be advised.
Co-ordinator: Professor E P Wolfers.

POL931 From Revolution to Reform in State Socialist Societies
Autumn session; 12 credit points (3 hrs per wk lectures and tutorials)
Assessment: 9,000 words in essays and tutorial papers.
The subject examines the reasons for reform in State Socialist Societies, and explanations for the loss of legitimacy of Leninist party and state systems in recent years. The implications of changes in domestic and foreign policy in the USSR, the People's Republic of China and Eastern Europe for the 'Balance of Power' in international relations are examined through consideration of special case studies. Competing explanations of the power structure of state socialist societies and International Political Economy are examined to see what these approaches offer as explanations of current tensions and the likelihood of change.
Textbooks:
Co-ordinator: Dr S Reglar.
POL932 Contemporary Chinese Politics
Spring session; 12 credit points (4 hrs per wk lectures and tutorials)
Assessment: 2 x 3000 word essays each 25%, 1 x 2000 word essay 20%, 1 x 1000 word tutorial paper 10%, Journal 20%.
This subject examines the reasons for reform in the government and administration of the Peoples' Republic of China. Issues studied include foreign policy, the role of ideology, the legacy of Mao Zedong, the Communist Party, law and policing, the role of intellectuals, theoretical debates in political economic policy, approaches to technological modernisation, industrial organisation, gender and family policy and problems of rural and urban life.
Textbooks:
Co-ordinator: Dr S Regular.

POL941 Government and Politics in the South Pacific Islands Region
Autumn session; 12 credit points (3 hrs per wk lectures, seminars and tutorials)
Assessment: 9,000 words in essays, seminar and tutorial papers.
Pre-colonial and colonial politics and government in the South Pacific islands. Nationalism, political parties and other forms of popular mobilisation, decolonisation. Constitution making, independence, and post-independence political arrangements, including challenges to the authority of successor states. Politics, government, policy-making and implementation, including the impact of external forces (aid donors, lenders, investors, etc). Students are encouraged to undertake detailed case-studies of particular issues, institutions, countries or regions; to draw on, apply and test relevant bodies of theory; and to make systematic comparisons (which need not be confined to the region).
Textbook: To be advised.
Co-ordinator: Professor E P Wolfers.

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

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

The following postgraduate courses are available:

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

POSTGRADUATE PROGRAMS

Science and Technology Studies
Technology Policy and Management

CURRENT RESEARCH AREAS

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

SCHEDULE OF PROGRAMS

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

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>Core:</td>
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<tr>
<td>STS901</td>
<td>Theories and Methods of Science and Technology Studies</td>
<td>12</td>
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<tr>
<td>STS921</td>
<td>Dynamics of Science and Technology</td>
<td>12</td>
</tr>
<tr>
<td>STS 902</td>
<td>Advanced Topics in Science &amp; Technology Studies</td>
<td>12</td>
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<tr>
<td>STS909</td>
<td>Topics in History of Western Science and Technology</td>
<td>12</td>
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<tr>
<td>plus either</td>
<td>Minor Thesis</td>
<td>24</td>
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<tr>
<td>STS903</td>
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<td>and</td>
<td>Electives</td>
<td>24</td>
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<tr>
<td>or</td>
<td>Electives:</td>
<td></td>
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<tr>
<td>STS924</td>
<td>Major Thesis</td>
<td>48</td>
</tr>
<tr>
<td>STS914</td>
<td>Master Narratives, Myth and Symbolic Politics in Science</td>
<td>12</td>
</tr>
<tr>
<td>STS929</td>
<td>Studies in Resource and Environmental Policy</td>
<td>8</td>
</tr>
<tr>
<td>STS 931</td>
<td>Risk Assessment, Health &amp; Safety</td>
<td>12</td>
</tr>
<tr>
<td>STS933</td>
<td>Energy and Technological Development</td>
<td>12</td>
</tr>
<tr>
<td>STS934</td>
<td>Genetics and Technological Innovation</td>
<td>12</td>
</tr>
<tr>
<td>STS 935</td>
<td>The Impact of Computers and Communication Technology</td>
<td>12</td>
</tr>
<tr>
<td>STS936</td>
<td>Critical Studies in Medicine and Health</td>
<td>12</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.
POSTGRADUATE PROGRAM IN SCIENCE AND TECHNOLOGY STUDIES
leading to the Master of Arts (Program 2)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<tbody>
<tr>
<td>STS921</td>
<td>The Dynamics of Science and Technology</td>
<td>12</td>
</tr>
<tr>
<td>STS901</td>
<td>Theory and Methods of Science and Technology Studies</td>
<td>12</td>
</tr>
<tr>
<td>STS902</td>
<td>Advanced Topics in Science and Technology Studies</td>
<td>12</td>
</tr>
<tr>
<td>STS 951</td>
<td>Research Report</td>
<td>12</td>
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</tbody>
</table>

For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN TECHNOLOGY POLICY AND MANAGEMENT
leading to the Master of Arts [Program 3]

<table>
<thead>
<tr>
<th>Core</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>STS921</td>
<td>The Dynamics of Science and Technology</td>
<td>12</td>
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<tr>
<td>STS945</td>
<td>Technology and Economics</td>
<td>6</td>
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<tr>
<td>STS946</td>
<td>Management of Technological Change</td>
<td>6</td>
</tr>
<tr>
<td>STS947</td>
<td>Case Studies in Science and Technology Policy</td>
<td>6</td>
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</table>

Plus 18 credit points from either

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>STS951</td>
<td>Research Report</td>
<td>12</td>
</tr>
<tr>
<td>STS 948</td>
<td>Research Project</td>
<td>6</td>
</tr>
</tbody>
</table>

and electives selected from:
Appropriate STS 900 Level subjects as determined by Head of Department

| ECON 924 | International Economic Relations | 8             |
| MGMT911 | Organisational Behaviour         | 6             |
| MGMT912 | Organisational Structure and Control | 6           |
| SOC934  | Advanced Research Methods        | 6             |
| ITAC 911| Telecommunications in Australia  | 6             |
| ITAC 912| International Communications     | 6             |
| ITAC920 | Globalisation in Informatics     | 6             |
| ITAC921 | Industry Policy in High Technology | 6           |

For further details, see Course Requirements below.

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in STS999.

2. HONOURS MASTER OF ARTS

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

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

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

Students required to complete 96 credit points must complete 48 credit points before they enrol in either STS903 Minor Thesis, or STS924 Major Thesis, one of which must be completed by all students enrolled in Program 1.
3. MASTER OF ARTS

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

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

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

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

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

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

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

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

Program Determination
Students wishing to enrol for the Honours Master of Arts, Program 1 or Master of Arts, Program 2, must have their proposed course of study approved by the Head of the Department.
passed by the candidate as part of any degree or diploma already held or previously attempted;

3. the selection of courses and the program of study shall be approved by the Head of Department;

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

5. admission to candidature for the Graduate Diploma is on the recommendation of the Head of the Department of Science and Technology Studies.

SUBJECT DESCRIPTIONS

STS901 Theories and Methods of Science and Technology Studies
Autumn session; 12 credit points (3 hrs seminars per wk)
Assessment: essays and seminar papers.
Students will study topics appropriate to their field of special interest subject to the approval of the Head of Department.
Co-ordinator: To be advised.

STS902 Advanced Topics in Science and Technology Studies
Autumn or Spring session; 12 credit points (3 hrs seminars per wk)
Assessment: essays and seminar papers.
Students will study topics appropriate to their field of special interest subject to the approval of the Head of Department.
Co-ordinator: To be advised.

STS903 Minor Thesis
Autumn or Spring session; 24 credit points (4 hrs per wk)
Assessment: thesis.
A thesis embodying the result of an original investigation of a problem approved by the Head of the Department under the supervision of a staff member.
Co-ordinator: To be advised.

STS909 Topics in History of Western Science and Technology
Autumn or Spring session; 12 credit points (3 hrs per wk lecture/seminars)
Assessment: essay 50%, seminar paper 30%; and two oral seminar criticisms 10% each.
An introduction to the methods and interpretative tools of the history of Western science and technology, including perspectives on contemporary history of science and technology. Topics will be selected to explore key periods and central theoretical debates and may include: science, technology and society in Medieval, Renaissance and Early Modern Europe; technology dynamics, innovation and social change since the Industrial Revolution; new perspectives in the social history of technology and contextual history of science in the 19th and 20th centuries; the dynamics of contemporary science and technology; and the relations between the history of science and the history of technology.
Textbook:
No single suitable textbook; current research embodied in the main journals and significant recent books will be the focus of concern.
Co-ordinator: Associate Professor J A Schuster.

STS914 Master Narratives, Myth and Symbolic Politics in Science
Spring session; 12 credit points (3 hrs per wk)
Assessment: essay 50%; seminar 30%, two oral seminar commentaries 20%.
The past generation has witnessed the demise, in some quarters, of virtually the entire corpus of traditional frameworks of cultural meaning about the history and nature of science, elaborated over the past 350 years. What previously counted as master narratives of, and signposts to, the essence of scientific progress and rationality have come to be seen as problematic, historically contingent discursive weapons and strategies for the defense (or sectional co-optation) of the institution of science, by practitioners and their cultural allies. Accordingly, the previously received cultural meanings of science have become objects of study in the newer critical history and sociology of science. This subject surveys the previously received wisdom – including some of its internal conflicts – and examines the grounds of its deconstruction and collapse, as seen from within recent critical theoretical developments in the history, philosophy and sociology of science. Topics will include: (1) Traditional master narratives of the history of science – idealist/Marxist/functionalist – and their deconstruction from Bachelor, through Kuhn to post-Kuhnian history and sociology of science; the common ‘whiggish’ discursive ‘deep structure’ of formally opposed ‘internalist’ and ‘externalist’ narratives of science. (2) The lingering cult and symbolism of method: the discursive dynamics and rhetorical functions of method discourse (Feyerabend/Schuster); the abortive careers of ‘born-again’ methods narratives from Popper to Lakatos and Laudan. (3) Science as inscription: scientific discoveries, facts and tests as textual and rhetorical accomplishments; and textuality and historicity of scientific hardware. (4) The possibility and desirability of new master narratives for old in the 17th century rise of modern science and the 18th century emergence of experimental fields. (5) Myth, symbol and master narrative in current science policy discourse and the wider public politics of science.
**Textbook:**
No single suitable textbook; various books and articles will be used.

**Co-ordinator:** Associate Professor J A Schuster.

**STS915 Master Narratives, Myth and Symbolic Politics in Science**
*Spring session; 8 credit points (3 hrs per wk lecture/seminars)*

Pre-requisite: available only to students enrolled in Master of Cultural Studies.

Assessment: essay 50%; seminar paper 30% and two oral seminar commentaries 20%.

For subject description see STS914 Master Narratives, Myth and Symbolic Politics in Science.

**Textbook:**
No single suitable textbook; various books and articles will be used.

**Co-ordinator:** Associate Professor J A Schuster.

**STS921 The Dynamics of Science and Technology**
*Autumn session; 12 credit points (4 hrs per wk)*

Assessment: essay 35%, essay 45%, seminar paper 20%.

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:**
Ronayne, J, Science in Government
Clark, N, The Political Economy of Science and Technology
Dickson, D, The New Politics of Science
Norman, C, The God that Limps: Science and Technology in the Eighties
Kumar, K, Prophecy and Progress: Sociology of Industrial and Post-Industrial Societies

**STS923 Technology and the State**
*Spring session; 12 credit points (2 lectures, 1 tutorial per wk)*

Assessment: essay 35%, essay 45%, seminar paper 20%.

This subject explores the relation between technology and politics. The emphasis is on theory; it introduces key contending theoretical frameworks, and specific concepts and analytical tools. But it explores as well the usefulness of this theoretical work for understanding the different contexts of technological development, in particular through the examination of key institutions, some major political controversies over technologies, and many specific examples of the shaping and selection of technologies and the treatment of their impacts. The subject covers the role of technology in economic relations, from the level of global restructuring of production and consumption, down to the politics of technological change in the workplace; different approaches to explaining the state, its interventions in an industrial economy, and its role in directing and controlling technology; conceptions of power relations, the different bases of power, and its manifestation in processes of determining policy and action; the relation between knowledge and power, and the role of technical experts in political arenas; interest groups, social movements and public participation; and the role of technologies in political and social control.

**Co-ordinator:** To be advised.

**STS924 Major Thesis**
*Double session (A); 48 credit points (2 hrs per wk)*

A thesis embodying the results of a significant and original investigation of a problem approved by the Head of the Department under the supervision of a staff member.

**STS929 Studies in Resource and Environmental Policy**
*Autumn session; 8 credit points (4 hrs of lecture/seminars per wk)*

Assessment: major research essay of 4,000 words, minor essay of 1,500 words, seminar performance, plus class exercises.

This subject will provide advanced study of the social, economic and political processes through which environmental policy is negotiated and instituted. The subject will be thematic, choosing one or more particular areas of technological development and its environmental impact as a case study. (The areas will be chosen in any given year on the basis of their contemporary relevance).

Theoretical perspectives which will be developed in this context may include the politics and sociology of scientific controversy, global, national and regional developments in environmental regulation, theories of state regulation and intervention, and the choice
and negotiation of different environmental strategies. Students will be expected to read extensively and critically, to engage in coherent and documented argument and to approach the problems considered by utilising insights from a number of different theoretical perspectives.

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

STS931 Risk Assessment, Health and Safety
Spring session; 12 credit points (4 hrs per wk)
Assessment: essay 30%, review exercise 15%, seminar presentation 20%, participation 15%, take-home examination 20%.
This subject investigates scientific and political aspects of environmental and occupational hazards, with special reference to contemporary Australia. Themes will include: concept of acceptable risk, public participation in decisions about risks, shaping of attitudes to risks, the social production of scientific knowledge. The course will draw on case studies which are currently being debated in Australia: e.g. herbicides, asbestos, radiation, fuel additives.
Co-ordinator: Dr S Russell.

STS933 Energy and Technological Development
Autumn session; 12 credit points (4 hrs per wk)
Assessment: participation 15%, review exercise 15%, seminar presentation 20%, essay 30%, take-home examination 20%.
This subject examines the social, economic and political factors influencing patterns of energy provision and choice of energy technologies; the social and environmental implications of different energy options; and the nature of the debates themselves which have developed throughout the world on these issues and choices.
Textbook:
Co-ordinator: Dr S Russell.

STS934 Genetics and Technological Innovation
Autumn session; 12 credit points (3 hrs per wk)
Assessment: seminar paper 30%, essay 30%, attendance, preparation and participation 20%, oral examination 20%.
This subject examines the emergence, development and impact of molecular biology and genetic engineering on the life sciences in their social context. Issues to be addressed may include: the roles of Avery, Chargaff and Pauling prior to the development by Watson and Crick of their model of DNA; the part played by Wilkins and Franklin in the work leading up to the double helix; the acceptance of the Watson-Crick structure; the function of Crick's 'Central Dogma of Molecular Biology' in guiding subsequent work; the elucidation of the 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:
Co-ordinator: To be advised.

STS935 The Impact of Computers and Communication Technology
Spring session; 12 credit points (3 hrs per wk)
Assessment: two essays 60%, seminar paper 20%, seminar presentation 20%.
The course will examine the effects of information technology on work and organisations principally through the work of Zuboff (1988). The author's main conclusion is that the full benefits from information technology can only be achieved when managers can relinquish their old ideas about employees and organisations. The main topics covered by the course are: Theories of organisation and industrial society. How and why organisations change. Early and recent socio-technical theory. The computer and the "textualisation" of work. The limits of hierarchy in an "informed" organisation. Information technology as a window on the organisation – "Panoptic" power. The changing nature of managerial authority. Authority and expert systems. Decision-making in the information age. The changing nature of Human Resource Management. The scope of information technology in the modern organisation.
Textbooks:
Co-ordinator: Mr S Aungles.

STS936 Critical Studies in Medicine and Health Care
Spring session; 12 credit points (3 hrs per wk)
Assessment: essay 50%, two seminar papers 50%.
An examination of the increasing technological dependency and automation of diagnosis and
treatment in modern medicine and health care; their socio-economic and political implications.

Co-ordinator: Associate Professor E Richards.

STS945 Technology and Economics
Autumn session; 6 credit points (4 hrs per wk)
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.

Textbooks:

Co-ordinator: To be advised.

STS946 Management of Technological Change
Spring session; 6 credit points (4 hrs per wk)
Assessment: major case study 50%, six research exercises 50%.

The objectives of this subject are to develop familiarity with the conceptual tools and techniques available to manage technology in private and public sector organisations in the context of the changing role of technology in the national and global economy and the implications of these changes for national, industry and company strategies. The course will cover issues of technology strategy formulation and management, marketing of technology, models and mechanisms of government intervention, new manufacturing technologies, work organisation and skill formation, and management information systems.

Textbooks:
Link, P, Marketing Technology, Nelson


Co-ordinator: To be advised.

STS947 Case Studies in Science and Technology Policy
Spring session; 6 credit points (4 hrs per wk)
Assessment: tailored to individual student projects and will include a major case study report of at least 5,000 words.

The objectives of this subject are to provide practical insights and experience in the application of methods of analysis, policy formulation, implementation and monitoring of science and technology in their social and political context. Case studies will be chosen on the basis of departmental and student interests and expertise, and may also draw on research themes from the Science and Technology Analysis (STA) Research Program. Students will engage in the analysis of one or more case studies of technological controversy taking into account their political, economic and technical dimensions. Participation will be based on a combination of active research, course work, and policy laboratory studies and exercises. Topic areas may include consideration of issues such as the problems raised in developing and evaluating: 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 computing system purchase.

Textbooks:
Relevant material will be provided initially by the Department.

Co-ordinator: 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.

Co-ordinator: To be advised.
STS951 Research Report
Autumn or Spring session; 12 credit points (3 hrs per wk)
A report providing a survey and analysis of arguments and data on the subject approved by the Head of the Department, under the supervision of a staff member.
Co-ordinator: To be advised.
COURSES OFFERED

The following postgraduate courses are available.

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

POSTGRADUATE PROGRAMS

Social Policy
Sociology
Cultural Studies

CURRENT RESEARCH AREAS

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

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

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

The Department is closely associated with the Sociological Analysis of Political and Social Change Research Group. This Research Group brings together researchers and post-graduate students concerned with the analysis of fundamental factors of social advantage and disadvantage in social, political and cultural change and integrates research within Sociology in these areas of central concern to the discipline.

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN SOCIOLOGY
leading to the Master of Arts

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>Core:</td>
<td>Postgraduate Sociology Seminar</td>
<td>8</td>
</tr>
<tr>
<td>SOC910</td>
<td>Advanced Research Techniques</td>
<td>8</td>
</tr>
<tr>
<td>SOC933</td>
<td>Advanced Social Policy Studies</td>
<td>8</td>
</tr>
<tr>
<td>SOC946</td>
<td>Practical Communication and Communication Theory</td>
<td>8</td>
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<tr>
<td>SOC947</td>
<td>Cultural Theory</td>
<td>8</td>
</tr>
<tr>
<td>CMS903</td>
<td>Social Policy in a Multicultural Society</td>
<td>8</td>
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<tr>
<td>Electives:</td>
<td>Advanced Health Sociology</td>
<td>8</td>
</tr>
<tr>
<td>SOC938</td>
<td>Advanced Race and Ethnic Studies</td>
<td>8</td>
</tr>
<tr>
<td>SOC942</td>
<td>Advanced Urban Society</td>
<td>8</td>
</tr>
<tr>
<td>SOC943</td>
<td>Social Regulation: Policies and Issues</td>
<td>8</td>
</tr>
<tr>
<td>SOC949</td>
<td>Advanced Studies in the Individual in Society</td>
<td>8</td>
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<tr>
<td>SOC950</td>
<td>Advanced Studies of Gender in Society</td>
<td>8</td>
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<tr>
<td>SOC959</td>
<td>Advanced Social Movements</td>
<td>8</td>
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(A Special Topic may be substituted for one or two of the electives with the permission of the Head of the Department).

For further details, see Course Requirements below.
POSTGRADUATE PROGRAM IN SOCIAL POLICY
leading to the Master of Policy (Social Policy)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tr>
<td>SOC940</td>
<td>Advanced Social Policy Studies</td>
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</tr>
<tr>
<td>SOC933</td>
<td>Advanced Research Techniques</td>
<td>8</td>
</tr>
<tr>
<td>SOC904</td>
<td>Case Studies in Social Policy</td>
<td>8</td>
</tr>
<tr>
<td>CMS903</td>
<td>Social Policy in a Multicultural Society</td>
<td>8</td>
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Electives: at least two of the following:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>SOC905</td>
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<tr>
<td>SOC910</td>
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<td>SOC938</td>
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<td>SOC959</td>
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<td>STS961</td>
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<td>POL904</td>
<td>8</td>
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</table>

For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>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>SOC990</td>
<td>Minor Thesis</td>
<td>24</td>
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<tr>
<td>SOC999</td>
<td>Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

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

2. HONOURS MASTER OF ARTS (CULTURAL STUDIES)

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

3. HONOURS MASTER OF ARTS BY RESEARCH

This degree is available to graduates with an Honours degree in Sociology. Normally, a minimum of one year full-time research is required to complete a MA(Hons) in Sociology.

Full-time candidates enrol in SOC999. Part-time enrolment is available.

4. MASTER OF ARTS

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

1. persons who have completed a major in Sociology at the undergraduate level shall not include in their program subjects which are substantially similar to those already completed;

2. students 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. option subjects will be offered according to Postgraduate Rules. That is, not all subjects will be offered in any one year or session;
the Master of Arts shall be available as a part-time and full-time program. Full-time students are expected to complete the degree in two academic sessions, part-time students in not less than three and not more than six academic sessions.

5. MASTER OF POLICY (SOCIAL POLICY)

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

(2) Students are required to complete successfully an approved program of study of 48 credit points drawn from the Schedule of Graduate Studies, as set out in the table above.

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

(4) Students shall discuss their proposed program with the Co-ordinator of the Master of Policy (Social Policy) prior to enrolment.

(5) 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 program. Full-time students are expected to complete the degree in two academic sessions, part-time students in not less than three and not more than six academic sessions.

6. MASTER OF ARTS (CULTURAL STUDIES)

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

7. GRADUATE DIPLOMA IN ARTS

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

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

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

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

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

(5) admission to 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.

8. GRADUATE CERTIFICATE IN MIGRATION AND DEVELOPMENT

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

SUBJECT DESCRIPTIONS

SOC904 Case Studies in Social Policy
Autumn or Spring session; 8 credit points (2 hrs seminar/workshop)
Assessment: workshop participation, seminar reports, assignments.
A case-centred approach is used to examine policy issues, concentrating on exploring the methodologies of issue identification, definition, investigation, and policy development, implementation, outcome and review. Students will develop case analyses based on reading and visits to community groups. Topics may include welfare, health, employment and communications policies, programs addressed to the needs of the aged, youth, the disabled and government strategies aimed at overcoming disadvantage experienced by Aborigines, immigrants or women. Where appropriate, comparative international perspectives will be used to explore the relationships between state forms and social policies.

Co-ordinator: Ms R Albury.

SOC905 Social Policy Research Project

Autumn or Spring session; 8 credit points (2 hr seminar a fortnight)

Assessment: a research report of 8,000 - 10,000 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 program.

Co-ordinator: Ms R Albury.

SOC910 Postgraduate Sociology Seminar

Autumn session; 8 credit points (2 hrs seminar)

Assessment: seminar presentations and essay.

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

Textbook: To be advised.

Co-ordinator: Professor J Bern.

SOC921 Special Topic in Sociological Studies - A

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

Assessment: one essay and tutorial assignments.

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

Co-ordinator: Refer to Head of Department.

SOC922 Special Topic in Sociological Studies - B

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

This subject cannot be taken with SOC921.

Assessment: one essay and tutorial assignments.

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

Co-ordinator: Refer to Head of Department.

SOC933 Advanced Research Techniques

Autumn session; 8 credit points (2 hrs seminar)

Assessment: research project and continuous assessment of work set in 'practical' seminars.

This subject will explore social science techniques of enquiry with a focus of appropriate methods, both qualitative and quantitative, for different types of enquiry. Students will review some of the traditional social science tools of analysis - questionnaire, semi-structured interviewing and formal observation. Some of the following alternative methods will be considered - film, video, analysis of public documents, participant observation, unobtrusive measures and evaluation research.

Co-ordinator: Refer to Head of Department.

SOC938 Advanced Health Sociology

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

Assessment: seminar paper, minor essay, and essay/research project.

This course draws on a wide range of sociological theories and a substantial body of sociological research as applied to health. Functionalist, Symbolic Interactionist, Weberian, Marxist, Feminist and Foucauldian perspectives will be examined. The course is divided into two parts. The first half focuses 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 macro-sociological 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.

Co-ordinator: Ms T Vezgoff.

SOC940 Advanced Social Policy Studies

Autumn session; 8 credit points (3 hrs lecture/seminar)

Assessment: written exercises and group project.

The aim of the subject is to explore the relationship between social policy and sociological theory. The subject will review
major debates in contemporary sociology in these areas and move towards developing a paradigm for the evaluation of policy in Australia. 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.

Co-ordinator: Ms R Albury.

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

SOC943 Advanced Urban Society
Spring session; 8 credit points (3 hrs lecture/seminar)
Assessment: seminar paper, and essay/research project.
The aim of the course is to introduce students to theoretical and empirical issues in the sociology of cities. Four broad questions will be posed. 'What is a city?' This would be approached in a historical context. One of the dynamics of the course structure is the paradox that, although we all know just what a city is, it is not so easy to define a suitable perspective from which to study cities. What are the perspectives from which cities may be studied? A range of intellectual traditions will be drawn on to discuss this question. What are the current issues facing cities of the world, from a global perspective? Those addressed will include some of the following: 'Third World' cities, US cities, European cities, as well as global issues of environmental stress and the internationalisation of capital and flexible accumulation. Finally, we consider current debates and policy initiatives in Australia, at Federal, State, regional and local levels.
Textbooks: To be advised.
Co-ordinator: Professor J Bern.

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

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

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

Co-ordinator: Dr A Aungles.

SOC950 Advanced Studies in the Individual in Society

Autumn session; 8 credit points (3 hrs lecture/seminar/workshop)
Assessment: major essay, seminar project, and participation.

This subject examines fundamental aspects of human identity and explores the extent to which an individual is 'socially constructed'. The individual is located in the historical, cultural, and institutional context of 'modern'/ 'post-modern' times through a consideration of contemporary myths, ideologies and practices which provide structure and meaning to daily life (e.g. love, gender, truth). The course broadly addresses the question of how personal identity is achieved in the context of change and uncertainty. These issues involve cross-cultural exploration of different models of self, identity and relationship. Students have the opportunity to explore a range of perspectives including interactionist, structuralist, post-structuralist and post-modern approaches to questions of identity. This also involves some consideration of 'non-western' traditions and questions about the ecological status of human identity.

Co-ordinator: Dr T Jagtenberg.

SOC959 Advanced Studies in Gender in Society

Spring session; 8 credit points (3 hrs lecture/seminar)
Assessment: seminar papers and essay.

This subject takes as its focus current debates about the constitutions of humans as gendered subjects. Through the reading of key texts students will explore the debates within contemporary sociological thought on the complex inter-relation of social structures, social institutions and social practices in the constitution of femininity and masculinity. Among the debates to be addressed include those about the sexual division of labour, the contradictory position of women in relation to the family and the state, and the nature and role of sexuality in the constitution of femininity and masculinity.

Each year the subject concentrates on a particular aspect of gender relations in Australia. The focus will be on the interaction of the state and other social institutions of gender division. Examples will be drawn from current literature.

Please Note: Students with little or no background in the study of gender relations must consult the lecturer for preliminary reading.

Co-ordinator: Ms R Albury.

SOC970 Advanced Social Movements

Autumn session; 8 credit points (3 hrs lecture/seminar)
Assessment: major essay, seminar paper and presentation, and participation.

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

Co-ordinator: Dr E Vasta.

SOC990 Minor Thesis
24 credit points

SOC999 Major Thesis
48 credit points
FACULTY OF COMMERCE

PRINCIPAL OFFICERS

Dean: Vacant*
Acting Dean: Associate Professor Garry Tibbits
Acting Sub Dean: Ms Diana Kelly
Executive Officer: Ms Miranda Baker

MEMBERSHIP

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

Accountancy
Business Systems
Economics
Management

RESEARCH COURSES AVAILABLE

All Departments offer Honours Master of Commerce and Doctor of Philosophy degrees by research and some offer the Honours Master of Arts by research.

POSTGRADUATE PROGRAMS

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

| Auditing | 154 |
| Business Administration | 181 |
| Business Information Systems | 161 |
| Controllership | 153 |
| Development Economics | 170 |
| Econometrics | 169 |
| External Reporting | 150 |
| Human Resource Management | 189 |
| Industrial Relations | 177 |
| Information Systems in Accounting | 153 |
| International Accounting and Finance | 151 |
| Labour Economics | 169 |
| Management | 179 |
| Management Accounting | 151 |
| Management Information Systems | 162 |
| Marketing Management | 189 |
| Operations Management | 190 |
| Organisational Behaviour | 190 |
| Public Policy | 169 |
| Public Sector Management | 190 |
| Treasury | 152 |

For Total Quality Management, refer to the "Cross Faculty Programs" Section.

* Selection process underway at time of printing.
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<tr>
<td>Acting Dean</td>
<td>Associate Professor Garry Tibbits, MCom Auck, CPA, ACA(NZ), CMANZ, ACIS, ACIM</td>
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<td>Acting Sub-Dean</td>
<td>Diana Kelly, BA Macq, MCom</td>
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<td>Executive Officer</td>
<td>C Miranda Baker, BA UNSW, MBA, AIMM</td>
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<td>External Relations Officer</td>
<td>Belinda Schuster, BSc, Med, GDip(Mgmt)</td>
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<td>Professional Officer</td>
<td>Rosemary Cooper, BCom</td>
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**DEPARTMENT OF ACCOUNTANCY**

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<tbody>
<tr>
<td>Departmental Head and Professor of Accountancy</td>
<td>Michael J R Gaffikin, BCom Well, MBA Massey, PhD Syd, FCPA</td>
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<td>Associate Professors</td>
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<td>Gary Linnegar, DBA Mississippi State, MBA, AGSM, FCPA, FCIS FCPIM</td>
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<td>Michael McRae, BCom DipEd Melb, MCom WA, PhD ANU</td>
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<td>Garry Tibbits, MCom Auck, CPA, ACA(NZ), CMANZ, ACIS, ACIM</td>
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<td>Senior Lecturers</td>
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<td>Henry W Collier, MA MBA Mich State, BBA, CPA, CMA</td>
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<td>Mary M Day, BBus DDIAE, MCom, AAIM, FCPA</td>
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<td>Gerhard Gniewosz, BA GradDipBusAdmin SAIT, MCom DipCom Otago, CPA</td>
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<td>Warwick N Funnell, BA DipEd UNSW, BCom MCom, CPA, AIMM</td>
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<td>Anne Abraham, BSc Syd, DipEd STC, MAcc C Sturt, ASA</td>
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<td>Ari W Ariyadasa, BA Vidydod, DipAccy Ceyl, MEC Syd, ACA</td>
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<td>Larry A Blackett, BCom MCom UNSW, MAS Illinois</td>
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<td>Anwar I Chowdhury, BCom MCom Dhaka, ACA (Aust), ACA (Eng &amp; Wales) ACMA (Bangl)</td>
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* Selection process underway at time of printing.
Professional Officer
Wolfgang Brodesser, BE BA

DEPARTMENT OF MANAGEMENT

Departmental Head and Professor of Management
Gill Palmer, BScSc Birm, MSc LSE, PhD City UK

Professor
Michael Hough, RDF ED BE UNSW, BA Macq, GradDipIndEng N’cle (NSW), DipEd NCAE, DipSchAdmin ACAE, MEDAdmin NE, EdD Georgia, FACE, FAIM, FACEA

Professorial Fellows
Graeme W Galt, BCom MBA DipEd Melb
David Greatorex, AO, BA SYD, MCom & Admin Vic, FCA, FAIM

Associate Professors
Paul Patterson, BBus UTS, MCom UNSW
Richard Badham, BA DipSoc PhD War

Senior Lecturers
Muris Cicic, BSc MA PhD Sarajevo
John Flanagan, BSc UNSW
Muayyad Jabri, BSc AI Hirka Jesuit, MSocSci Birm, PhD Manc
Anthony J Naughton, MBA Brad, FCCA
Celia T Romm, DipEd MA PhD Toronto
A B Sim, BA Malaya, MBA Brit Col, PhD UCLA
Michael Zanko, BA Leeds, MBA Brad

Lecturers
Kwaku Atuahene-Gima, BSc Ghana, MCom UNSW, DipM, MCIM, PhD
Ray Cleary, BA Macq, MED Admin NE
Gail Graham, MA PhD Melb, AAIM
Constance Hill, MBA UTS, AAMI
Les Kirchmayer, BSc UNSW, MBA
John McKenna, MMgmt, FAIM
Neil Masters, BA York, MSc
Philip Scott, BBus MBA Georgia
Lesley White, BPharm Syd, MCom UNSW

Associate Lecturers
Karin Cheung, BA Hong Kong, MCom
Frans Laneyrie, BA

Professional Officer
Ruth Williams, BSc Bristol, DipEd East Africa
VISITING COMMITTEE

Mr John Armstrong, Chief Manager, Resources in Technology Development, Westpac Banking Corporation Technology Centre
Emeritus Professor Raymond Chambers, Department of Accounting, Sydney University
Mr Michael Costa, Executive Officer, NSW Trades & Labour Council
Mr Arthur Delbridge, Assistant General Manager Communications, Advance Bank
Mr Richard Dowse, Manager, Information Services, Wollongong City Council
Ms Mary Foley, General Manager, Policy Development Health Care of Australia, Mayne Nickless Ltd
Mr Les Gregory, Superintendent, Training & Development, BHP Slab & Plat Products Division
Professor David Greatorex, Chairman, NEIS Pty Ltd, First State Computing Pty Ltd & Deputy Chairman, AWA Ltd.
Mr Paul Greenwood, President, NSW Small Business Combined Association
Emeritus Professor Fred Gruen, Department of Economics, Australian National University
Mr Jim Hall, Manager, Finance & Planning, BHP Slab & Plate Products Division
Mr Peter Jack, General Manager, Illawarra Mutual Building Society
Mr Kevin Locke, Training Manager, BHP Steel Slab & Plate Products Division
Mr Garry Mackrell, General Manager, AEFC (Merchant Bank), Commonwealth Bank
Mr George Maltby, Executive Advisor, Telecommunications
Ms Jane Miller, Human Resources Information Technology, AMP Society
Mr Peter Peterson, Chief Executive, Australian Institute of Management (NSW) Ltd
Mr Denis Pratt, Council Member (NSW Division), Australian Human Resources Institute
Mr David Robson, Group Manager, Marketing & Business Development, Heggies Transport Pty Ltd
Ms Kathy Rozmeta, Chief Manager, ANZ Training & Development, ANZ Bank
Mr Phil Singleton, Director and Principal, Phil Singleton Research Pty Ltd
Mr Mike Withford, National Marketing Partner, Price Waterhouse
ACCOUNTANCY

COURSES OFFERED

The following postgraduate courses are available:

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

POSTGRADUATE PROGRAMS

Auditing
Controllership
External Reporting

CURRENT RESEARCH AREAS

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

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

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN EXTERNAL REPORTING
leading to the Master of Commerce or the Honours Master of Arts or Commerce

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For further details, see Course Requirements below.
# POSTGRADUATE PROGRAM IN INTERNATIONAL ACCOUNTING & FINANCE

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

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<th>Number</th>
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(i) Master of Commerce

**Inner Core, at least 4 from**
- ACCY904 Financial Accounting 6
- ACCY905 International Accounting 6
- ACCY909 Comparative Accounting Systems 6
- ACCY910 Issues in International Accounting 6
- ACCY974 Accounting Regulation 6
- MGMT998 Multinational Financial Management 6

**Outer Core, at least 4 from**
- ACCY903 Accounting Theory 6
- ACCY907 Empirical Research Methods in Accounting 6
- ACCY913 Management Accounting 6
- ACCY924 Corporate Financial Information Analysis 6
- ACCY944 Issues in Auditing 6
- ACCY983 Studies in Government Accounting 6

*plus approved subjects from other Programs*

(ii) Honours Master of Arts or Commerce

**Compulsory**
- ACCY903 Accounting Theory 6
- ACCY904 Financial Accounting 6
- ACCY913 Management Accounting 6
- ACCY993 Research Essay 12

**Elective, at least 2 from**
- ACCY905 International Accounting 6
- ACCY907 Empirical Research Methods in Accounting 6
- ACCY909 Comparative Accounting Systems 6
- ACCY910 Issues in International Accounting 6
- ACCY995 Research Project 24
- MGMT998 Multinational Financial Management 6

*plus approved subjects from other Programs*

For further details, see *Course Requirements* below.

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# POSTGRADUATE PROGRAM IN MANAGEMENT ACCOUNTING

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

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(i) Master of Commerce

**Inner Core, at least 3 from**
- ACCY913 Management Accounting 6
- ACCY914 Management Planning and Control Systems 6
- ACCY916 Studies in Controllership 6
- ACCY918 Applied Management Accounting 6

**Outer Core, at least 3 from**
- ACCY903 Accounting Theory 6
- ACCY905 International Accounting 6
- ACCY907 Empirical Research Methods in Accounting 6
- ACCY933 Studies in Information Systems in Accounting 6
- ACCY936 Management and Information Systems 6
## POSTGRADUATE PROGRAM IN MANAGEMENT ACCOUNTING

leading to the Master of Commerce or the Honours Master of Arts or Commerce (Cont’d)

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**(ii) Honours Master of Arts or Commerce**

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*For further details, see Course Requirements below.*

## POSTGRADUATE PROGRAM IN TREASURY (FINANCE)

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

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*For further details, see Course Requirements below.*
### POSTGRADUATE PROGRAM IN INFORMATION SYSTEMS IN ACCOUNTING

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

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<td>ACCY931</td>
<td>Advanced Decision Support Systems</td>
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<td>ACCY933</td>
<td>Studies in Information Systems in Accounting</td>
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<td>ACCY936</td>
<td>Management and Information Systems</td>
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### POSTGRADUATE PROGRAM IN CONTROLLERSHIP

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

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### POSTGRADUATE PROGRAM IN CONTROLLERSHIP
leading to the Master of Commerce or the Honours Master of Arts or Commerce (Cont'd)

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### POSTGRADUATE PROGRAM IN AUDITING
leading to the Master of Commerce or the Honours Master of Arts or Commerce

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OTHER POSTGRADUATE SUBJECTS

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

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in ACCY996.

2. HONOURS MASTER OF ARTS

(a) Candidates who have completed at an acceptable standard the requirements for the award of the BA(Hons) in 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) 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 from the specialisation Schedule.

3. 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.

(a)2 Subjects are to be selected from 900-level subjects offered by either the Department of Accountancy, the Department of Business Systems, 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, Business Systems, 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).

(a)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 from the specialisation Schedule.

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

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

4. MASTER OF COMMERCE

The purpose of this pass degree is to provide graduate students, who have completed the accountancy specialisation for the BCom degree, with the opportunity of further in-depth study of advanced topics in accounting. 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 in accordance with one of the postgraduate programs. 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 include Financial Accounting III and Management Accounting III (or, in special situations, other undergraduate accountancy subjects); thus the total credit points required for these candidates is 72.

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

5. GRADUATE DIPLOMA IN COMMERCE

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

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

Specific requirements for the Graduate Diploma are:

1. not less than 30 credit points (of the minimum required of 48) are to be obtained from 200- and/or 300-level subjects offered by the Department of 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.); and

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.
SUBJECT DESCRIPTIONS

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

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

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

ACCY901 Accounting for Managers
Autumn session: 6 credit points
The interpretation and utilisation of the major types of reports and analyses prepared by accountants for management decision making.
Co-ordinator: Ms J F Moore.

ACCY903 Accounting Theory
6 credit points
Co-ordinator: Ms M M Day.

ACCY904 Financial Accounting
6 credit points
The objectives and functions of external financial reporting, including periodic profit measurement. Evaluation of accounting measurement methods including historical cost, general price level, current value and relative price change models. Communication in accounting reports.
Co-ordinator: Mr A W Ariyadasa.

ACCY905 International Accounting
6 credit points
Co-ordinator: Mr G Gniewosz.

ACCY906 Issues in Financial Accounting
6 credit points
Contemporary issues in financial reporting to external parties, including accounting for different classes of assets, liabilities and equities. Legal, institutional and professional reporting requirements including proposals for improvement in accounting principles applied in practice.
Co-ordinator: Mr A W Ariyadasa.

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.
Co-ordinator: Associate Professor M McCrae.

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.
Co-ordinator: Professor M J R Gaffikin.

ACCY909 Comparative Accounting Systems
6 credit points
An in-depth examination of the patterns of accounting development in different national political environments. Key variables determining the differential accounting development patterns and their implications, in particular, for multinational reporting, will be critically evaluated. Approaches for resolving the problems posed by the diversity of accounting systems will also be considered.
Co-ordinator: Mr G Gniewosz.

ACCY910 Issues in International Accounting
Spring session; 6 credit points (2 hrs per wk)
Pre-requisite: ACCY905
Assessment: by seminar.
Specific current issues that may be examined in-depth include harmonisation of accounting standards and practices, foreign currency accounting, internal control and performance evaluation problems in foreign subsidiaries, and international transfer pricing problems.
Content may be revised subject to the currency of specific issues and in light of student interests.

Co-ordinator: To be advised.

**ACCY913 Management Accounting**
*6 credit points*

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

Co-ordinator: Associate Professor G E Tibbits.

**ACCY914 Management Planning and Control Systems**
*6 credit points*

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

Co-ordinator: Associate Professor G Linnegar.

**ACCY915 Capital Investment**
*6 credit points*

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.

Co-ordinator: Associate Professor M McCrae.

**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.

Co-ordinator: Mr L Blackett.

**ACCY918 Applied Management Accounting**
*6 credit points*

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

Co-ordinator: Mr R B Williams.

**ACCY923 Investment Management**
*6 credit points*


Co-ordinator: Ms B Cornelius.

**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.

Co-ordinator: Professor M J R Gaffikin.

**ACCY925 Australian Banking Practices**
*6 credit points*

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

Co-ordinator: To be advised.

**ACCY926 Studies in Business Finance**
*6 credit points*

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

Co-ordinator: Ms B Cornelius.

**ACCY931 Advanced Decision Support Systems**
*6 credit points*

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

Co-ordinator: To be advised.

**ACCY933 Studies in Information Systems in Accounting**
*6 credit points*

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

Co-ordinator: Ms M A Kaidonis.
ACCY936 Management and Information Systems
6 credit points
The effective use and control of information systems, particularly computer-based information systems, and the likely impact of developments in this area on management functions and how managers carry out those functions.
Co-ordinator: Associate Professor G Linnegar.

ACCY943 Auditing and Accounting Information Systems
6 credit points
The general principles of auditing applied to the audit of computer-based accounting systems and the use of computers as an auditing tool. Particular emphasis on the positive aspects of auditing and internal control, including their contribution towards improvements in: (a) management functions such as planning; and (b) the quality (both real and perceived) of information flows within an entity and between it and external parties.
Co-ordinator: Mr G M E Mickhail.

ACCY944 Issues in Auditing
6 credit points
An in-depth examination of contemporary topics in auditing with emphasis on controversial and theoretical issues, including social and ethical issues, role of quantitative techniques in the audit function, continuous auditing concept, uncertainty reporting, audit performance evaluation, extension of attest function and public sector auditing.
Co-ordinator: Mr A I Chowdhury.

ACCY961 Professional Practice - Accounting
6 credit points
Co-ordinator: To be advised.

ACCY962 Professional Practice - Auditing and EDP
6 credit points
Statements of Auditing Standards and Statements of Auditing Practice. EDP Systems and Controls.
Co-ordinator: To be advised.

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

ACCY968 Insolvencies
6 credit points
Note: A student who has passed ACCY368 Insolvencies may not enrol in this subject.

Accounting and legal aspects of corporate and non-corporate insolvencies including bankruptcies, liquidations, receivership; alteration of capital, reconstruction, amalgamation and takeovers.
Co-ordinator: Professor M J R Gaffikin.

ACCY973 History of Accounting Thought
6 credit points
Co-ordinator: Ms K A Cooper.

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

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

ACCY985 Special Topic in Accounting - A
6 credit points
ACCY986 Special Topic in Accounting - B
6 credit points
A special topic to be selected from any area of financial accounting, management accounting, business finance, information systems or government accounting. The selection would be made by the Head of the Department, taking into account the expertise of academic staff, including visiting staff, and the interest of students.
Co-ordinator: Professor M J R Gaffikin.

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 ACCY985, ACCY986, ACCY993, ACCY994, ACCY995 and ACCY996.
BUSINESS SYSTEMS

COURSES OFFERED

The following postgraduate courses are available:

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

POSTGRADUATE PROGRAMS

Business Information Systems Management Information Systems

CURRENT RESEARCH AREAS

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

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

Specific areas of investigation include:

(a) The application of knowledge-based systems in commercial environments.
(b) Methodologies for the development of knowledge-based systems.
(c) The refinement of knowledge for incomplete domain theories.
(d) The development of second generation expert systems.

(e) Intelligent search methods for project management.

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

Specific areas of investigation include:

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

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

Specific areas of investigation include:

(a) Qualitative analysis of the organisational context of information systems development
(b) The evaluation and development of information systems for managerial decision making.

SCHEDULE OF OF PROGRAMS

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

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Subject</td>
<td>Credit Points</td>
</tr>
<tr>
<td>(i) Master of Commerce</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schedule 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compulsory subjects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUSS 904</td>
<td>Information Analysis</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 905</td>
<td>Structured Systems Design</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 922</td>
<td>Distributed Information Systems</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 923</td>
<td>Information Systems Management</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 940</td>
<td>Management Information Systems Project</td>
<td>18</td>
</tr>
</tbody>
</table>
POSTGRADUATE PROGRAM IN BUSINESS INFORMATION SYSTEMS
leading to the Master of Commerce or the Honours Master of Commerce (Cont’d)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plus one of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUSS 907</td>
<td>Systems Development Environment</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 921</td>
<td>Advanced Data Management</td>
<td>6</td>
</tr>
</tbody>
</table>

One 6 credit point 900 level BUSS subject selected with approval of the Head of the Department of Business Systems from Schedule 3.

Candidates who do not have a specialisation in Information Systems or equivalent in their undergraduate degree will undertake a program of at least 72 credit points as listed in Schedule 2 below.

Schedule 2

All of the compulsory subjects in Schedule 1 (42 credit points) plus:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSS 901 Computer Hardware/Software Systems</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 902 Structure of Programs and Data</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 907 Systems Development Environment</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 921 Advanced Data Management</td>
<td>6</td>
</tr>
</tbody>
</table>

One 6 credit point 900 level BUSS subject selected with approval of the Head of Department of Business Systems from Schedule 3.

(ii) Honours Master of Commerce

Subjects selected from:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSS 981 Advanced Information Systems Topic A</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 982 Advanced Information Systems Topic B</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 983 Advanced Information Systems Topic C</td>
<td>12</td>
</tr>
<tr>
<td>BUSS 984 Advanced Information Systems Topic D</td>
<td>12</td>
</tr>
<tr>
<td>BUSS 986 Research Report</td>
<td>24</td>
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<tr>
<td>BUSS 987 Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN MANAGEMENT INFORMATION SYSTEMS
leading to the Master of Business Administration

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory Coursework (72 credit points) selected from the following subjects:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCY901</td>
<td>Accounting for Managers</td>
<td>6</td>
</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>MGMT931</td>
<td>Strategic Planning &amp; Policy</td>
<td>6</td>
</tr>
<tr>
<td>MGMT976</td>
<td>Competitive Strategy and Analysis</td>
<td>6</td>
</tr>
<tr>
<td>BUSS902</td>
<td>Structure of Programs and Data</td>
<td>6</td>
</tr>
<tr>
<td>BUSS904</td>
<td>Information Analysis</td>
<td>6</td>
</tr>
<tr>
<td>BUSS905</td>
<td>Structured Systems Design</td>
<td>6</td>
</tr>
<tr>
<td>BUSS907</td>
<td>Systems Development Environment</td>
<td>6</td>
</tr>
<tr>
<td>BUSS921</td>
<td>Advanced Data Management</td>
<td>6</td>
</tr>
<tr>
<td>BUSS922</td>
<td>Distributed Information Systems</td>
<td>6</td>
</tr>
<tr>
<td>BUSS923</td>
<td>Information Systems Management</td>
<td>6</td>
</tr>
<tr>
<td>ACCY933</td>
<td>Studies in Information Systems in Accounting</td>
<td>6</td>
</tr>
</tbody>
</table>

Compulsory project (18 credit points)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSS940 Management Information Systems Project</td>
<td>18</td>
</tr>
</tbody>
</table>

Plus one elective subject to be chosen from Schedule 3, or a cognate subject offered by another academic unit (e.g. Accountancy, Computing Science, etc.) of the University, subject to the approval of the Head of the Department of Business Systems.

For further details, see Course Requirements below.
### OTHER POSTGRADUATE SUBJECTS

<table>
<thead>
<tr>
<th>Schedule 3</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSS 903</td>
<td>Business Data Processing Systems</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 906</td>
<td>Information in Organisations</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 908*</td>
<td>Intelligent Tutoring Systems</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 909*</td>
<td>Office Automation</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 924*</td>
<td>Systems Modelling and Simulation</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 925</td>
<td>Knowledge-Based Information Systems</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 926*</td>
<td>Decision Support Systems</td>
<td>6</td>
</tr>
<tr>
<td>BUSS927</td>
<td>Human Computer Interaction</td>
<td>6</td>
</tr>
</tbody>
</table>

### Graduate Diploma in Commerce

<table>
<thead>
<tr>
<th>Schedule 4</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSS 211</td>
<td>Business Computer Systems I</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 212</td>
<td>Business Computer Systems II</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 214</td>
<td>Structured Business Programming I</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 215</td>
<td>Structured Business Programming II</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 311</td>
<td>Data Management Systems I</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 312</td>
<td>Data Management Systems II</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 313</td>
<td>Management Information Systems</td>
<td>6</td>
</tr>
<tr>
<td>BUSS 314</td>
<td>Information Systems: Policy and Management</td>
<td>6</td>
</tr>
</tbody>
</table>

* Not on offer in 1994.

Descriptions for the subjects in this schedule are provided in the University Undergraduate Calendar. Pre-requisites will not apply to Postgraduate Diploma students.

For further details, see Course Requirements below.

### COURSE REQUIREMENTS

#### 1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in BUSS999.

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

1. (a) Candidates who have completed the requirements for the award of the BCom(Hons) in Accountancy, Business Systems Analysis, Economics or Management at a standard of Class II, Division 2 or higher, or an equivalent degree, may qualify for the award of the MCom(Hons) degree by completing at honours standard any one of the following courses of study:
   
   (i) Thesis (48 credit points); or
   
   (ii) Research report (24 credit points) and course work aggregating not less than 24 credit points.

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

(i) A combination of subjects from two departments must be approved by the Heads of the two Departments concerned; and

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

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

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

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

3. MASTER OF BUSINESS ADMINISTRATION (MANAGEMENT INFORMATION SYSTEMS)

The MBA Management Information Systems (MIS) program 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.

4. MASTER OF COMMERCE

This pass degree provides BCom degree (or equivalent) graduates with the opportunity to study advanced topics in business information systems. The degree of 48 or 72 credit points may be studied full time or part time. Subjects are selected from the 900 level subject offerings as shown in Schedules 1 and 2 above.

5. GRADUATE DIPLOMA IN COMMERCE (BUSINESS INFORMATION SYSTEMS)

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

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

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

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

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

SUBJECT DESCRIPTIONS

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

BUSS901 Computer Hardware/Software Systems
Autumn session; 6 credit points (3 hrs per wk)
Assessment: examination and assignments.
This subject aims to provide an advanced introduction to the fundamental concepts, principles and techniques of business
computing and information technology. Traditional EDP topics in hardware and systems software are augmented by a consideration of programming systems and languages, data communications and networking technology and file structures and organisations.

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

**BUSS902 Structure of Programs and Data**

*Autumn session; 6 credit points (3 hrs per wk)*

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: To be advised.
Co-ordinator: Dr L Schafe.

**BUSS903 Information Systems for Managers**

*Spring session; 6 credit points (3 hrs per wk)*

Assessment: assignments, case studies, and tutorial exercises.

This subject provides an analysis of the structures and functions of the range of typical computer-based business information systems including the use of common computer based business productivity tools. Other issues considered are the integration of discrete applications into the total information system; organisational implications of such integration and automation; the use of spreadsheets, data base management tools and integrated software to solve data processing problems. As a core MBA subject there is an emphasis on the international nature of business and wherever possible and appropriate, case study examples and problems which illustrate the increasing globalization of the business and management environment.

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

**BUSS904 Information Analysis**

*Spring session; 6 credit points (3 hrs per wk)*

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: To be advised.
Co-ordinator: Dr L Schafe.

**BUSS905 Structured Systems Design**

*Spring session; 6 credit points (3 hrs per wk)*

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: To be advised.
Co-ordinator: Dr L Schafe.

**BUSS906 Information in Organisations**

*Spring session; 6 credit points (3 hrs per wk)*

Assessment: examination, assignments and case studies.

This subject establishes a foundation for understanding the role of information systems in organisations and how such systems relate to organisational objectives and structures. Topics covered include: the systems concepts in an organisation; information theory; information flows and decision processes; nature of information systems in organisations; techniques and skills in representing system structures; and integration of information systems into the organisational structure. Examples will be drawn from business organisational settings wherever possible.

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

**BUSS907 Systems Development Environment**

*Spring session; 6 credit points (3 hrs per wk)*

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. Productivity aids considered include: Project management software, CASE, 4GL and prototyping tools, with an in-depth study in at least one of these.

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

**BUSS908 Intelligent Tutoring Systems**

*Spring session; 6 credit points (3 hrs per wk)*

Assessment: examination, assignments and case studies.

This subject examines the design, construction, and implementation of intelligent tutoring
systems and adaptive instructional 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: To be advised.
Co-ordinator: Dr L Schafe.

BUSS909 Office Automation

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

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

BUSS921 Advanced Data Management

Spring session; 6 credit points (3 hrs per wk)
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, physical and logical structures, relational theory, data languages, survey and evaluation of DBMSs, data integrity and security, database administration.

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

BUSS922 Distributed Information Systems

Autumn session; 6 credit points (3 hrs per wk)
Assessment: assignments and examination.
This subject aims to familiarise the student with the concepts of design, implementation and management of distributed information systems. Topics covered include the development of user and organisational requirements for distributed systems, the development of logical and physical designs for distributed systems, the methods of seeking and evaluating technical solutions and the implementation and management of distributed systems in an organisation.

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

BUSS923 Information Systems Management

Autumn session; 6 credit points (3 hrs per wk)
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: To be advised.
Co-ordinator: Dr L Schafe.

BUSS924 Systems Modelling and Simulation

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

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

BUSS925 Knowledge-Based Information Systems

Spring session; 6 credit points (3 hrs per wk)
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: To be advised.
Co-ordinator: Dr L Schafe.

BUSS926 Decision Support Systems

Autumn session; 6 credit points (3 hrs per wk)
Assessment: assignments and examination.
This subject examines the following issues in decision support systems: objective and subjective rationality in decision making; decision making process in individuals and in organisations; uncertainty and 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: To be advised.

Co-ordinator: Dr L Schafe.

BUSS927 Human Computer Interaction
Spring session; 6 credit points (3 hrs per wk)
Assessment: assignments and examination.
The aim of this subject is to make students aware of the multidisciplinary nature of the domain of Human Computer Interaction. It aims to provide students with the knowledge and skills required to make sound judgements about the design of a business computer system in terms of its suitability for achieving the particular goals required by its users, to evaluate how well software systems fulfil the needs of their users and to contribute to the design of user-centred systems in which users and task needs are given major consideration.

Textbook: To be advised.

Co-ordinator: Dr L Schafe.

BUSS940 Management Information Systems Project
Double (A) or Autumn or Spring session: 18 credit points
Assessment: written report.
Students will be expected to carry out a substantive project in management information systems, under the supervision of a member of staff, culminating in a substantial written report.

Co-ordinator: Dr L Schafe.

BUSS981 Advanced Information Systems Topic A
6 credit points

BUSS982 Advanced Information Systems Topic B
6 credit points

BUSS983 Advanced Information Systems Topic C
12 credit points

BUSS984 Advanced Information Systems Topic D
12 credit points

BUSS986 Research Report
24 credit points

BUSS987 Masters Thesis
48 credit points

BUSS999 Doctoral Thesis
48 credit points
ECONOMICS

COURSES OFFERED

The following postgraduate courses are available:

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

POSTGRADUATE PROGRAMS

Development Economics
Econometrics
Labour Economics
Public Policy

SCHEDULE OF PROGRAMS

MASTER OF COMMERCE (HONOURS) ECONOMICS
leading to the Master of Commerce or the Honours Master of Commerce

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

* Head of the Department of Economics may agree to the substitution of another quantitative subject for ECON998.
† Only for candidates who have successfully completed ECON996, 997 and 998 or their equivalents.

For further details, see Course Requirements below.

There is a Supplementary Schedule 6 for postgraduate subjects offered by the Department of Economics for postgraduate students taking other degrees. The Industrial Relations Schedules 7 and 8 are given in the Industrial Relations section. In special circumstances the Head of the Department may substitute an approved 900-level subject for a subject or subjects in Schedules 2 to 6.

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

CURRENT RESEARCH AREAS

The areas of research in which staff can offer supervision are indicated by the areas by Schedules 1 to 6 and by the specific subjects within those schedules. Other areas may be offered subject to consultation with the Head of Department.
### POSTGRADUATE PROGRAM IN LABOUR ECONOMICS

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

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>Schedule 2</td>
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<tr>
<td>ECON912</td>
<td>Labour Economics</td>
<td>8</td>
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<tr>
<td>ECON913</td>
<td>Industrial Economics</td>
<td>8</td>
</tr>
<tr>
<td>ECON916</td>
<td>Microeconomic Analysis</td>
<td>8</td>
</tr>
<tr>
<td>ECON917</td>
<td>Economics of Health Care</td>
<td>8</td>
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<tr>
<td>ECON936</td>
<td>Graduate Macroeconomics</td>
<td>8</td>
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<tr>
<td>ECON937</td>
<td>Graduate Microeconomics</td>
<td>8</td>
</tr>
<tr>
<td>ECON943</td>
<td>Advanced Topics in Economics - C</td>
<td>8</td>
</tr>
<tr>
<td>ECON957</td>
<td>Productivity and Labour</td>
<td>8</td>
</tr>
</tbody>
</table>

Students may undertake 16 credit points from Schedule 7 - Industrial Relations. For further details, see Course Requirements below.

### POSTGRADUATE PROGRAM IN PUBLIC POLICY

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

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>Schedule 3</td>
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<tr>
<td>ECON903</td>
<td>Public Finance</td>
<td>8</td>
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<tr>
<td>ECON907</td>
<td>Cost Benefit Analysis</td>
<td>8</td>
</tr>
<tr>
<td>ECON911</td>
<td>Advanced International Economics</td>
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<tr>
<td>ECON917</td>
<td>Economics of Health Care</td>
<td>8</td>
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<tr>
<td>ECON901</td>
<td>Monetary Economics</td>
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<td>ECON936</td>
<td>Graduate Macroeconomics</td>
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<tr>
<td>ECON937</td>
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</tr>
<tr>
<td>ECON938</td>
<td>Environmental Economics</td>
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</tr>
<tr>
<td>ECON943</td>
<td>Advanced Topics in Economics - C</td>
<td>8</td>
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</tbody>
</table>

For further details, see Course Requirements below.

### POSTGRADUATE PROGRAM IN ECONOMETRICS

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

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>Schedule 4</td>
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</tr>
<tr>
<td>ECON909</td>
<td>Econometric Theory</td>
<td>8</td>
</tr>
<tr>
<td>ECON921</td>
<td>Econometric Models</td>
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</tr>
<tr>
<td>ECON939</td>
<td>Principles of Econometrics</td>
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</tr>
<tr>
<td>ECON934</td>
<td>Advanced Financial Economics</td>
<td>8</td>
</tr>
<tr>
<td>ECON935</td>
<td>Advanced Managerial Economics and Operations Research</td>
<td>8</td>
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<tr>
<td>ECON936</td>
<td>Graduate Macroeconomics</td>
<td>8</td>
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<td>ECON937</td>
<td>Graduate Microeconomics</td>
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<tr>
<td>ECON940</td>
<td>Econometric Analysis</td>
<td>8</td>
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<tr>
<td>ECON941</td>
<td>Advanced Topics in Economics A</td>
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</table>

For further details, see Course Requirements below.
POSTGRADUATE PROGRAM IN DEVELOPMENT ECONOMICS
leading to the Master of Commerce or the Honours Master of Commerce

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>Schedule 5</td>
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<tr>
<td>ECON902</td>
<td>Advanced International Monetary Economics</td>
<td>8</td>
</tr>
<tr>
<td>ECON903</td>
<td>Public Finance</td>
<td>8</td>
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<td>ECON907</td>
<td>Cost Benefit Analysis</td>
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<tr>
<td>ECON908</td>
<td>Advanced Topics in Economics of Development</td>
<td>8</td>
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<tr>
<td>ECON923</td>
<td>Applied Economic Development Planning</td>
<td>8</td>
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<tr>
<td>ECON924</td>
<td>International Economic Relations</td>
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<td>ECON934</td>
<td>Advanced Financial Economics</td>
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<td>ECON936</td>
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<tr>
<td>ECON937</td>
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<tr>
<td>ECON943</td>
<td>Advanced Topics in Economics - C</td>
<td>8</td>
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</tbody>
</table>

For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

(i) Master of Commerce and Honours Master of Commerce

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
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<tbody>
<tr>
<td>Schedule 6 - Supplementary Schedule</td>
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<tr>
<td>ECON918</td>
<td>Economics of Health Care - A</td>
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</tr>
<tr>
<td>ECON925*</td>
<td>Advanced Economic Theory</td>
<td>8</td>
</tr>
<tr>
<td>ECON932</td>
<td>Economic Analysis of the Business Environment</td>
<td>6</td>
</tr>
<tr>
<td>ECON941</td>
<td>Advanced Topics in Economics - A</td>
<td>8</td>
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<tr>
<td>ECON942</td>
<td>Advanced Topics in Economics - B</td>
<td>8</td>
</tr>
<tr>
<td>ECON954*</td>
<td>Industrial Relations in Australia</td>
<td>6</td>
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<tr>
<td>ECON952</td>
<td>Workplace &amp; Enterprise Industrial Relations</td>
<td>8</td>
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<tr>
<td>ECON973</td>
<td>Employers and Industrial Relations</td>
<td>6</td>
</tr>
<tr>
<td>ECON974</td>
<td>Industrial Relations Policy</td>
<td>6</td>
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<td>ECON975</td>
<td>Advanced Industrial Relations Processes</td>
<td>6</td>
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<tr>
<td>ECON991</td>
<td>Project</td>
<td>16</td>
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<td>ECON992</td>
<td>Research Report</td>
<td>24</td>
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<tr>
<td>ECON993</td>
<td>Thesis</td>
<td>48</td>
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</tbody>
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* Not on offer in 1994.

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

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

2. HONOURS MASTER OF COMMERCE

HONOURS MASTER OF ARTS

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

The Course Rules governing the Honours Masters degree will apply.

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

For the Honours Master degree students must, subject to the subsequent advanced standing or exemption clause, complete Schedule 1 and:

Either

48 credit points of subjects chosen from Schedules 2 to 5;

Or

an additional 24 credit points of subjects
chosen from Schedule 1 with the approval of the Head of Department, together with 24 credit points of subjects chosen from one of Schedules 2 to 5.

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

3. MASTER OF COMMERCE

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

The Course Rules governing the Masters degree will apply.

The degree of 48 credit points may be studied full-time over one year, or may be studied part-time.

For the Master of Commerce degree students must complete 48 credit points from one of Schedules 2 to 5.

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

4. GRADUATE DIPLOMA IN COMMERCE

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

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

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

SUBJECT DESCRIPTIONS

Composition of Subjects
Three hrs lectures/seminars per wk.

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

ECON901 Monetary Economics
8 credit points
The subject is in two sections. The first section compares the monetarist theory of money with the 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 subject will be based on journal articles in which most of the debates have been carried.
Co-ordinator: Dr C Harvie.

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

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

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

* Not on offer in 1994.
ECON906 History of Economic Thought
8 credit points
A study of the history of Economics, mainly concerned with the origins and development of modern Economics.
Co-ordinator: Associate Professor R Castle.

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

ECON908 Advanced Topics in the Economics of Development
8 credit points
The subject provides an in-depth analysis of formulation of development policies in less developed countries in the light of theory and experience. The formulation of an integrated strategy of development is preceded by problem description and application of relevant economic theory. Possible topics include: economic growth versus economic development; poverty and inequality; population growth; unemployment and rural-urban migration; technological change; peasant agriculture and agricultural productivity; human capital and development; role of capital; credit and institutions; international dimensions of development and development planning.
Co-ordinator: Associate Professor D P Chaudhri.

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

ECON910 Advanced International Economics
8 credit points.
Not to count with ECON921.
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).
Co-ordinator: Dr C-S Suh.

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.
Co-ordinator: Ms N Verrucci.

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.
Co-ordinator: Dr C-S Suh.

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

ECON917 Economics of Health Care
8 credit points.
Not to count with 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.
Co-ordinator: Professor D Lewis.

ECON918 Economics of Health Care - A
6 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.

Co-ordinator: Professor D Lewis.

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

Co-ordinator: To be advised.

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

Co-ordinator: Associate Professor T V Hoa.

ECON923 Applied Economic Development Planning
8 credit points
This subject will develop the skills needed by those engaged in economic development planning and analysis. Topics covered will include: identification of program objectives, program planning, program evaluation and appraisal, program implementation and management. Several programs in developing nations will be reviewed.

Co-ordinator: Associate Professor A Levy.

ECON924 International Economic Relations - B
8 credit points.
Not to count with INTR920.
The subject 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.

Co-ordinator: Associate Professor R Castle.

ECON925 Advanced Economic Theory*
8 credit points:
Advanced topics in economic theory will be studied. Topics in microeconomics will normally include game theory, general equilibrium analysis, welfare economics and economics of regulation. Topics in macroeconomics will normally include growth theory, trade cycle theory, open economy dynamics, rational expectations and post-Keynesian economics.

Co-ordinator: Mr E Wilson.

ECON929 Macrodynamics
8 credit points
This subject covers dynamic aspects of macroeconomics, including economic growth theory and business cycle theories. The role of technological change, balanced and unbalanced growth, shock adjustment, and optimal growth will all be studied in a framework of macroeconomic modelling.

Co-ordinator: Associate Professor A Levy.

ECON932 Economic Analysis of the Business Environment
6 credit points
This subject focusses on the macro and micro environment of business and organisations, and the role of managers in relating their organisational behaviour to the economic environment. Internationalisation of business and the globalisation of economics and markets will be studied as well as macroeconomic and microeconomic policies which affect the business environment.

Co-ordinator: Ms A Hodgkinson.

ECON933 Game Theory*
6 credit points
Pre-requisite: ECON111 and ECON122 or their equivalents.
A study of advanced topics in game theory. The objective of this subject is to build on traditional analytical techniques in economics based on assumptions of certainty and competitive markets. Using game theory, the analysis is extended to settings that traditional economic analysis is unable to cope with. These typically involve settings incorporating risk and uncertainty, asymmetric and incomplete information and strategic situations where the assumptions of competitive markets do not apply. The emphasis is on theoretical developments and the application of the central tools of game theory to real world problems of business and economics involving strategic interactions between parties.

Textbook:

Co-ordinator: Dr B Lee.

* Not on offer in 1994.
ECON934 Advanced Financial Economics
6 credit points
Pre-requisite: ECON121 or equivalent
An advanced study of the theory of optimal acquisition, financing and composition of assets and production activities with applications in the fields of economics of the firm, agricultural economics and international economics. The optimal control method and phase-plane diagrams will be applied in the analysis of the optimal trajectories of capital investment, advertising and borrowing. Investors' portfolio choices and producers' activity sets will be analysed within a mean-variance expected utility maximisation framework incorporating the notions of risk aversion, costs of risk bearing and diversification. The determinants and implications of debt accumulation, insolvency, continuation or liquidation will be analysed within the context of international economics. Co-ordinator: Associate Professor A Levy.

ECON935 Advanced Managerial Economics and Operations Research
6 credit points
Pre-requisite: ECON228 or ECON230 or equivalent.

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

ECON937 Graduate Microeconomics
Autumn and Summer session; 8 credit points
Assessment: assignments, tutorial presentation, essays and final examination.
The subject provides the theoretical basis for analysis of a wide range of microeconomic issues and policies. Topics include demand and supply theory; consumer preference theory; theory of the firm; cost functions; market behaviour under perfect competition, monopoly, and imperfect competition; factor markets; general equilibrium theory; externalities and intertemporal choice and risk. The emphasis in these topics is on providing a theoretical foundation that is linked to empirical analysis and interpretation of real world problems.
Co-ordinator: Dr D O'Brien.

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

ECON939 Principles of Econometrics
Autumn session; 8 credit points
Assessment: seminars, research report.
This course deals with the fundamental concepts of econometrics used in applied economic work in the academic, business and government sectors. The course covers the standard and non-standard econometric models, based on time series, cross-section, or qualitative data. Emphasis will be on applications of the econometric methodologies in empirical research.
ECON940 Econometric Analysis
Spring session; 8 credit points
Assessment: seminars, research report.
The subject deals with applications of the econometric theory to microeconomic and macroeconomic analyses. Topics include consumer demand, production function, investment analysis, finance, unemployment, inflation, and international trade. The subject also covers multi-sector economy-wide modelling of the Keynesian and neo-classical classes, and emphasizes particularly empirical research on current economic issues.
Textbook:
Co-ordinator: Associate Professor Tran Van Hoa.

ECON941 Advanced Topics in Economics - A
8 credit points

ECON942 Advanced Topics in Economics - B
8 credit points

ECON943 Advanced Topics in Economics - C
8 credit points

ECON944 Advanced Topics in Economics - D
8 credit points

ECON945 Advanced Topics in Economics - E
8 credit points

ECON946 Advanced Topics in Economics - F
8 credit points
Topics for these subjects may be drawn from any area of Economics which the Head of the Department considers to be suitable preparation for a higher degree and appropriate to the student's special interests.
Co-ordinator: Associate Professor R Castle.

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

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

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

ECON954 Industrial Relations in Australia
6 credit points.
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.
Co-ordinator: To be advised.

ECON955 Comparative Studies in Industrial Relations
Spring session, 8 credit points
Assessment: essays, seminar papers, optional exam.
A comparative examination of the development and organisation of industrial relations systems in a variety of different countries.
Textbook:
Co-ordinator: Associate Professor R Markey.

ECON956 Advanced Industrial Relations Processes
8 credit points
This subject will develop concepts, theories and techniques for the choice and evaluation of strategies and tactics in collective bargaining

* Not on offer in 1994.
and advocacy.
Co-ordinator: Ms D Kelly.

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

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

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

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

ECON991 Project
16 credit points

ECON992 Research Report
24 credit points

ECON993 Thesis
48 credit points

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

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

ECON998 Research Methods
8 credit points
This subject provides an introduction to research methods. Mathematical and statistical techniques used in economic research will be studied. Research methodology relating to taxonomy, hypothesis development, analysis, and theories of causation in the social sciences will be examined. Thesis preparation and presentation will be considered and students will be expected to become familiar with copy-editing conventions and style manuals.
Co-ordinator: Professor D Lewis.
INDUSTRIAL RELATIONS

COURSES OFFERED

The following postgraduate courses are available:

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

POSTGRADUATE PROGRAM

Industrial Relations

CURRENT RESEARCH AREAS

The areas of research in which staff can offer supervision are indicated by the area covered in Schedules 7 and 8 listed below and by the subjects within those Schedules. Other areas may be offered subject to consultation with the Head of Department.

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN INDUSTRIAL RELATIONS
leading to the Master of Commerce or the Honours Master of Commerce.

Schedule 7 - Industrial Relations

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON912</td>
<td>Labour Economics</td>
<td>8</td>
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<tr>
<td>ECON913</td>
<td>Industrial Economics</td>
<td>8</td>
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<tr>
<td>ECON944</td>
<td>Advanced Topics in Economics - D</td>
<td>8</td>
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<tr>
<td>ECON945</td>
<td>Advanced Topics in Economics - E</td>
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<tr>
<td>ECON946</td>
<td>Advanced Topics in Economics - F</td>
<td>8</td>
</tr>
<tr>
<td>ECON948</td>
<td>Employers and Industrial Relations</td>
<td>8</td>
</tr>
<tr>
<td>ECON952</td>
<td>Workplace and Enterprise Industrial Relations</td>
<td>8</td>
</tr>
<tr>
<td>ECON953</td>
<td>Political Economy of Australian Wage Determination</td>
<td>8</td>
</tr>
<tr>
<td>ECON955</td>
<td>Comparative Studies in Industrial Relations</td>
<td>8</td>
</tr>
<tr>
<td>ECON957</td>
<td>Productivity and Labour</td>
<td>8</td>
</tr>
<tr>
<td>ECON958</td>
<td>Industrial Relations and Management Thought</td>
<td>8</td>
</tr>
<tr>
<td>MGMT953*</td>
<td>Human Resource Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT962*</td>
<td>Environmental and Occupational Health</td>
<td>6</td>
</tr>
<tr>
<td>LAW966*</td>
<td>Studies in Industrial Law</td>
<td>6</td>
</tr>
<tr>
<td>LAW969*</td>
<td>Occupational Health and Safety Law</td>
<td>6</td>
</tr>
<tr>
<td>GMHC954*</td>
<td>Organisational Psychology</td>
<td>8</td>
</tr>
<tr>
<td>PSYC956*</td>
<td>Occupational Psychology</td>
<td>8</td>
</tr>
</tbody>
</table>

*Subject available only to those doing ECON992 Research Report (24 credit points).
For further details, see Subject Requirements in Economics section.

OTHER POSTGRADUATE SUBJECTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tr>
<td>Schedule 8</td>
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<tr>
<td>ECON956</td>
<td>Advanced Industrial Relations Processes</td>
<td>8</td>
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<tr>
<td>ECON991</td>
<td>Project</td>
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<tr>
<td>ECON992</td>
<td>Research Report</td>
<td>24</td>
</tr>
<tr>
<td>ECON993</td>
<td>Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>
COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY
For the degree of Doctor of Philosophy, candidates enrol in the subject ECON993 Thesis.

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

The Course Rules governing the Honours Masters degree will apply.

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

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

Either
ECON993 Thesis - 48 credit points together with subjects chosen from the remainder of Schedule 7;
or
ECON992 Research Report - 24 credit points
and
together with 48 credit points of subjects chosen from Schedule 7.

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

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

The Course Rules governing the Masters Degree will apply.

For the Master of Commerce degree students must complete 48 credit points chosen from Schedule 7, including at least 24 credit points of ECON subjects.

In special circumstances the Head of the Department may substitute an approved 900-level subject for a subject or subjects in Schedule 7.

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

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

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

For descriptions of subjects, refer to Economics section.
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
- Human resource management
- International management
- International marketing
- Interorganisational relations
- Management of R & D
- Management training
- Manufacturing strategy
- Marketing communication and consumer behaviour, gift-giving behaviour
- Mergers and divestment
- New Product Service Innovations
- Operations management
- Organisational behaviour and structure
- Organisational politics
- Organisational culture
- Portfolio management and capital markets
- Professional services marketing
- Public sector management
- Services marketing
- Strategic management
- Technology Marketing and Licensing
- Total quality management
- Women in management

SCHEDULE OF PROGRAMS

This is a 24 credit point course which may be taken from several approved schedules. The current schedules available are:

Schedule 1: The NSW Police Academy Program (Off Campus Study)
Schedule 2: The TAFE Systems/University of Wollongong Program (Off Campus Study)
Schedule 3: The Public Sector Management Course Program (Off Campus Study)
Schedule 4: The General Schedule (On Campus Study)

1. The NSW Police Academy Program

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT801</td>
<td>Command and Leadership</td>
<td>6</td>
</tr>
<tr>
<td>MGMT802</td>
<td>Managing Service and Program Delivery</td>
<td>6</td>
</tr>
<tr>
<td>MGMT803</td>
<td>Information and Finance Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT804</td>
<td>Human Resource Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT899</td>
<td>Workbased Project</td>
<td></td>
</tr>
</tbody>
</table>

Note 1: Admission to this program and its subjects is restricted to students enrolled in the NSW Police Academy Command Development Program. This program is taught only at the NSW Police Academy.
## GRADUATE CERTIFICATE IN MANAGEMENT (Cont’d)

### 2. The TAFE Systems/University of Wollongong Program

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT811</td>
<td>Management Skills and Concepts</td>
<td>6</td>
</tr>
<tr>
<td>MGMT812</td>
<td>Managing Operations and Change</td>
<td>6</td>
</tr>
<tr>
<td>MGMT813</td>
<td>Managing People</td>
<td>6</td>
</tr>
<tr>
<td>MGMT814</td>
<td>Managing Finance and Information</td>
<td>6</td>
</tr>
<tr>
<td>MGMT899</td>
<td>Workbased Project</td>
<td>6</td>
</tr>
</tbody>
</table>

Note 2: Admission to this program and its subjects is restricted to students enrolled in the TAFE Systems/University of Wollongong program. This is a full fee, off campus program of study.

### 3. Public Sector Management Course Program

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT821</td>
<td>Managing Service and Program Delivery</td>
<td>6</td>
</tr>
<tr>
<td>MGMT822</td>
<td>Professional Identity: Leadership and Change</td>
<td>6</td>
</tr>
<tr>
<td>MGMT823</td>
<td>Finance and Resource Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT824</td>
<td>People Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT899</td>
<td>Workbased Project</td>
<td>6</td>
</tr>
</tbody>
</table>

Note 3: Admission to this program and its subjects is restricted to students enrolled in the Australian Governments’ Public Sector Management Course. This is an employer-selected and sponsored off-campus program of study.

### 4. General Schedule

24 credit points of study selected from the Graduate Diploma in Commerce (Management) schedule (see following).

For further details see [Course Requirements](#) below.

Program Director: Professor M Hough

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## GRADUATE DIPLOMA IN COMMERCE (MANAGEMENT)

This is a 48 cp course.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCY901†</td>
<td>Accounting For Managers</td>
<td>6</td>
</tr>
<tr>
<td>ECON932†</td>
<td>Economics For Managers</td>
<td>6</td>
</tr>
<tr>
<td>BUSS903†</td>
<td>Information Systems For Managers</td>
<td>6</td>
</tr>
<tr>
<td>MGMT905†</td>
<td>Business Ethics and Law</td>
<td>6</td>
</tr>
<tr>
<td>MGMT906†</td>
<td>Managing People At Work</td>
<td>6</td>
</tr>
<tr>
<td>MGMT907†</td>
<td>Managerial Skills Workshop</td>
<td>6</td>
</tr>
<tr>
<td>MGMT922†</td>
<td>Marketing Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT979</td>
<td>Financial Decision Making</td>
<td>6</td>
</tr>
</tbody>
</table>

† These subjects are only available to students enrolled in the MBA/Graduate Diploma/Graduate Certificate programs, or by special approval by the Head of Department.

For further details - see [Course Requirements](#) below.

Program Director: Professor M Hough
MASTER OF BUSINESS ADMINISTRATION
This is a 96 credit point course, offered at Pass or Merit level.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
</table>

The program of study is constituted from:

1. 48 credit points of core studies, as specified for the Graduate Diploma in Commerce (Management)

   ACCY901†  Accounting for Managers  6
   ECON932†  Economics for Managers  6
   BUSS903†  Information Systems for Managers  6
   MGMT922†  Marketing Management  6
   MGMT905†  Business Ethics and Law  6
   MGMT906†  Managing People at Work  6
   MGMT979†  Financial Decision Making  6
   MGMT907†  Managerial Skills Workshop  6

2. 42 credit points of specialization studies in an approved area of specialization drawn from one of the following schedules:

   Schedule 1:  General Management
   Schedule 2:  Marketing
   Schedule 3:  Human Resource Management
   Schedule 4:  Total Quality Management
   Schedule 5:  Public Sector Management
   Schedule 6:  International Business
   Schedule 7:  Operations Management
   Schedule 8:  Strategic Management
   Schedule 9:  Technology and Innovation Management
   Schedule 10:††  Managerial Finance
   Schedule 11:  Industrial Relations
   Schedule 12:  Business Economics
   Schedule 13:††  Management Information Systems
   Schedule 14:  Legal Studies

   and

3. 6 credit points of integration studies

   MGMT931•o  Strategic Planning and Policy  6
   or
   MGMT976  Competitive Analysis and Strategy  6

Specializations will only be available for study as from 1995, except where specifically indicated following.

Specialisation Schedules

Each specialization schedule will include the option of a project within the prescribed 42 credit points. The project must be within the area of specialization.

† †† • o - refer to key on page 187.
### SCHEDULE 1: GENERAL MANAGEMENT (available as from 1994)

**Coursework Option**
1. Any 42 credit points of MGMT900 level subjects which are not core subjects for the MBA and
2. MGMT931 Strategic Planning and Policy 6

**Project Option**
24 credit points of project studies
- MGMT980 Business Research Methods 6
- MGMT982 Project 18
- or
- MGMT981 MBA Project 24

### SCHEDULE 2: MARKETING

**Compulsory Subjects**
- MGMT936* Consumer Behaviour 6
- MGMT938* Managing Service Marketing 6
- MGMT957* International Marketing Strategy 6
- MGMT931* Strategic Planning and Policy 6

and **Coursework Option**
24 credit points of coursework drawn from
- MGMT977* Research For Marketing Decisions 6

and Any 3 of the following
- MGMT921* Managerial Finance 6
- MGMT937* Management of Marketing Communication 6
- MGMT939* Contemporary Issues in International Marketing 6
- MGMT956 New Product Marketing 6
- MGMT967 Quantitative Methods 6
- MGMT935* Marketing Planning and Strategy 6

or any 6 credit points postgraduate subject approved by Head of Department of Management

**Project Option**
24 credit points of project studies
* either
- MGMT977 Research for Marketing Decisions 6
- MGMT982 Project 18
- or
- MGMT981 MBA Project 24

### SCHEDULE 3: HUMAN RESOURCE MANAGEMENT

**Compulsory Subjects**
- MGMT953 Human Resource Management 6
- ECON954 Industrial Relations In Australia 6
- MGMT931 Strategic Planning and Policy 6

* either
- MGMT916 Management and Employment Relations 6
- or
- MGMT919* Human Resource Strategies and TQM 6

and **Coursework Option**
24 credit points of coursework
* either
- MGMT916 Management and Employment Relations 6
- or
- MGMT919* Human Resource Strategies and TQM 6

* * - refer to key on page 187.
### MASTER OF BUSINESS ADMINISTRATION (Cont’d)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>and 18 credit points drawn from</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGMT920</td>
<td>Organizational Analysis</td>
<td>6</td>
</tr>
<tr>
<td>MGMT915*</td>
<td>Management of Change</td>
<td>6</td>
</tr>
<tr>
<td>MGMT918*</td>
<td>Organizational Processes</td>
<td>6</td>
</tr>
<tr>
<td>MGMT924*</td>
<td>Organizations and Their Environments</td>
<td>6</td>
</tr>
<tr>
<td>MGMT947</td>
<td>Quality Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT963</td>
<td>Management of Occupational Health and Safety</td>
<td>6</td>
</tr>
<tr>
<td>ECON948</td>
<td>Employers and Industrial Relations</td>
<td>6</td>
</tr>
</tbody>
</table>

or any 6 credit points postgraduate subject approved by Heads of Departments of Management and Economics

**Project Option**

24 credit points of project studies

*either*

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT980</td>
<td>Business Research Methods</td>
<td>6</td>
</tr>
<tr>
<td>MGMT982</td>
<td>Project</td>
<td>18</td>
</tr>
<tr>
<td>or</td>
<td>MGMT981 MBA Project</td>
<td>24</td>
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### Schedule 4: TOTAL QUALITY MANAGEMENT

**Compulsory Subjects**

<table>
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<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>MGMT947</td>
<td>Quality Management</td>
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<td>MGMT915*</td>
<td>Management of Change</td>
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<tr>
<td>TQM911</td>
<td>Introduction To TQM</td>
<td>6</td>
</tr>
<tr>
<td>MGMT931*</td>
<td>Strategic Planning and Policy</td>
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</tr>
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</table>

and

**Coursework Option**

24 credit points of coursework drawn from

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT916</td>
<td>Management and Employment Relations</td>
<td>6</td>
</tr>
<tr>
<td>MGMT918*</td>
<td>Organizational Processes</td>
<td>6</td>
</tr>
<tr>
<td>MGMT919*</td>
<td>Human Resource Strategies and TQM</td>
<td>6</td>
</tr>
<tr>
<td>MGMT920*</td>
<td>Organizational Analysis</td>
<td>6</td>
</tr>
<tr>
<td>MGMT924*</td>
<td>Organizations and Their Environments</td>
<td>6</td>
</tr>
<tr>
<td>MGMT961</td>
<td>International Business Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT967</td>
<td>Quantitative Methods</td>
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</tr>
<tr>
<td>MGMT970</td>
<td>Contemporary Issues In Service Quality</td>
<td>6</td>
</tr>
</tbody>
</table>

or any 6 credit points postgraduate subject approved by Head of Department of Management

**Project Option**

24 credit points of project studies

*either*

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT980</td>
<td>Business Research Methods</td>
<td>6</td>
</tr>
<tr>
<td>MGMT982</td>
<td>Project</td>
<td>18</td>
</tr>
<tr>
<td>or</td>
<td>MGMT981 MBA Project</td>
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</table>

### Schedule 5: PUBLIC SECTOR MANAGEMENT

**Compulsory Subjects:**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT924*</td>
<td>Organizations and Their Environments</td>
<td>6</td>
</tr>
<tr>
<td>MGMT927</td>
<td>Australian Government Administration</td>
<td>6</td>
</tr>
<tr>
<td>MGMT928</td>
<td>Public Policy and Administration</td>
<td>6</td>
</tr>
<tr>
<td>MGMT931*</td>
<td>Strategic Planning and Policy</td>
<td>6</td>
</tr>
</tbody>
</table>

* * - refer to key on page 187.
## MASTER OF BUSINESS ADMINISTRATION (Cont'd)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
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<tbody>
<tr>
<td>and Coursework Option</td>
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<td></td>
</tr>
<tr>
<td>24 credit points of coursework drawn from</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGMT919*</td>
<td>Human Resource Strategies and TQM</td>
<td>6</td>
</tr>
<tr>
<td>MGMT916</td>
<td>Management and Employment Relations</td>
<td>6</td>
</tr>
<tr>
<td>MGMT920</td>
<td>Organizational Analysis</td>
<td>6</td>
</tr>
<tr>
<td>MGMT918*</td>
<td>Organizational Processes</td>
<td>6</td>
</tr>
<tr>
<td>MGMT915*</td>
<td>Management of Change</td>
<td>6</td>
</tr>
<tr>
<td>MGMT963</td>
<td>Management of Occupational Health and Safety</td>
<td>6</td>
</tr>
<tr>
<td>MGMT948</td>
<td>Project in Regional Administration</td>
<td>6</td>
</tr>
<tr>
<td>ACCY983</td>
<td>Studies in Government Accounting</td>
<td>6</td>
</tr>
<tr>
<td>ECON903</td>
<td>Public Finance</td>
<td>6</td>
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<tr>
<td>or any 6 credit points postgraduate subject approved by Head of Department of Management</td>
<td></td>
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<tr>
<td>or Project Option</td>
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<td></td>
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<tr>
<td>24 credit points of project studies</td>
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<tr>
<td>either</td>
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<td></td>
</tr>
<tr>
<td>MGMT980</td>
<td>Business Research Methods</td>
<td>6</td>
</tr>
<tr>
<td>MGMT982</td>
<td>MBA Project</td>
<td>18</td>
</tr>
<tr>
<td>or MGMT981</td>
<td>MBA Project</td>
<td>24</td>
</tr>
</tbody>
</table>

### SCHEDULE 6: INTERNATIONAL BUSINESS

#### Compulsory Subjects:
- MGMT931• | Strategic Planning and Policy | 6 |
- MGMT957• | International Marketing Strategy | 6 |
- MGMT961 | International Business Management | 6 |
- MGMT998• | Multinational Financial Management | 6 |

#### Coursework Option
- 24 credit points of subjects drawn from
- MGMT976 | Competitive Strategy and Analysis | 6 |
- MGMT978 | Cross Cultural Management | 6 |
- plus 12 credit points drawn from
- ECON924 | International Economic Relations | |
- ACCY905Δ | International Accounting | |
- Any 900-level MGMT subject(s) which are not core subject(s) for the MBA, or previously studied.
- Any 6 credit points postgraduate subject approved by Head of Department of Management

### Project Option
- 24 credit points of project studies
- either
- MGMT980 | Business Research Methods | 6 |
- MGMT982 | Project | 18 |
- or MGMT981 | MBA Project | 24 |

### SCHEDULE 7: OPERATIONS MANAGEMENT

#### Compulsory Subjects:
- MGMT931 | Strategic Planning and Policy | 6 |
- MGMT947* | Quality Management | 6 |
- MGMT952 | Production and Operations Management | 6 |
- MGMT967 | Quantitative Methods | 6 |

* * Δ - refer to key on page 187.
### MASTER OF BUSINESS ADMINISTRATION (Cont’d)

<table>
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<tr>
<th>Number</th>
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<th>Credit Points</th>
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<tr>
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<tr>
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<td>MGMT933 Management of Process Innovation I</td>
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<td>MGMT976 Competitive Strategy and Analysis</td>
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<td>plus one elective postgraduate subject from any of the Commerce Schedules as approved by the Head of Department of Management.</td>
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<tr>
<td></td>
<td>or</td>
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<td><strong>Project Option:</strong></td>
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<td></td>
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<td>or</td>
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#### SCHEDULE 8: STRATEGIC MANAGEMENT

**Compulsory Subjects**

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<tr>
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<td>MGMT915• Management of Change</td>
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<td></td>
<td>MGMT931 Strategic Planning and Policy</td>
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<td>MGMT967 Quantitative Methods</td>
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<tr>
<td></td>
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<tr>
<td></td>
<td>MGMT921• Managerial Finance</td>
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**Coursework Option**

24 credit points of coursework drawn from the 900 level MGMT Schedule except core subjects for the MBA

**Project Option**

24 credit points of project studies

*either*

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<tr>
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#### SCHEDULE 9: TECHNOLOGY AND INNOVATION MANAGEMENT

**Compulsory Subjects**

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<td></td>
<td>MGMT934 Management of Process Innovation 2</td>
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<td>BUSS923 Information Systems Management</td>
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**Coursework Option**

24 credit points of coursework drawn from

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<td></td>
<td><strong>Project Option</strong></td>
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<td>MGMT982 Project</td>
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<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
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</tbody>
</table>

* - refer to key on page 187.
### SCHEDULE 10: MANAGERIAL FINANCE
For details, refer to the Department of Management

### SCHEDULE 11: INDUSTRIAL RELATIONS

**Compulsory Subjects**
- ECON954•: Industrial Relations in Australia
- ECON944: Advanced Topics in Economics D
- MGMT931•: Strategic Planning and Policy

**either**
- MGMT953: Human Resource Management
- or
- MGMT916: Management and Employment Relations

**Coursework Option**
24 credit points of coursework drawn from

**either**
- MGMT916: Management and Employment Relations
- or
- MGMT953: Human Resource Management

**and**
- ECON948: Employers and Industrial Relations
- ECON952~: Workplace and Enterprise Bargaining*
- ECON953~: Political Economy of Australian Wage Determination
- ECON955: Comparative Studies in Industrial Relations
- ECON956: Advanced Industrial Relations Processes
- ECON957~: Productivity and Labour
- ECON958~: Industrial Relations and Management Thought

**or**
- one 6 credit points subject from MBA Specialization Schedule 3.

**or**

**Project Option**
- ECON992: Research Project

### SCHEDULE 12: BUSINESS ECONOMICS

**Compulsory Subjects:**
- ECON907*: Cost-Benefit Analysis
- ECON936#: Graduate Macroeconomics
- ECON937#: Graduate Microeconomics
- MGMT931: Strategic Planning and Policy

**and**

**Coursework Option**
24 credit points of coursework drawn from

**and any 2 of**
- ECON913: Industrial Economics
- ECON916: Microeconomic Analysis
- ECON924: International Economic Relations
- ECON933: Game Theory
- ECON934: Advanced Financial Economics
- ECON935: Advanced Managerial Economics and Operations Research
- ECON938: Environmental Economics
- ECON944: Advanced Topics in Economics D

**or**
- any 6 credit points postgraduate subject approved by Head of Department of Economics.

**or**

**Project Option**
- ECON992: Research Project

* # ~ - refer to key on page 187.
### SCHEDULE 13: MANAGEMENT INFORMATION SYSTEMS

For details, refer to the Department of Management

### SCHEDULE 14: LEGAL STUDIES

**Compulsory Subjects:**
- LAW810* Law in Society 8
- LAW811 Law of Contracts 8
- MGMT931 Strategic Planning and Policy 6

**Coursework Option**
30 credit points of coursework drawn from
- LAW951 Taxation Policy and Practice 6
- LAW953 Studies in Taxation 6
- LAW964 Studies in Business Law 6
- LAW965 Studies in Administrative Law 6
- LAW966 Studies in Industrial Law 6
- LAW967 Studies in Trade Practices and Consumer Law 6
- LAW988 Special Topic in Law 6

or
any 6 credit points postgraduate subject approved by Dean of Faculty of Law

or

**Project Option**
6 credit points selected from one of
- LAW951 Taxation Policy and Practice 6
- LAW953 Studies in Taxation 6
- LAW964 Studies in Business Law 6
- LAW965 Studies in Administrative Law 6
- LAW966 Studies in Industrial Law 6
- LAW967 Studies in Trade Practices and Consumer Law 6
- LAW988 Special Topic in Law 6

and

24 credit points of Project study
- MGMT980 Business Research Methods 6
- MGMT982 Project 18

or
- MGMT981 Project 24

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* Not offered in 1994. Subject descriptions available in 1995 Calendar.
† Core subjects only available to MBA/Graduate Diploma/Graduate Certificate students.
* These subjects require prerequisites - see subject descriptions.
†† These specializations are not yet finalized, and will be specified in the 1995 Calendar
o MGMT931 will normally be taken as the concluding subject in the MBA sequence, except where specifically stated otherwise by a specialization schedule.
Δ subject to approval, Head of Department of Accountancy.
# Students with a sufficient prior background in Economics may be permitted by the Head, Department of Economics to substitute two other subjects listed for these subjects.
- Enrolment only with permission from the Graduate Co-ordinator, Industrial Relations.

Not all specializations will be offered in a given year.
For further details see Course Requirements below.

Program Director: Professor M Hough
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<tr>
<td>BUS903</td>
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<td>LAW961</td>
<td>Selected Legal Topics in Management</td>
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<td>ACCY976</td>
<td>Special Topic in Accounting B</td>
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<td>MGMT914</td>
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<td>MGMT916</td>
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<td>MGMT938x*</td>
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<td>MGMT941</td>
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For further details, see Course Requirements below.

* Not on offer in 1994

x Subjects only available in MCom program

* This subject requires prerequisite - see Subject Descriptions.
POSTGRADUATE PROGRAM IN MANAGEMENT INFORMATION SYSTEMS
leading to the Master of Business Administration
For further information please refer to the Business Systems Section of the Calendar.

MASTER OF COMMERCE PROGRAMS

The MCom is currently under review and students are required to obtain an approved program of study in conjunction with their MCom Specialisation Director.
Subjects in approved programs will be selected from, but not necessary confined to, the specialisation outlines described below.

MASTER OF COMMERCE - HUMAN RESOURCE MANAGEMENT SPECIALISATION

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and an Industrial Relations Subject approved by the Course Director

For further details, see Course Requirements below.

*This subject requires prerequisite - see Subject Descriptions below.

Course Director: Dr T Romm

MASTER OF COMMERCE - MARKETING MANAGEMENT SPECIALISATION

<table>
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<tr>
<td>MGMT938</td>
<td>Managing Services Marketing</td>
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<tr>
<td>MGMT939</td>
<td>Contemporary Issues in International Marketing</td>
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<td>MGMT967</td>
<td>Quantitative Methods</td>
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plus one of

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<td>MGMT956</td>
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<td>MGMT970</td>
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For further details, see Course Requirements below.

*May not be offered in 1994

*This subject requires prerequisite - see Subject Descriptions.

Course Director: Associate Professor P Patterson
### MASTER OF COMMERCE - PUBLIC SECTOR MANAGEMENT SPECIALISATION

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<td>MGMT928</td>
<td>Public Policy and Administration</td>
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<td>MGMT929</td>
<td>Interorganisational Relations</td>
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<tr>
<td>ACCY983</td>
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<td>ECON903</td>
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<td><strong>plus a subject from the General Postgraduate Schedule.</strong></td>
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For further details, see Course Requirements below.

*This subject requires prerequisite - see Subject Descriptions.

Course Director: To be advised

### MASTER OF COMMERCE - OPERATIONS MANAGEMENT SPECIALISATION

<table>
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<th>Subject</th>
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<td>MGMT953</td>
<td>Human Resource Management</td>
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<td>MGMT967</td>
<td>Quantitative Methods</td>
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<td>STS937</td>
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<tr>
<td><strong>plus a subject from the Postgraduate Schedules.</strong></td>
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For further details, see Course Requirements below.

Course Director: Mr N Masters

### MASTER OF COMMERCE - ORGANISATIONAL BEHAVIOUR SPECIALISATION

<table>
<thead>
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<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tr>
<td>MGMT912</td>
<td>Organisation Structure and Control</td>
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</tr>
<tr>
<td>MGMT915+</td>
<td>Management of Change</td>
<td>6</td>
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<tr>
<td>MGMT929</td>
<td>Interorganisational Relations</td>
<td>6</td>
</tr>
<tr>
<td>MGMT953</td>
<td>Human Resource Management</td>
<td>6</td>
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<tr>
<td>MGMT979</td>
<td>Financial Decision Making</td>
<td>6</td>
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<tr>
<td><strong>plus either</strong></td>
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<tr>
<td>MGMT968+</td>
<td>Communication</td>
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<td><strong>or</strong></td>
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<tr>
<td>MGMT961+</td>
<td>International Business Management</td>
<td>6</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.

*This subject requires prerequisite - see Subject Descriptions.

+Subject to the approval of the Program Director.

Course Director: Dr M Jabri
GRADUATE DIPLOMA IN COMMERCE (OCCUPATIONAL HEALTH AND SAFETY)*

*This course will not be offered in 1994

Course Director: Mr M Zanko

HONOURS MASTER OF ARTS, AND HONOURS MASTER OF COMMERCE

Compulsory subjects for students not holding an Honours degree in Management or similar and undertaking a 96 credit point Masters degree.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT986</td>
<td>Special Topic A</td>
<td>12</td>
</tr>
<tr>
<td>MGMT987</td>
<td>Special Topic B</td>
<td>12</td>
</tr>
<tr>
<td>MGMT988</td>
<td>Special Topic C</td>
<td>12</td>
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<tr>
<td>MGMT989</td>
<td>Special Topic D</td>
<td>12</td>
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<tr>
<td>plus</td>
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</tr>
<tr>
<td>MGMT991</td>
<td>Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

For students with an Honours degree, an agreed combination of course work from the list of 900 level subjects offered by Management and one of the following:

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT990</td>
<td>Minor Thesis</td>
<td>24</td>
</tr>
<tr>
<td>MGMT991</td>
<td>Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

Course Director: Dr K Atuahene-Gima

DOCTOR OF PHILOSOPHY

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
</tr>
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<tbody>
<tr>
<td>MGMT991</td>
<td>Major Thesis</td>
</tr>
</tbody>
</table>

Course Director: Dr K Atuahene-Gima

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in MGMT991. Candidates should refer to the University's general PhD Rules.

2. HONOURS MASTER OF COMMERCE

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

(i) Thesis (48 credit points),

(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 from the specialisation Schedule.

3. 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.

(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 from the specialisation Schedule.

4. MASTER OF COMMERCE

The purpose of this pass degree is to provide graduate students, who have completed a BCom, BBus degree or equivalent, from an Australian University or equivalent tertiary institution, 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.
Candidates are required to take one of the following specialisations:
- Human Resource Management
- Public Sector Management
- Marketing Management
- Operations Management
- Organisational Behaviour

Candidates who do not have a BCom or BBus but have successfully completed management/commerce subjects to second year level in their undergraduate degree may be permitted to study for the degree provided they first pass a program of 24 points of 300 level "Management" subjects approved by the MCom Course Director or Head of Department. Thus the total credit points required for these candidates is 72.

A candidate who has not completed a BCom or BBus and not studied any commerce subjects at undergraduate level will be required to take a 96 credit point course, which may include 48 credit points of undergraduate subjects from the Commerce Schedule, as determined by the Program Director. 24 credit points of this undergraduate course work must be taken at the 300 level.

5. MASTER OF BUSINESS ADMINISTRATION

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

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

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

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

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

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

6. GRADUATE DIPLOMA IN COMMERCE (MANAGEMENT)

In accordance with the general Rules for graduate diplomas, candidates for the Graduate Diploma in Commerce must have been admitted to the degree of Bachelor in the University or other approved institution. In special circumstances an applicant holding other academic or professional qualifications and with relevant work experience of not less than five years may be admitted as a candidate.

The objective of the Graduate Diploma is to provide practising managers with insights and understandings of the core issues of management skills and concepts. The core subjects covered in the Graduate Diploma provide postgraduate level education with an applied emphasis in the major functional areas of management and administration.

Selection into the program will be on the basis of a balance between academic qualifications, managerial experience, and career intent. Where an applicant for the MBA is otherwise qualified except for meeting the full work experience requirements for the degree, they may be admitted to the Graduate Diploma as a way of establishing their appropriateness and readiness for full MBA study. The core subjects of the Graduate Diploma constitute the first year of study in the MBA, and students who have achieved an average of a credit grade or higher over all subjects, may be admitted to the full MBA program. They will receive a credit of 48 credit points. On satisfactory completion of the MBA they will not be entitled to receive the Graduate Diploma in Commerce (Management).

The Graduate Diploma is intended to be completed over 2 sessions by full-time study, or in 4 sessions by part-time study.

Applicants may be required to an adequate command of English in a commercial context.

7. GRADUATE CERTIFICATE IN MANAGEMENT

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

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

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

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

SUBJECT DESCRIPTIONS

MGMT901 Capital Investment
6 credit points (2 hrs lectures per wk)
Pre-requisite: ACCY221 or MGMT921
Assessment: seminars, essay(s) and examinations.
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.
Textbook: To be advised.
Co-ordinator: To be advised.

MGMT903 Investment Management
6 credit points (2 hrs lectures per wk)
Pre-requisite: ACCY221 or MGMT921
Assessment: seminars, essay(s) and examinations.

* Not on offer in 1994

Textbook: To be advised.
Co-ordinator: To be advised.

MGMT905 Business Ethics and Law
6 credit points (3 hrs per wk)
Assessment: projects, tutorials and examination.
The legal studies component covers the following: legal basis of business and organizations; the liabilities of managers and company directors in law; legal processes that impinge on the managerial function e.g. EEO, FOI, IR, anti discrimination legislation.
The ethics component will cover both Australian and international business environments to deal with the ethical issues of: codes of conduct and practice; morality and business; controlling and coding ethical practices within organizations; ethical issues in running organizations; environmental and personal factors affecting ethical choices; professional codes of conduct.
Textbook: To be advised.
Co-ordinator: Dr G Graham.

MGMT906 Managing People At Work
6 credit points (3 hrs per week)
Assessment: seminar(s), assignment(s) and examination.
A study of the contemporary environment of human resource management with particular reference to organizational strategy and human resource development, line and staff managerial roles, and the effects of institutional framework and industrial agreements on workplace management. Human behaviour and productive performance including needs and motivation, individual and group behaviour, work organization and management. Managing organizational change in the workplace will be a particular focus of this subject.
Textbook: To be advised.
Co-ordinator: Dr M Jabri.

MGMT907 Managerial Skills Workshop
6 credit points (3 hrs per week)
Assessment: tutorials, workshops, and examination.
This subject focuses on the individual and group skills needed by managers to function in organizational settings. The skill focus will include: communication skills in a managerial environment; time and stress management; conflict and dispute resolution; negotiation skills; staff selection and dismissal/counselling skills; personal effectiveness skills; managing personal and group performance; networking; information gathering, evaluating skills and environmental scanning skills.
Textbook: To be advised.
Co-ordinator: To be advised.
MGMT911 Organisational Behaviour
6 credit points (2 hrs per wk)
Assessment: seminars, case studies, essay(s) and examination(s).
A study of the behaviour of individuals in organisations, groups and group processes, leadership and communication, organisation design and job design, appraisal of performance, processes of organisational change and development.
Textbook: To be advised.
Co-ordinator: Dr M Jabri

MGMT912 Organisation Structure and Control
6 credit points (2 hrs per wk)
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.
Textbook: To be advised.
Co-ordinator: Dr M Jabri.

MGMT914 Human Resource Development
6 credit points (2 hrs lectures/seminars per wk)
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.
Textbook: To be advised.
Co-ordinator: Professor M Hough.

MGMT915 Management of Change
6 credit points (2 hrs lectures/seminars)
Pre-requisite: MGMT911 and MGMT912.
Assessment: seminars, project and examination.
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; intervention strategies; planning and monitoring change; sustaining change.
Textbook: To be advised.
Co-ordinator: Dr M Jabri.

MGMT916 Management and Employment Relations
6 credit points: (3 hrs per wk)
Assessment: assignments, seminars, examination.
The subject explores the use of different social theories of management for the analysis of the managerial policies that cover the employment relationship. The impact of technical, administrative skill, of negotiation and of culture creation in the management of work and employment relationships are assessed. The development of policies on recruitment and selection, training and career development, job design, organisational design, job evaluation, performance appraisal and incentive payment schemes are analysed.
Textbook:
Co-ordinator: Professor G Palmer.

MGMT917 Business Ethics
6 credit points (3 hrs per wk)
Pre-requisite: Not to count with MGMT351
Assessment: essay, case study, examination.
An examination of central issues in business ethics. Topics covered will be ones such as: the concept of social responsibility; individual values and corporate values; competing models for making ethical decisions, i.e. consequentialist and non-consequentialist; ethics for the employee, the customer, the environment, the community, the government and the multinational context. Specialised assignments and tutorials will relate these topics to postgraduate levels of analysis and experience in the business environment.
Textbook:
Co-ordinator: Dr G Graham.

MGMT921 Managerial Finance
6 credit points (3 hrs per wk)
Pre-requisite: ACCY901 or ACCY983
Assessment: seminars, case studies, essays and examinations.
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.
Textbook: To be advised.
Co-ordinator: Mr T Naughton.

MGMT922 Marketing Management
6 credit points (3 hrs per wk)
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.

Textbook: To be advised.
Co-ordinator: Dr M Cicic.

MGMT925 Selected Topic A*
6 credit points
A special topic selected from any area of management. The selection would be made by the Head of the Department, taking into account the expertise of academic staff, including visiting staff, and the interests of students.
Co-ordinator: To be advised.

MGMT926 Selected Topic B*
6 credit points
A special topic selected from any area of management. The selection would be made by the Head of the Department, taking into account the expertise of academic staff, including visiting staff, and the interests of students.
Co-ordinator: To be advised.

MGMT927 Australian Government Administration
6 credit points (2 hrs per wk 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.
Textbook: To be advised.
Co-ordinator: To be advised.

MGMT928 Public Policy and Administration
6 credit points (2 hrs per wk lectures/seminars)
Assessment: assignments, tutorials, examinations.
The process of formulating public policy through existing governmental machinery, the pressures created by present and emerging public policy issues, problems and issues in regional public policy formulation, and the role and problems of regional administration.
Textbook: To be advised.
Co-ordinator: To be advised.

MGMT929 Interorganisational Relations
6 credit points (2 hrs per wk 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.
Textbook: To be advised.
Co-ordinator: To be advised.

MGMT931 Strategic Planning and Policy
6 credit points (3 hrs per wk)
Pre-requisite: MGMT976.
Assessment: examination and essays.
The subject will use case studies as a key teaching vehicle and will examine strategy in the context of organisations. Key topic areas may include: strategy formulation, choice and implementation; strategy and structure and the organisational context; strategy and competitive advantage; interrelationships, diversification, integration, acquisition and internal development; global strategies.
Textbook: To be advised.
Co-ordinator: Dr A B Sim.

MGMT933 Management of Process Innovation 1
6 credit points (4 hrs per week)
Assessment: group project, essays, and examination.
A key concern of contemporary technology management is improving the rate and quality of process innovation by adopting new methods to successfully integrate the human, organizational and technological factors. This subject introduces the student to the interdependent human and technological character of production systems and methods for integrating technical and organizational expertise in new production system designs. The nature of production systems and process innovation is introduced through a critique of traditional technological determinist and contingency models, and the use of contemporary configurational theory. The different approaches to production system design are introduced through a critical examination of the changing perspectives within organisations of process engineering, employee management, information systems management, and workers representatives.
Co-ordinator: Associate Professor Richard J Badham.

* Not on offer in 1994
MGMT934 Management of Process
Innovation 2
6 credit points (4 hrs per wk)
Assessment: group presentation, essays, and examination.

Contemporary management literature on process innovation is dominated by universalistic contingency models of 'best practice'. In contrast, this subject develops a more 'contextual' model of innovation, critically reviews alternative explanations of the nature and direction of process innovation, and examines a range of implementation strategies and methods for integrating technical and organisational innovation in the effective realisation of new production systems. This subject introduces students to the following models of process innovation: sequential-engineering model; labour process and socio-technical models; strategic choice and processual models; paradigm, trajectory and configurational models; and inter-organisational and network models of incremental learning and innovation. Implementation strategies and methods are investigated through a discussion of the implied strategies in different models of innovation, strategic choices in implementation strategies, and contemporary strategic planning, cross functional team formation, participation, and problem solving methods.

Textbook:
Co-ordinator: Associate Professor R J Badham.

MGMT935 Marketing Planning and Strategy
6 credit points (3 hrs per wk)
Prerequisite: MGMT922
Assessment: case studies, presentations and examination.

With the use of case studies, this subject will examine the development and implementation of marketing strategies at the organizational level. Key issues may include: marketing's strategic role in the organization, marketing strategy and competitive advantage, including marketing mix strategies, marketing strategy formulation, implementation and control.

Textbook: To be advised.
Co-ordinator: Associate Professor P Patterson.

MGMT936 Consumer Behaviour
6 credit points (3 hrs per wk)
Pre-requisite: MGMT922
Assessment: group project, assignment, final examination.

The subject will explore the motives of consumers during the purchase of products and services. It will investigate sociological and psychological concepts as they specifically apply to the behaviour of consumers in order to learn how to make more effective marketing decisions. In addition to a required text that will be used to understand the theory, readings and case studies will be assigned for practical application of the concepts. This subject is only available to MCom students.

Textbook: To be advised.
Co-ordinator: Ms C Hill.

MGMT937 Management of Marketing Communications
6 credit points (2 hrs lectures/seminars per wk)
Pre-requisite: MGMT922
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. This subject only available to MCom students.

Textbook: To be advised.
Co-ordinator: Ms C Hill.

MGMT938 Managing Services Marketing
6 credit points (3 hrs lectures per wk)
Pre-requisite: MGMT922
Assessment: assignment, class presentation, examination.

This advanced course is designed to provide an in-depth analysis of the problems facing services marketing managers in both consumer and business-to-business service firms. Through lectures, class discussions, readings and case analysis, plus observation of firms in actual service situations, students will develop insights concerning the unique characteristics of marketing in the services sector. Major topics include: Problems and Strategies in Services Marketing; Understanding the Service Experience; Application of Consumer Decision Models to Service Marketing; Role Theory Perspectives on Dyadic Interactions; Dimensions of Service Quality; Services Marketing Mix; Growth Strategies for Service Firms; Marketing Implementation Issues. This subject only available to MCom students.

Co-ordinator: Associate Professor P Patterson.

MGMT939 Contemporary Issues in International Marketing
6 credit points (3 hrs per wk lectures/seminars)
Pre-requisite: MGMT922

This subject examines the role of marketing in National Economic development. The major focus will be Developing countries as a market segment. Topics will include: marketing to developing countries the applicability of marketing concepts, marketing channels, the formal and informal marketing sectors,
technology licensing and marketing, consumer issues in developing countries and the role of government in marketing.

Textbook: To be advised.
Co-ordinator: Dr K Atuahene-Gima.

MGMT940 Innovation and Entrepreneurship
6 credit points (2 hrs lectures per wk)
Assessment: essay(s) and examinations.
The nature and role of entrepreneurs and entrepreneurship. The economic, behavioural and institutional conditions associated with entrepreneurship. Entrepreneurship and new high technology enterprises: empirical analysis at a firm and industry level, spin-off enterprises. Entrepreneurship and managing the corporate venturing process.

Textbook: To be advised.
Co-ordinator: Mr L Kirchmajer.

MGMT941 Small Business Management I
6 credit points (2 hrs lectures per wk)
Assessment: essay(s) and examinations.
This subject develops financial, marketing, organisational and production strategies for established and growing small businesses. It integrates functional knowledge developed in earlier subjects and examines this in a small business context through the development of business planning procedures.

Textbook: To be advised.
Co-ordinator: Mr L Kirchmajer.

MGMT942 Small Business Finance*
6 credit points (2 hrs lectures per wk)
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.

MGMT943 Small Business Management II*
6 credit points (2 hrs lectures per wk)
Assessment: essay(s) and examinations.
Selected issues in small business management. These may draw from a wide field depending on student interest. Topics may include licensing, franchising, use of advisory services, negotiating skills, stress management, service sector management and marketing, co-operatives, family business and management succession.

MGMT944 Enterprise Project*
12 credit points (2 hrs lectures per wk)
Assessment: project work.
Students will develop their own small business project. This would normally involve them in developing new product/service proposals and planning the establishment of a new enterprise. The completion of a business plan in a form that could be assessed by potential investors and/or financiers would be a major goal of this project.

MGMT945 Technology Enterprise Project
6 credit points (2 hrs lectures per wk)
Assessment: assignment, examination, seminar.
This subject will cover the preparation of feasibility studies, sources of business opportunities, key elements of business plans and development of a business plan. Not to be taken with MGMT944.

Textbook: To be advised.
Co-ordinator: Mr L Kirchmajer.

MGMT947 Quality Management
6 credit points (2 hrs lectures per wk)
Assessment: assignments and examination.
This subject provides the student with an undertaking of how an organization can successfully make the transition to Total Quality Management (TQM). Specific topics will include: Japanese management practices and the impact on competitive advantage; TQM as part of corporate strategy; Kanban and JIT production management; quality circles; statistical tools and controls; Kaizen management; applications, implementation and auditing of TQM. Special emphasis is placed on the necessary changes in organisational structure and culture.

Textbook: To be advised.
Co-ordinator: Mr J Flanagan.

MGMT948 Project in Regional Administration*
6 credit points (3 hrs per wk lectures/seminars)
Assessment: major project.
Participants will be challenged to investigate a regional issue or the application of a wider public policy to a region and develop proposals for effective strategies, working in the mode of a governmental task force.

Co-ordinator: To be advised

MGMT952 Production and Operations Management
6 credit points (3 hrs per wk)
Assessment: case studies, essay(s) and examination.
A study of the design and operation of activities for the production of goods and services. Topics include: qualitative and quantitative forecasting, production planning and scheduling, management of quality and productivity, project management, and flexible manufacturing systems (FMS). Particular emphasis will be placed on a comparison of Japanese production and quality management methods with the traditional Western methods, total quality management (TQM), computer aided manufacturing (CAM), and implications for human resource management.

Textbook: To be advised.
Co-ordinator: To be advised.

* Not on offer in 1994
MGMT953 Human Resource Management
6 credit points (3 hrs per wk)
Assessment: seminars, case studies, essay(s) and examination(s).
Managing people at work, including recruitment, selection, human resources planning, performance appraisal, training and development, compensation, health and safety, and ergonomics.
Textbook: To be advised.
Co-ordinator: Mr M Zanko.

MGMT954 Special Topic in Management A*
6 credit points
Assessment: seminars, case studies, essay(s) and examination(s).
A special topic selected from any area of management. The selection would be made by the Head of the Department, taking into account the expertise of academic staff, including visiting staff, and the interest of students.
Co-ordinator: To be advised.

MGMT955 Special Topic in Management B*
6 credit points
Assessment: seminars, case studies, essay(s) and examination(s).
A special topic selected from any area of management. The selection would be made by the Head of the Department, taking into account the expertise of academic staff, including visiting staff, and the interest of students.
Co-ordinator: To be advised.

MGMT956 New Product Marketing
6 credit points (2 hrs lectures per wk)
Assessment: seminars, case studies and examination(s).
The subject will be taught in two parts. The first part will involve critical analysis of certain concepts that can be used to obtain a deeper understanding about the nature of products. This includes product life cycle, segmentation, product positioning and the product portfolio concepts. The major emphasis of the subject will be placed on the second part which will be concerned with the new product development process. This process will be examined in detail and special consideration will be given to new industrial products. In essence, the subject will be concerned with the question of how to reduce the risk of new product failure.
Textbook: To be advised.
Co-ordinator: Dr K Atuahene-Gima.

MGMT957 International Marketing Strategy*
6 credit points (3 hrs lecture/seminar)
Pre-requisite: MGMT922
Assessment: class participation, two essays and final examination.

The course will encompass the issues involved in International Marketing. Primary focus will be on the strategic aspects with particular emphasis on environmental consideration and international marketing decisions in the global context. A managerial perspective will be adopted and decision-making skills will be imparted through the case method of instruction.
Textbook: To be advised.
Co-ordinator: Dr M Cicic.

MGMT960 Case Study
6 credit points
An in depth analysis of a particular managerial problem encountered in a specific company or industry situation.
Textbook: To be advised.
Co-ordinator: Mr M Zanko.

MGMT961 International Business Management
6 credit points (2 hrs lectures/tutorials/seminars)
Assessment: examination and/or coursework.
This course will deal with the identification, analysis and resolution of 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.
Textbook: To be advised.
Co-ordinator: Dr A B Sim.

MGMT963 Management of Occupational Health and Safety*
6 credit points (3 hrs per wk)
Assessment: assignments, seminars, examination.
This subject examines issues associated with the establishment of programs for the effective management of Occupational Health, Safety and Rehabilitation. Topics include: Technical and motivational programs, the role of the specialist, benefit-cost analysis, emergency and disaster management, networking within and between organisations, design of accident investigation and hazard assessment reporting systems, and the impact of work organisation on occupational health and safety.

MGMT965 Occupational Hazards I*
6 credit points (3 hrs per wk 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 hrs per wk lecture/seminar)  
Assessment: research report.  
This subject extends the study initiated in Occupational Hazards I, and affords the opportunity for students to make an intensive study of a hazard or group of hazards of particular interest to them.

MGMT967 Quantitative Methods  
6 credit points (3 hrs per wk lecture/seminar)  
Assessment: assignments, tutorials, examinations.  
This subject introduces the quantitative techniques used to compile, interpret and analyze data. A particular emphasis will be given on the role of the computer, and the subject will provide a coverage of the main quantitative techniques used in business as an aid to decision-making.  
Textbook: To be advised.  
Co-ordinator: Mr N Masters.

MGMT968 Communication  
6 credit points (3 hrs per wk lecture/seminar)  
Assessment: assignments, tutorials, examinations.  
This subject enables a study of effective communication techniques, with a view to optimising students' intervention on organisational issues. This subject requires a high standard of English. Students with limited fluency will be encouraged to take MGMT961 as an alternative.  
Textbook: To be advised.  
Co-ordinator: Dr G Graham.

MGMT970 Contemporary Issues in Services Quality  
6 credit points (2 hrs per wk)  
Pre-requisite: MGMT922 and MGMT938 - not applicable to TQM students.  
Assessment: critique of academic literature, case presentations, assignments.  
This advanced course is designed to follow on from MGMT938 (Managing Services Marketing). It will focus on advance topics in service quality, customer satisfaction with services, and strategic issues relating to the marketing of service firms. Emphasis will be placed on reviewing contemporary readings in the academic and professional literature. Available only to MCom students.  
Co-ordinator: Associate Professor P Patterson.

MGMT976 Competitive Strategy and Analysis  
6 credit points (3 hrs per wk)  
Assessment: seminars, essays and examination.  
This subject introduces a conceptual framework for analysing competitors and competition in industry. Topics include: structural frameworks for analysis; generic strategies; strategies in fragmented, emerging, declining, transitional and mature industries; global strategies, vertical integration, new entry and diversification.
characteristics; Sample size and response rates; Analysis of data.

Textbook: To be advised.

Co-ordinator: Dr T Romm.

MGMT981 MBA Research Project
24 credit points
Assessment: project report.
Pre-requisite: MGMT980 and completion of at least 42 credit points of MBA subjects at an average grade of credit or higher or by permission of the Head of Department.
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.
Co-ordinator: Professor M Hough.

MGMT982 Project
18 credit points (Individual contact with supervisor)
Prerequisite: MGMT980
This subject constitutes the second component of the project study option within the MBA. This subject enables the research proposal developed in MGMT980 to be implemented, under the guidance of a nominated supervisor. A substantive project report to an approved format will be the output from this subject.
Textbook: To be advised.
Co-ordinator: Professor M Hough.

MGMT986 Special Topic A
12 credit points

MGMT987 Special Topic B
12 credit points

MGMT988 Special Topic C
12 credit points

MGMT989 Special Topic D
12 credit points
Master of Commerce Honours qualifying subjects consisting of a program of course work and reading as prescribed by the Head of the Department of Management.
Co-ordinator: To be advised.

MGMT990 Minor Thesis
24 credit points

MGMT991 Major Thesis
48 credit points
Approved program of study agreed with the Head of the Department of Management or Course Director.

MGMT996 Managing for Innovation
6 credit points (2 hrs per wk)
Assessment: assignments, examinations.
This subject will deal with the development and creation of innovative business opportunities for both the start-up entrepreneurial team and the existing organisation. The material to be covered shall include: Developing an innovative culture in organisations; Sourcing innovative opportunities for the organisation both internally and externally; Overcoming barriers to innovation; Changing bias toward creativity in employees and management; Initial screening and evaluation of innovative opportunities; Critique of contemporary innovation literature.
Textbook: To be advised.
Co-ordinator: To be advised.

MGMT998 Multinational Financial Management
6 credit points (2 hrs lectures/tutorials/seminars)
Pre-requisite: MGMT921
Assessment: 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.
Textbook: To be advised.
Co-ordinator: Mr T Naughton.
FACULTY OF
CREATIVE ARTS
FACULTY OF CREATIVE ARTS

PRINCIPAL OFFICERS

Dean: Professor Barry Conyngham
Sub Dean: To be appointed
Faculty Officer: To be appointed

RESEARCH COURSES AVAILABLE

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

POSTGRADUATE PROGRAMS

Programs are available in the Faculty in the following disciplines and their related interdisciplinary areas:

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FULL TIME STAFF

Dean and Professor of Creative Arts
Barry Conyngham, MA Syd, DMus Melb

Sub-Dean
To be appointed

Faculty Officer
To be appointed

Associate Professor
Peter L Shepherd, TC Balmain, DipArt(Ed) Nat Art Sch, BEd(Art) UNSW, GradDipEdStud
Syd, DCA

Senior Lecturers
Ronald K Pretty, BA MA Syd, AIE Lond
Andrew N Schultz, BMus PhD Q'ld, MMus
Lond

Lecturers
Joan Chapple, DipTeach STC, DipTextArt
Lond, MCA
Diana Wood Conroy, BA Syd
Gregor Cullen, DipArt Alex Mackie
Wayne Dixon, AMusA NSW Con, LTCL, MA
Lindsay J Duncan, BA MCA
Andrew Ford, BA Lanc
Ian Gentle, DipArt UNSW
Clem Gorman, DipArts Lond Cent, BA Syd
Janys Hayes, BSc Melb, DipAct Drama Centre
Lond
Christian Heim, BMus DipMusComp Syd,
MMus Manhattan S of M, AMusA NSW
Con
Keith Hempton, BA Syd
Richard Hook, BA AITWA, PostGradCertEd
Lond, MFA Tas
Liz Jeneid, DipTeach SKTC, MCA
Jeff Kevin, Dip Act PG Act NIDA, MCA
Ian F McGrath, MCA
Leonie Molloy, BFA Syd Coll Arts
Ken Orchard, BAFA South Aust Coll, MAFA Syd
Coll of Arts
Susan E Rowley, BA DipEd Monash, BCA PhD
John Scott, BA DipEd Monash
John Senczuk, DipDesign NIDA
Tsou Nan-Chien, MMus Melb
Jelle van den Berg, Dip Ed HeerenveenAcP, Art
Cert GroningenAcP, Grad Dip Art
GroningenAcVisArts

Music Development Officer
David C Vance, BA UNSW, BMus Syd, LMusA

Professorial Fellow
Herbert Flugelman

Director Permanent Collection
Guy Warren
CREATIVE ARTS

COURSES OFFERED

The following postgraduate courses are available:

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

POSTGRADUATE PROGRAMS

Music
Visual Arts
Theatre
Creative Writing

CURRENT RESEARCH AREAS

The following areas are available to students undertaking research degrees:

Creative writing (poetry; prose; screen writing)
Music composition
Analysis of music/musicology
Music performance
Design for theatre
Directing
Acting and movement
Lighting design
Theories of theatre
Painting
Ceramics
Sculpture
Screen printing
Textiles
Visual arts theory

The School also conducts inter-disciplinary research relating to the above areas.

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN MUSIC
leading to the Master of Creative Arts

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For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN THEATRE
leading to the Master of Creative Arts

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For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN VISUAL ARTS
leading to the Master of Creative Arts

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For further details, see Course Requirements below.
POSTGRADUATE PROGRAM IN CREATIVE WRITING
leading to the Master of Creative Arts

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<td>WRIT911</td>
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For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

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<td>CREA905</td>
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COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

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

- **Music:**
  - Music Composition
  - Music Performance
  - Musicology and Analysis

- **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.

Candidates for this degree enrol in CREA901.

2. DOCTOR OF CREATIVE ARTS

The Doctor of Creative Arts is a doctoral degree based on presentation of creative work and supported by written documentation of the work.

*Requirements for admission:*

An applicant for registration as a candidate for the Doctor of Creative Arts shall have qualified for a Bachelor degree 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.

An applicant who does not hold an Honours Class II, Division 2 degree or higher 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.

Candidates for this degree enrol in CREA901.

3. 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 a Honours Class II, Division 2 degree or higher, or its equivalent in an appropriate discipline, enrol in CREA901, Thesis Creative Arts. Other candidates will be required to also enrol in CREA905 Advanced Topics in Creative Arts.

4. MASTER OF CREATIVE ARTS

The Master of Creative Arts is a pass masters degree which consists of a major presentation of creative work and two 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.

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.

SUBJECT DESCRIPTIONS

CREA901 Thesis Creative Arts
Double Session (A); 48 credit points
Pre-requisite: Nil
Assessment: 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 and Analysis

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.
Co-ordinator: Dr A Schultz.

CREA905 Advanced Topics in Creative Arts
Double session (A); 48 credit points
Pre-requisite: Nil
Assessment: 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. 

Textbooks:
Reference list supplied by School. 
Co-ordinator: Dr A Schultz.

CREA913 Major Presentation
Double session (A); 24 credit points
Pre-requisite: Any two of MUS910, MUS911, THEA910, THEA911, VIS910, VIS911, WRIT910, WRIT911 as approved by the School of Creative Arts.
Assessment: based on report of External and Internal Examiners on candidate's Major Presentation and accompanying documentation.
Candidates will be required to undertake a major project on a topic decided upon after consultation with their supervisor. This project may be either research based or performance based. That is, presentation may be by thesis, or it may be by exhibition, performance, presentation of a fictional text etc. Some theoretical explication of the work, however, will normally be required in the case of performance-based presentations. 

Textbooks:
Reference list supplied by School. 
Co-ordinator: Dr A Schultz.

MUS910 Musical Analysis
Autumn and/or Spring session; 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. 
Co-ordinator: Dr A Schultz.

MUS911 Studies in Technique
Autumn and/or Spring session; 12 credit points
Pre-requisite: Nil
Assessment: completion of a project in one of the following areas, following consultation with the supervisor: orchestration; studies in counterpoint or imitative compositional style; preparation of a new performance edition; studies in computer music; multi-media collaborative project. 

Students may study in any practical musical area (composition, conducting, instrumental playing or singing). Students will be required to develop and refine their techniques until they have achieved a high professional standard. The course will include working with University Ensembles and will culminate in a recital, concert or public performance.

Textbooks:
Reference list supplied by School. 
Co-ordinator: Dr A Schultz.

THEA910 Theatre Analysis
Autumn and/or Spring session; 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. 
Co-ordinator: Mr J Kevin.

THEA911 Advanced Techniques in Theatre
Autumn and/or Spring session; 12 credit points
Pre-requisite: Nil
Assessment: written evaluations of the techniques explored. 2 x 5,000 word papers.
In weekly tutorials, students will examine the latest techniques in their chosen field in Theatre. This will be a practical course, with the emphasis upon developing and refining techniques, some of which may be unfamiliar to students.

Textbooks:
Reference list supplied by School. 
Co-ordinator: Mr J Kevin.

VIS910 Visual Arts Theory
Autumn and/or Spring session; 12 credit points
Pre-requisite: Nil
Assessment: two seminar papers of 5,000 words on topics approved by the subject co-ordinator.
Candidates will be required to attend and participate fully in a series of lectures and tutorials dealing with visual arts theory and the history of art.

Textbooks:
Reference list supplied by School. 
Co-ordinator: Ms S Rowley.

VIS911 Studio Analysis
Autumn and/or Spring session; 12 credit points
Pre-requisite: Nil
Assessment: documentation of studio work, approximately 5,000 words and appropriate visual material 50%; review of studio work 50%.
Candidates will be expected to work at an advanced level and with a high degree of independence in their chosen studio discipline. Work presented at the Review must demonstrate a questioning and exploratory
attitude to form and content. The work must be imaginative, original and considered, with a high level of technical proficiency. Students will be expected to discuss their ongoing studio projects, ideas and preparatory work with their supervisors each week. Informal reviews of work will take place. Students may be required to give a seminar presentation of their work to other students. Students will prepare a documentation of their work, which may be presented as the documentation of the Major Presentation. The Documentation should include a record of the work by the student in an appropriate visual form, such as photographs, slides, videos, etc. A suitably presented copy of the Documentation will be retained by the School of Creative Arts.

Textbooks:
Reference list supplied by School.
Co-ordinator: To be advised.

WRIT910 Analysis of Text
Autumn and/or Spring session; 12 credit points
Pre-requisite: Nil
Assessment: three seminar papers of 3,000 words each based on close analysis of texts chosen for study.
This course will be concerned with a detailed study of relevant texts in the candidate's specialisation, which may be in poetry, prose fiction or scriptwriting. The course aims to develop and refine the ability to trace in detail the relationship between the effects gained by a text and the techniques of writing used to achieve them. To some extent the course will resemble advanced literary criticism, except that the emphasis will be on the techniques used by the writer rather than the reader's response.
Textbooks:
Reference list supplied by School.
Co-ordinator: Mr R Pretty.

WRIT911 Literary Composition
Autumn and/or Spring session; 12 credit points
Pre-requisite: Nil
Assessment: based on 10,000 words of experimental writing, including written self-evaluation of the effectiveness of the techniques used.
In this course, candidates will be required to develop and refine their awareness of the techniques and processes of literary composition, and to demonstrate their control of these techniques and processes in their own writing. Candidates will be required to outline the effects they are seeking in their writing, and to describe and evaluate the techniques they are using to achieve those effects.
Textbooks:
Reference list supplied by School.
Co-ordinator: Mr R Pretty.
FACULTY OF EDUCATION

PRINCIPAL OFFICERS

Dean: Vacant*
Acting Dean: Associate Professor John Patterson
Sub Dean: Mr Peter Keeble
Faculty Officer: Ms Rosemary Cullen

Graduate School
Head: Professor Ken Gannicott
Professional Officer: Ms Debbie McGavin

RESEARCH COURSES AVAILABLE

The Faculty offers the Honours Master of Arts, the Honours Master of Education and the Doctor of Philosophy degrees by research. The Doctor of Education is available by coursework and thesis.

POSTGRADUATE PROGRAMS

Coursework Masters Programs are available in the Faculty in the following areas:

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* Selection process underway at time of printing.
### FULL TIME STAFF

**Dean**

Vacant

**Associate Dean**

Associate Professor John Patterson, DipPhysEd, STC, MSc, Oregon, MED, Syd, EdD, N Colorado

**Head, Graduate School of Education**

Professor Ken G Gannicott, MA, Sus, PhD, UNSW

**Director, Teacher Education**

Malcolm Harris, TC, Armidale, BA, UNE, MSc, UNSW

**Sub-Dean**

Peter J Keeble, TC, Bal, TC, BA, UNE, MED, UNSW

**Faculty Officer**

Rosemary Cullen, BA, ALAA

**Professors**

Carla Fasano, MSc, Bari, MSc, Geneva, MSc, Lond, SchEcon, PhD, Geneva

Ken G Gannicott, MA, Sus, PhD, UNSW

Ronald C King, BSc, DipEd, BA, MSc, UNSW

Jennifer M Jones, BEd, Qld, MA, Vic, BC, PhD, Lond, SchEcon

Peter J Keeble, TC, Bal, TC, BA, UNE, MED, UNSW

Yvonne Kerr, DipPhysEd, CertHealthEd, MSc, Oregon, MED, Syd

Arthur Smith, TC, Armidale, DipArt(Ed), Syd, MA, Stan, PhD, Ohio State

Jan Turbill, BA, Macq, MED, Syd, FACE

Paul Webb, DipPhysEd, GradDipSpEd, Tas, CAE, MH, Kinetics, Windsor, MSc, PhD, Oregon

Richard G Wilsmore, DipPhysEd, STC, BA, PhysEd, Alberta, MED, Syd

Michael Wilson, BSc, St And, PGCE, Hull, DipEd, MA, PhD, Lond

William N Winser, BA, DipEd, MED, Syd, MA, Ox, PhD, MACE

Janice E Wright, MED, Syd, PhD

**Lecturers**

Ian Brown, DipTeach, BEd, MED, Cand, Wing Cheung, BSc, MSc, EdD, North Illinois

Janet Davy, BEd, MED, Syd

Patrick F Farrar, DipTeach, Armidale CAE, BA, UNE

Brian Ferry, BA, Macq, MStudEd, MED, MACE

Christine Fox, BA, PhD, Syd, DipEd, MA, Lond

Max Gillett, BA, NE, BEd, Qld, MA, Syd, PhD, Oregon

Tonya L Gray, BEd, MA, Colorado

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Deslea Konza, BA, DipEd, Macq, DipSpecEd, Nepean, MED

Grace Masselos, DipKTC, Syd, DipAdEd, Std, MKTC, Melb, GradDipMultiStd, Armidale, BA, Macq, MA, PhD, Ohio State

John F Paterson, BA, DipEd, Macq, GradDipEdStd, (Hearing Impaired), Syd, TC, MED, WSyd

Sylvia Rice, BA, UNSW, BEd, DipEd, Syd

Brian Rogers, BA, UNE, BEd, DipEd, Syd

Gregg S Rowland, DipPhys, HlthEd, BEd, MED

Robert Smith, BMusEd, N'cle, CAE, MA

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Jillian Trezise, BEd, Inst Early Child Stud, MA, UNSW

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Margaret Cameron, BA

Jan James, BA, DipEd, GDipEuroStud, MStudEd, MBA

Deborah McGavin, BSc, DipLib, UNSW

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* Selection process underway at time of printing.
VISITING COMMITTEE

Chair of the Committee - Dr Greg Ramsey, Managing Director, NSW TAFE Commission

Mr Greg Best, Acting Deputy Director, NSW Department of Sport, Recreation & Racing

Mr John Bladen, Wollongong Cluster Director, South Coast Region, NSW Department of School Education

Dr Terry Burke, Assistant Director-General, South Coast Region, NSW Department of School Education

Mr Ray Cavenagh, Deputy President, NSW Teachers’ Federation

Alderman Kerrie Christian, Wollongong City Council

Mrs Jo Flynn, Head, Labour Market Programmes, Wollongong TAFE

Mr Les Gregory, Superintendent, Training and Development, BHP Slab and Plate Products Division

Mrs Alison Jones, Lecturer in Child Care Studies, Wollongong TAFE

Mr Kevin Locke, Training Manager, BHP Slab & Plate Products Division, Port Kembla

Ms Jan McClelland, Deputy Director-General (Resources), NSW Department of School Education

Mrs Rae Mitchell, Principal, Smiths Hill High School

Professor Ingrid Moses, Pro Vice-Chancellor, University of Canberra

Mr Brendan O'Reilly, Director, Illawarra Institute of Technology

Mr Barry Russell, Director, Australian College for Seniors

Mr Gerry Sullivan, State Member for Wollongong

Mr Terry White, Director of Education, Catholic Education Office
EDUCATION

COURSES OFFERED

The following postgraduate degrees and diplomas are available:

1. Doctor of Philosophy
2. Doctor of Education
3. Honours Master of Education
4. Honours Master of Arts
5. Master of Education
6. Graduate Diploma in Education
7. Graduate Diploma in Computer-Based Learning
8. Graduate Diploma in Adult Education and Training
9. Graduate Certificate in Higher Education
10. Graduate Certificate in History Education
11. Graduate Certificate in Adult Career Development

The Faculty of Education offers a range of graduate courses in education. The Graduate Diploma in Education is a professional pre-service course in education for graduates of this or another university who seek teacher qualifications. The main aim of the course is to provide a professional certification course of pre-service education for intending primary and secondary school teachers.

Other graduate diplomas and degrees, such as the Graduate Diploma in Adult Education and Training, the Graduate Diploma in Computer-Based Learning, the Masters degrees and the Doctoral programs are instead designed for those already working in the area of education and training who wish to undertake further study and/or research.

A range of Graduate Certificates, such as the Graduate Certificate in History Education, Graduate Certificate in Adult Career Development, and Graduate Certificate in Higher Education have been introduced to provide access to graduate study in educational settings to holders of degrees in other disciplines and working in non-school areas.

Study in all these areas takes place in a framework provided by the Graduate School of Education, part of the Graduate Faculty of the University. The aim of the Graduate School of Education is to co-ordinate research and study in a way which provides an orderly and coherent exposure to critical issues in contemporary educational theory and practice, and also provides an avenue for professional development for committed teachers. Postgraduate work is grouped into Program Areas, with each Area made up of a number of more specialised programs in which staff have particular expertise. In 1994 it is expected that the major Program Areas and Programs will be as follows:

Program Areas and Programs

Program Area 1: Curriculum.
Programs:
- Curriculum Development and Evaluation
- Physical and Health Education

Program Area 2: Language and Learning.
Programs:
- Language and Literacy
- Teaching English to Speakers of Other Languages (TESOL)
- Special Education

Program Area 3: Policy, Planning and Technology.
Programs:
- Education Policy and Planning
- Information Technology in Education and Training

In subsequent years there will be further changes to the Programs so as to reflect changes in both staffing resources and student interests. Students who were enrolled prior to 1992 should consult an academic adviser regarding their enrolment in 1994. Those who maintain the University's normal progression patterns (for details see below) can be assured of completing their degree on terms no less favourable than at the time of their enrolment.

CURRENT RESEARCH AREAS

Curriculum change and professional development in the Pacific
Curriculum development and evaluation
Educational policy and planning in Australia, the Asia-Pacific region and the OECD countries
Equity in education
Information technology in education and training
Language and education
Learning
Literacy education and teacher development
Policies for health and physical education
Professional development of teachers
Social and cultural context of education
Special education
Women and girls' education

Research Programs and Groups are the University's major mechanism for fostering research and the Graduate School of Education contains

- the Research Program Educational Policy and Planning, Program (co-ordinator Professor Carla Fasano): This Program pursues a wide range of research activities into educational policy and planning issues in Australia, the Pacific region, and the OECD countries, in
addition to policies and strategies related to information technology in education and training.

- the Research Group, Social Literacy (co-ordinator Dr Bill Winser) researches all areas concerned with language and learning, including literacy and language education in school and other learning environments, and examines the variables involved in access to educational and social opportunities for disadvantaged groups.
- the Research Development Group, Curriculum Research, (co-ordinator Dr Christine Fox), which carries out research in areas related to the theories and processes of curriculum development, implementation and evaluation.

COURSE REQUIREMENTS

A. HIGHER DEGREES

The Master of Education, Master of Education (Honours), Master of Arts(Honours), PhD and Doctor of Education do not lead to teaching qualifications, but are instead designed for those students already qualified in Education and working in the area who wish to undertake advanced study and/or research in education.

1. DOCTOR OF PHILOSOPHY

Entry to this degree is available to candidates who meet the University entry requirements for PhD candidature. In the first instance this requires the completion of a Bachelors degree with Honours Class II or higher in an appropriate area, or an equivalent qualification.

Candidates for this degree enrol in a major thesis, subject number EDGA905. Interested candidates should contact the Head of the Graduate School of Education.

2. DOCTOR OF EDUCATION

In 1993 the Graduate School introduced the Doctorate of Education, as a program to prepare professional leaders in Education. The Doctorate of Education is a doctoral level program completed by a combination of coursework and thesis, offered in 1994 in the areas of

- Curriculum
- Language and Learning
- Policy, Planning and Technology

Entry Requirements for the EdD Program

Entry to this degree is available to candidates who:

1. Meet the University entry requirements for Doctoral candidature. In the first instance this requires the completion of a Bachelors degree with Honours Class II or higher in an appropriate area, or an equivalent qualification. Normally this would be an appropriate Masters degree, completed at credit (65%) level or better. Limited Advanced Standing may be available for candidates who have completed Masters level coursework at a credit level or better; and
2. Candidates must have completed a minimum of three years relevant professional experience.

Time Limits

Normally, the degree will be completed in not less than six, and not more than eight, academic sessions of full-time study. Completion of the degree in a minimum of five sessions will be permitted to those candidates granted Advanced Standing for previous graduate study.

Patterns of Study

1. The program for the degree will require successful completion of:

   (1) at least 72 credit points (9 subjects) chosen from the Graduate Schedule of Subjects in the Graduate School of Education in line with the requirements for each Program Area (see 4 below).

   (2) a supervised thesis (EDGA909) on a topic in the Program Area chosen for specialisation, to be examined externally. This thesis will contribute fifty percent towards the final assessment.

2. Each candidate will be required to select a program of study in consultation with the Program Co-ordinator and the Head of the Graduate School to ensure that subjects chosen do not duplicate previous graduate work.

3. Candidates will be required to pass all coursework subjects at the first attempt, at not less than Credit (65%) level. Students who do not meet this requirement will have their doctoral candidature terminated, and may enrol in an appropriate Masters program.

4. The coursework requirements for each Program Area are as follows:

   (1) Curriculum

   The coursework component of a Doctorate of Education in the Program Area of Curriculum consists of:
Either EDGA 901 Advanced Qualitative Research Methods or EDGA 902 Advanced Quantitative Research Methods is compulsory. It is recommended that both of these subjects, or their equivalent, be completed. If there is satisfactory evidence that one of these subjects or their equivalents has already been completed the student will undertake another subject of his/her choice from the Graduate School of Education Schedule; and

(ii) at least five subjects chosen from the Curriculum Program Area Schedule, with at least three from the specialisation areas of either Curriculum and Evaluation or Physical and Health Education. These subjects are listed below:

**Specialisation: Curriculum and Evaluation**

- EDGA910 Curriculum in a Changing Context
- EDGA911 Managing Curriculum Change
- EDGA912 Curriculum Special Topic
- EDGA913 Curriculum and Program Evaluation
- EDGA914 Science Education
- EDGA915 Music Education
- EDGA916 Maths Education
- EDGA917 International and Intercultural Perspectives

**Specialisation: Physical and Health Education**

- EDGA920 Curriculum Problems and Issues in Physical and Health Education
- EDGA921 Studies in the Scientific Bases of Health Education and Health Promotion
- EDGA922 Theoretical and Practical Bases of Coaching
- EDGA923 Physical Activity, Culture and Education
- EDGA924 Adolescent Health Status and Behaviour
- EDGA925 Advanced Seminar

(iii) the balance of subjects to be chosen from anywhere in the Schedule of Subjects of the Graduate School of Education (e.g. curriculum related subjects in language, special education and TESOL; curriculum policy related subjects in the Policy Area; or curriculum technology related subjects in the Information Technology Area), or from any 900 level Graduate Schedule in the University, provided that prior approval has been obtained from the Head of the Graduate School of Education.

(2) Language and Learning

The coursework component of a Doctorate of Education in the Program Area of Language and Learning consists of:

(i) either EDGA 901 Advanced Qualitative Research Methods or EDGA 902 Advanced Quantitative Research Methods is compulsory. It is recommended that both of these subjects, or their equivalent, be completed. If there is satisfactory evidence that one of these subjects or their equivalent has already been completed the student will undertake another subject of his/her choice from the Graduate School of Education Schedule; and

(ii) at least five subjects chosen from the Language and Learning schedule, with at least three from one of the specialisation areas. These subjects in each specialisation area are listed below:

**Language and Literacy**

- EDGA970 Language learning and development
- EDGA971 Assessment and evaluation of language and literacy
- EDGA972 Literacy: Theory into practice
- EDGA973 Language, ideology and culture
- EDGA974 Children's literature
- EDGA975 Educational linguistics
- EDGA976 Text and context

**TESOL**

- EDGA976 Text and context
- EDGA 980 Foundations of TESOL
- EDGA 981 Second language literacy
- EDGA 982 Methodology and programming in TESOL
- EDGA 983 Assessment in TESOL

**Special Education**

- EDGA936 Learning theories and exceptionality
- EDGA937 Approaches to reading difficulties
- EDGA938 Teaching students with learning difficulties
- EDGA939 Approaches to behaviour management
- EDGA940 Teaching gifted children
(iii) The balance of subjects may be chosen from anywhere in the Schedule of Subjects of the Graduate School of Education, or from any 900 level Graduate Schedule in the University, provided that prior approval has been obtained from the Head of the Graduate School of Education.

(3) Policy, Planning and Technology

The coursework component of a Doctorate of Education in the Program Area of Policy, Planning and Technology consists of:

(i) EDGA902 Advanced Quantitative Research Methods. If there is satisfactory evidence that this subject or its equivalent has already been completed the student will undertake another subject of his/her choice from the Graduate School of Education Schedule;

(ii) at least five subjects chosen from the Policy, Planning and Technology Schedule, with at least three from one of the two specialisation areas (Education Policy and Planning, or Information Technology in Education and Training). These subjects are listed below:

Education Policy and Planning
EDGA960 Foundations of Policy Studies
EDGA961 Policy Research and Policy Analysis
EDGA963 Education Policy in Australia
EDGA964 Educational Management and Administration
EDGA965 Resource Allocation in Education
EDGA966 School Leadership and Management

Information Technology in Education
EDGA950 Information Technology and Education
EDGA951 Information Technology and Educational Management
EDGA952 Designing Instructional Systems
EDGA953 Information Technology, Curriculum and Pedagogy
EDGA954 Interactive Multimedia in Education
EDGA955 Information Technology and Cognitive Processes
EDGA956 Advanced Studies in Information Technology in Education

Advanced Standing
Candidates in the Doctor of Education program may apply for up to 24 credit points of Advanced Standing for subjects completed at Masters level. This Advanced Standing will be granted as Specified Credit, i.e., there must be a direct correspondence between the prior subject and a subject in the Doctor of Education Schedule. Advanced Standing will only be granted if the subject has been passed at Credit (65%) level or better in the Masters degree.

3. HONOURS MASTER OF EDUCATION

The Honours Master of Education is a specialised research degree for students who either wish to pursue research careers in education or whose future career will require them to interpret and apply the findings of educational research. This degree is intended for students who are professionally qualified educators.

Entry requirements
The degree of Honours Master of Education (MEd(Honours)) in the Faculty of Education shall be subject to the University's rules for the award of the degree of Honours Master together with the following guidelines:

1. Entry to the degree program will normally be available to a person who has:

(a) completed the requirements for an approved Bachelor's degree with Honours Class II Division 2 or higher and who holds an approved teaching qualification; or

(b) completed the University's Master of Education Degree with results averaging credit level or better; or

(c) completed qualifications deemed by the Graduate Faculty to be the equivalent of the University's Master of Education Degree with results averaging credit level or better; or

(d) completed such other qualifications as might be approved by the Graduate Faculty on the recommendation of the Head of the Graduate School provided that in the view of the Graduate Faculty any
such person shall have accumulated the equivalent of 48 credit points beyond a Pass degree.

2. Students who have completed an MEd degree in the professional development orientation (see section 5) or its equivalent with results averaging credit level or better must complete 24 credit points of coursework at Credit level or better, before proceeding to a 24 credit points thesis. These 24 credit points will comprise:

(i) 8 credit points of an advanced methodology subject (EDGA901 or EDGA902)
(ii) EDGA903 Minor Project (8 credit points).

These two subjects must be completed prior to enrolment in EDGA903, and must be passed at credit level or better, at the first attempt. Failure to achieve a credit average in these two subjects at the first attempt will lead to termination of MEd(Hons) candidature.

Patterns of Study

Either

EDGA905 48 credit point thesis;
for candidates who have completed the research orientation in the Master of Education program, or an equivalent program.

or

EDGA904 24 credit point thesis;
and

EDGA906 Directed Study in Education I,
and

EDGA907 Directed Study in Education II,
and

EDGA908 Directed Study in Education III.

Each Directed Study subject is an 8 credit point individualised program of study in an area supporting the 24 credit point thesis. Students may replace a Directed Study subject with subject(s) chosen from the Master of Education (Pass) schedule, in consultation with their supervisor(s) and the Head of the Graduate School.

Requirements for the Degree Program

1. To qualify for admission as a candidate for the Master of Education, a student shall have qualified for a Bachelors degree of the University, or an equivalent qualification from an approved institution, with a major study in Education, provided that the degree or equivalent qualification has a minimum study duration of four years.

Patterns of Study

1. Either

(i) the professional orientation stream:
   (a) EDGA900 Introduction to Research Methods in Education (8 credit points)
   and
   (b) at least 24 credit points (at least 3 subjects each of 8 credit points) from a single Program (major specialisation). The core

3. A candidate may not include in this degree program any subject which the candidate has previously taken and had credited towards a qualification accepted for admission under Section 1 of these requirements.

4. The Graduate Faculty shall appoint supervisor/s for each candidate on the recommendation of the Head of the Graduate School of Education.

4. HONOURS MASTER OF ARTS

Candidates for the degree who have completed a Bachelors Honours Degree at the level of Class II, Division 2 or higher in an appropriate area will enrol in a 48 credit point major thesis, subject number EDGA905. Interested candidates should contact the Head of the Graduate School of Education.

5. MASTER OF EDUCATION

The Master of Education is an introductory higher degree allowing two alternative patterns of study. One pattern focuses on the professional orientation of educators, and the other pattern has a research orientation for candidates interested in pursuing study beyond this degree.

Entry Requirements for the Degree Program

The degree of Master of Education (MEd) in the Faculty of Education shall be subject to the University's rules for the award of the degree of Master together with the following guidelines:

1. The degree program will normally be completed in two sessions of full-time study or four sessions of part-time study.

2. The degree program shall involve:

(a) a thesis embodying the results of an investigation to the value of 48 credit points; or

(b) a minor thesis embodying the results of an investigation whose credit point value is 24 together with satisfactory completion of coursework subjects to the value of 24 credit points.
of subjects to be covered to complete a specialisation will vary from Program to Program. 

and up to

(c) 16 credit points of electives (2 subjects each of 8 credit points) chosen from any Program. The amount of choice available will vary from Program to Program.

or

(ii) The research orientation stream, for students wishing to proceed directly to MEd (Hons) by thesis or Doctorate programs:

(a) EDGA900 Introduction to Research Methods in Education (8 credit points)

and

(b) 8 credit points of advanced studies in qualitative or quantitative research methods (either EDGA901 Advanced Qualitative Research Methods or EDGA902 Advanced Quantitative Research Methods)

and

(c) at least 24 credit points (at least 3 subjects each of 8 credit points) from a single Program

and

(d) EDGA903 Minor Project in Education (8 credit points) in the same Program.

2. Students who have completed an MEd degree in the professional development orientation may proceed to MEd (Hons), provided they meet the program requirements for students who do not have a research component in the MEd. (see MEd(Hons) entry requirements)

Suggested progression patterns
The Master of Education degree will normally be completed in two sessions of full-time study, or in four sessions of part-time study. The first two sessions of part-time study are the same for both the professional and research orientation streams.

Normally a student will complete three subjects each year, two in one session and one in the other session. The sequence of study in the specialisation will be determined by the subjects offered in each session and by the pattern of pre- and co-requisites in each Program. EDGA900 Introduction to Research Methods is usually done in the first year of study. Alternative patterns of study may be arranged in consultation with the Program Co-ordinator and the Head of the Graduate School.

* Note: EDGA900 Introduction to Research Methods in Education is a compulsory, single session subject which is repeated each session. Students have the choice of session in which to complete it, but should consider the advice of the Program Co-ordinator for their specialisation.

MASTER OF EDUCATION

It should be noted that not all the following subjects will necessarily be offered in 1994. Final arrangements will depend upon student numbers and staff resources. Prospective students are strongly recommended to discuss their program of study with the Co-ordinator responsible for the Program in which they are interested or the Head of the Graduate School. These and other details are in the Graduate School of Education Postgraduate Courses Handbook, available from the Office of the Dean or the Graduate School Office. A suggested program of study is available for each Program.

All MEd students are required to include EDGA900 Introduction to Research Methods in Education in their program. Additional specific requirements for program specialisations are listed below.

Program Area 1: Curriculum

Program: Curriculum Development and Evaluation
EDGA910 Curriculum in a Changing Context+
EDGA911 Managing Curriculum Change#
EDGA912 Curriculum Special Topic
EDGA913 Curriculum and Program Evaluation
EDGA916 Maths Education
EDGA917 International and Intercultural Perspectives

+ Compulsory subject for students wishing to complete a major specialisation in Curriculum and Evaluation.

# Run jointly with the NSW Department of School Education as part of a Joint Masters program.

A specialisation in this Program requires the completion of three subjects. Normally these subjects will be chosen from the Curriculum and Evaluation Program. Variations must be approved by the Program Co-ordinator.

Program: Physical and Health Education
EDGA920 Curriculum Problems and Issues in Physical and Health Education
EDGA921 Studies in the Scientific Bases of Health Education and Health Promotion
EDGA922 Theoretical and Practical Bases of Coach Education
EDGA923 Physical Activity, Culture and Education
EDGA924 Adolescent Health Status and Behaviour
EDGA925 Advanced Seminar
A specialisation in Physical and Health Education requires the completion of three subjects. Normally these subjects will be chosen from the Physical and Health Education Program. Variations must be approved by the Program Co-ordinator.

Program Area 2: Language and Learning
Program: Language and Literacy Education
EDGA970 Language, Learning and Development+
EDGA971 Assessment and Evaluation of Language & Literacy
EDGA972 Literacy: Theory into Practice
EDGA973 Language, Ideology and Culture
EDGA974 Children's Literature
EDGA975 Educational Linguistics
EDGA976 Text and Context

+ Compulsory subject for students wishing to complete a major specialisation in Language and Literacy. A specialisation in this Program requires the completion of three subjects chosen from the Language and Literacy Education Program.

Program Area 3: Policy, Planning and Technology
Program: Education Policy and Planning
EDGA960 Foundations of Policy Studies+
EDGA961 Policy Research and Policy Analysis+
EDGA962 Leadership, School Management and Professional Development#

EDGA963 Education Policy in Australia
EDGA964 Educational Management and Administration
EDGA965 Resource Allocation in Education
EDGA966 Leadership, School Management and Professional Development

+ EDGA960 and EDGA961 are compulsory subjects for students wishing to complete a major specialisation in Educational Policy, Planning and Technology. In addition to these two compulsory subjects, students choose one other subject from the list to complete 24 credit points.

# Run jointly with the NSW Department of School Education as part of a Joint Masters program.

Program: Information Technology in Education and Training
EDGA950 Information Technology and Education+
EDGA951 Information Technology and Educational Management
EDGA952 Designing Instructional Systems
EDGA953 Information Technology, Curriculum and Pedagogy
EDGA954 Interactive Multimedia in Education
EDGA955 Information Technology and Cognitive Processes
EDGA956 Advanced Studies in Information Technology in Education

+ Compulsory subject for students wishing to complete a major specialisation in Information Technology in Education and Training. In addition to this compulsory subject, students choose two other subjects in consultation with the Program Co-ordinator to complete the three subject core program. The choice of subject will depend on the background of the students. Specialist subjects are available for students who already have a background in the area, and professional subjects available for students with an interest, but little background, in the area.

Research Methodology and Project Subjects
EDGA900 Introduction to Research Methods in Education
EDGA901 Advanced Qualitative Research Methods
EDGA902 Advanced Quantitative Research Method
EDGA903 Minor Project in Education

Note: Subjects in this group do not constitute a separate area of specialisation, but provide the various methodology and project subjects which are required for completion of the MEd, as explained above in the section Patterns of Study.
Advanced Standing
The Faculty of Education has approved up to 8 credit points of Advanced Standing in the Master of Education to candidates who have completed any of the following Department of School Education, and AMES courses:

Faculty Leadership for Effective change (FLEC), or Supervision for Effective Teaching (SET), or Educatice Leadership, or ESL Basic Training K-12, or Certificate in School Leadership and Management, or Adult Literacy Teaching: A Professional Development Course, or Design and Technology Training Agents (Completion of this course with the Tertiary Extension Lobe will allow candidates 8 credit points of Advanced Standing in the Curriculum specialisation plus 8 credit points Advanced Standing for an elective subject), or Learning Assistance Support Team (LAST), or Introduction to Functional Grammar (NSW AMES)

Specialisation requirements must still be met by the candidate, ie, normally this credit cannot be substituted for a compulsory subject within a program, or form part of a specialisation within a program. Candidates may claim a maximum of eight credit points of Advanced Standing on this basis in one program of study.

Joint Masters Subjects
The Graduate School of Education will be running two Joint Masters subjects in co-operation with the Department of School Education in 1994. Subjects are chosen from the Master of Education program in line with the patterns of studies offered, but will include either EDGA966 School Leadership and Management, or EDGA911 Managing Curriculum Change

These subjects are taught jointly by Faculty of Education staff and staff from the Department of School Education and are available to students from all areas of specialisation. EDGA966 School Leadership and Management may be taken as one subject in the specialisation of Policy and Planning, and EDGA911 Managing Curriculum Change as part of a specialisation in Curriculum. Either may be taken as an elective subject by students from other Program areas. Financial support may be available for students currently employed by the Department of School Education, and further information regarding arrangements should be available from the Department of School Education. Students must meet the normal entry criteria for the Master of Education program and follow the standard University application and enrolment procedures.

Requirements for the Degree Program
Please refer to the Pass Master Degree Rules and note the following additions:

1. Each 48 credit point program shall include a minimum of 24 credit points comprising a major specialisation within the degree. The area of specialisation shall be chosen from the areas listed in the Schedule of Subjects for the Master of Education;

2. A candidate for the Master of Education degree, may, with the approval of the Head of School, include in his/her program subjects not exceeding 16 credit points in aggregate selected from the Schedule of Graduate subjects offered by other schools or departments, provided that the Head of the other department or school approves such selection;

3. A person wishing to use the Master of Education degree as a qualifying program for admission to the Honours Master of Education or Doctoral degrees will normally be expected:

(a) to complete satisfactorily those subjects in the research orientation strand of the Master of Education Degree; and

(b) to achieve results averaging credit level or better in the Master of Education Degree.

4. Students who have completed an MEd degree in the professional development orientation with results averaging credit level or better are eligible for admission to the Honours Master of Education, but should consult the entry requirements for this degree (Section 3) for the required pattern of study.

B. GRADUATE DIPLOMAS

The Graduate Diploma in Education is designed for those seeking a teaching qualification. The Graduate Diplomas in Adult Education & Training and Computer-Based Learning are designed to extend existing three year qualifications. Full details of entry requirements, patterns of study, and the schedule of subject descriptions for the Diplomas are given in Sections 6, 7 and 8 below.

6. GRADUATE DIPLOMA IN EDUCATION

The Graduate Diploma in Education is a professional pre-service course in education for graduates of this or another approved university who seek teacher qualifications. It
also serves as an introduction to the study of education for those who will later pursue further studies in the field, for example at the Masters level.

Intending applicants for the Graduate Diploma course are advised that it may be necessary to restrict enrolments. If this is necessary, selection to the course will be made on the basis of academic merit and suitability of the first degree to teaching requirements.

The main aim of the course is to provide a professional course of pre-service education for intending primary and secondary school teachers. The structure of the program seeks to combine the practical and theoretical elements of teaching by engaging students in professional aspects, including Methods work and classroom practice from the beginning of the course. Underpinning and integrated with the professional aspects are curriculum studies and the "Foundation" disciplines of education.

Each of these components is intended to contribute to the development of concepts and skills relating to an understanding of and competence in teaching. It is hoped that prospective teachers will develop as autonomous professionals who will be competent, innovative and capable of contributing to the formulation of curriculum in schools.

The course is for one year full-time and involves lectures, seminars, tutorials, individual assignments and group exercises. Methods work and practice teaching are provided in co-operation with local schools. Students are advised that the structure of the course makes it preferable that it be undertaken full-time. Students who wish to pursue the course part-time should consult the Co-ordinator or the Professional Officer before enrolling.

There is no mid-year intake into this program.

Assessment
Students must satisfactorily complete every subject in their program of study before the Diploma will be awarded. Assessment for each subject in the Graduate Diploma in Education will be determined by the type of program offered by individual lecturers. More specific details of assessment will be given in individual subject outlines.

Attendance
Each session is divided into a number of blocks, each of which is either school or University based. 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
EDUC815 Perspectives in Education
4 credit points
EDUC801 Learners with Special Needs
4 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
EDUC815 Perspectives in Education
4 credit points
EDUC801 Learners with Special Needs
4 credit points
EDUC820 Perspectives in Education C
4 credit points
and
12 credit points of Primary Methods

Methods Subjects
Students are required to complete successfully two Primary or Secondary methods. Methods subjects are central to the program and are offered throughout the year. The Method areas which may be available 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 Officer, Directorate of Teacher Education, regarding the correct combination of methods which will satisfy requirements of the NSW Department of Education.

7. GRADUATE DIPLOMA IN COMPUTER-BASED LEARNING
(Formerly Graduate Diploma in Educational Studies (Computers in Education))

This course is designed to enable graduates to extend their knowledge of the use of computer technology in teaching.

Entry to the Graduate Diploma in Computer-Based Learning is available to candidates with
a three year degree, teaching diploma or the equivalent, plus the equivalent of one year of professional experience.

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.

**Pattern of study:**
The course consists of six subjects, taught by part-time study over two academic years. The following four subjects form the compulsory core:

- **EDGA811 Introduction to Information Technology and Education**
- **EDGA812 Educational Computer Programming**
- **EDGA813 Instructional Design for Software**
- **EDGA816 Computer Resources Project**

Plus two elective subjects, chosen from the Graduate School of Education Schedule in consultation with the Course Co-ordinator.

**Pattern of study**
The course will consist of a core of four subjects,

- **EDGA801 Curriculum and Instructional Design**
- **EDGA803 Assessment and Evaluation**
- **EDGA804 Instructional Strategies and Communication**
- **EDGA806 Practicum and Project**

plus, two electives chosen from the Graduate School Schedule in consultation with the Course Co-ordinator.

**C. GRADUATE CERTIFICATES**

**9. GRADUATE CERTIFICATE IN HIGHER EDUCATION**

The Faculty of Education introduced in 1993 the award of Graduate Certificate in Education. This program is available to all existing and newly appointed academic staff of the University. The course will allow staff to develop their teaching capabilities and obtain a formal award as evidence of appropriate teaching skills.

The Graduate Certificate in Higher Education will comprise -

- **EDGA807 Introduction to Tertiary Teaching**
- **EDGA801 Curriculum and Instructional Design**
- **EDGA803 Assessment and Evaluation**

**EDGA807 Introduction to Tertiary Teaching** may also be pursued independently as part of a staff development program. Staff who successfully complete the Graduate Certificate in Higher Education would be eligible to enrol in the Graduate Diploma in Adult Education and Training with Advanced Standing for three subjects on condition that the applicant surrender the Graduate Certificate.

**10. GRADUATE CERTIFICATE IN HISTORY EDUCATION**

The Graduate Certificate in History Education is a professional development course for qualified teachers of History in NSW secondary schools. It focuses on the development of modern inquiry techniques and new teaching approaches in History. Candidates for this award complete the following three subjects over one year of study:

- **EDGA820 New Approaches to Teaching and Learning in History**
- **EDGA821 Curriculum Development and Evaluation Project**
- **HIST934 The Re-making of Australian History**

**11. GRADUATE CERTIFICATE IN ADULT CAREER DEVELOPMENT**

The award of Graduate Certificate in Adult Career Development will be offered from 1994.
This is a specialised course aimed at those working with the development of adult careers. The course will be offered on a full-fee basis in a self-study open-learning format, with many of the materials available on Macintosh CD-ROM disk. It consists of three subjects:

EDGA831 Career Management and Organisation
EDGA832 Career Development and Support
EDGA836 Practicum and Project

SUBJECT DESCRIPTIONS

GRADUATE DIPLOMAS AND CERTIFICATES

The subjects EDGA801, 803, 804, 806 form the core subjects for the Graduate Diploma in Adult Education and Training. Two elective subjects are also chosen, as outlined in Section 8. Full details of course requirements can be obtained from Associate Professor John Hedberg.

The subjects EDGA811, 812, 813 and 816 form the core subjects of the Graduate Diploma in Computer-Based Learning (formerly Graduate Diploma in Educational Studies (Computers in Education)). Two electives may also be chosen from the list in Section 7. Full details of course requirements can be obtained from the Course Co-ordinator.

The subjects EDGA801, 803 and 807 form the course for the Graduate Certificate in Higher Education.

The subjects EDGA831, EDGA832 and EDGA836 form the course for the Graduate Certificate in Adult Career Development. These subjects are offered on a full-fee basis in a self-study, open learning format. Contact the course co-ordinator, Associate Professor John Hedberg for further information before enrolling in these subjects.

The subjects EDGA820, 821 and HIST934 form the course for the Graduate Certificate in History Education.

The subjects EDUC800-892 form the Graduate Diploma in Education and are found at the end of this alphanumeric subject listing.

EDGA801 Curriculum and Instructional Design
Autumn session; 8 credit points (2 hr lecture, 1 hr tutorial/seminar)
Co-requisite: EDGA802.
Assessment: completion of five short essays each 10%, one course design statement 50%.
This course will be an overview of the context of Adult Education and Training - Vocational, Continuing, Professional, Corporate and Community. The topics will include: Needs assessment, theoretical approaches to the design task and the processes employed. Other topics include: Task analysis and structuring content; Objectives and performance outcomes; Learner analysis; Learning theories and their implications for instructional design; Instructional strategies; Selection of delivery options and media; and assessment of learning.

Textbook:
Seels, B, and Glasgow, A, Exercises in Instructional Design, Columbus, Merrill, 1990.
Co-ordinator: Dr M Gillett.

EDGA802 Psychology of Adult Learning
Autumn session; 8 credit points (2 hr lecture, 1 hr tutorial/seminar)
Assessment: one journal 30%, one seminar presentation 30%, one essay 40%.
This subject will examine the characteristics of adult learning and issues in lifelong learning. Topics will include: Motivational theory; Personal goals and adult learning; The role of prior experience; Experiential, reflective, participative, didactic and action learning; Learning in teams; and assessment of adult learning needs.

Textbook:
Co-ordinator: Dr M Gillett.

EDGA803 Assessment and Evaluation
Spring session; 8 credit points (2 hr lecture, 1 hr tutorial)
Pre-requisite: EDGA801.
Assessment: completion of two evaluations each worth 50%, including the design of instruments, the analysis of the data, and the presentation of a report. One evaluation will be focused on a needs assessment in the students working context and the other will be evaluative review of a course or training intervention.

This subject will focus on the roles of assessment and evaluation. Specific techniques such as: Needs assessment; Skills auditing; Learner assessment; Learning contracts; Test types; Attitude inventories; Portfolios; Self-assessment; Peer assessment; Course evaluation; Questionnaire design; Formative and summative evaluation; Maintenance and review evaluation; Cost-effectiveness and cost-efficiency.

Textbooks:
Co-ordinator: Associate Professor J Hedberg.
EDGA804 Instructional Strategies and Communication  
*Spring session; 8 credit points (2 hr lecture, 1 hr tutorial/seminar)*
Pre-requisite: EDGA801  
Assessment: one compendium of resources 40%, one anthology of instructional strategies 40%, one presentation 20%.

This subject will allow the development of presentation skills and good educational communication practices. Issues will include: The design of visual, verbal materials for effective communication; Alternative delivery methods and instructional strategies; Open learning strategies; Instructional technology techniques and resources; CBT and new technologies.

Textbooks:
No set text, reference lists to current journals and monographs will be provided.
Co-ordinator: Dr M Gillett.

EDGA805 Management and Organisational Context  
*Autumn session; 8 credit points (2 hr lecture, 1 hr tutorial/seminar)*
Assessment: completion of two essays/projects each 40%. One would focus on a project related to the students’ working context and the other would focus upon change management processes required to implement a adult training/education project. Presentation of a group workshop 20%.

This subject will focus on the management and social contexts of Adult Education, Vocational, Continuing, Professional, Corporate and Community. It will examine the role of the trainer as a change agent and the Context in which the student is employed. e.g. TAFE issues, community concerns, corporate culture. Emphasis will be placed on administrative processes of curriculum development, the management of resources, sociological issues and the role of training in human resource development.

Textbooks:
No set text, reference lists to current journals and monographs will be provided.
Co-ordinator: Associate Professor J Hedberg.

EDGA806 Practicum and Project  
*Autumn or Spring session or Annual; 8 credit points (3 hrs tutorial)*
Pre-requisite: Students must have completed three subjects in the Grad Dip Adult Ed and Training  
Co-requisite/Pre-requisite: EDGA803, EDGA804  
Assessment: one major report/essay 100%.

The project/practicum is an individually defined and negotiated topic. Some initial meetings will focus on refining ideas and the development of a learning contract proposal. Students would then undertake their project with some help from a nominated supervisor.

Textbooks:
No set text, reference lists to current journals and monographs will be provided as relevant to each student’s project.
Co-ordinator: Associate Professor J Hedberg.

EDGA807 Introduction to Tertiary Teaching  
*Spring session/Autumn session; 8 credit points (1 hr lecture, 2 hr workshop)*
Assessment: direct observation of performance 50%, assessment of prepared materials 20%, reflective diary 30%.

This subject will be presented in cooperation with the Centre for Staff Development. It is only available to staff employed at the University of Wollongong and forms the introductory subject for the Graduate Certificate in Higher Education. It will introduce staff to a range of basic skills of tertiary teaching: planning, questioning managing, communicating and evaluating. It will deal with a range of teaching methods relevant to particular faculties and consider appropriate ways of assessing student performance. The principles and practices of subject and course design will be introduced and attention will be directed towards the counselling and feedback roles which are crucial to the teaching-learning process at the tertiary level. Ultimately this subject should lead staff to an awareness of avenues for continuing professional development and a desire to continue the refinement of their teaching capabilities. Intending students must consult with the course co-ordinator before enrolling in this subject.

Textbook:

Co-ordinator: Dr M Gillett.

EDGA811 Introduction to Information Technology and Education  
*Autumn session; 8 credit points (1 hr lecture, 2 hrs seminar/laboratory)*
Assessment: 3 computer based projects 20% each, 2 essays 20% each.

This subject will focus on the basic terms and IT techniques for the use in teaching and learning. It discusses the broad educational applications of IT. Workshops will focus on the use of a variety of applications packages suitable for use in teaching and learning. This course is skills oriented so that students will be able to use a range of computers and all major forms of software.
EDGA812 Educational Computer Programming
Spring session; 8 credit points (1 hr lecture, 2 hrs seminar/workshop per wk)
Co-requisite: EDGA811
Assessment: 2 essays 15% & 20%, 1 action research project 30%, 2 programming activities 15% and 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.
Textbooks:
Choice of text will depend on programming activities selected.
Co-ordinator: Dr W Cheung.

EDGA813 Instructional Design for Software
Autumn session; 8 credit points (1 hr lecture, 2 hrs seminar/laboratory)
Pre-requisite: EDGA811
Assessment: 2 computer based projects 25% each, 1 essay 25%, 1 seminar 25%.
This subject will address how learning theory and instructional strategies can be embodied in educational software and the evaluation of educational software. Other issues include: Principles of screen design for learning, instructional strategies for using software. Points will be illustrated with software exercises such as Hypercard.
Textbooks:
Co-ordinator: Dr W Cheung.

EDGA815 Developments in Interactive Learning Systems
Autumn session; 8 credit points (1 hr lecture, 2 hrs seminar/laboratory)
Pre-requisite: EDGA812, EDGA813
Assessment: 2 computer based projects 25% each, 2 essays 25% each.
This subject will address current trends in hardware and software and evaluate the processes and application of multimedia and hypertext environments to learning. The design of intelligent tutoring systems for improved learning and the application of artificial intelligence in educational software.

Textbook:
Co-ordinator: Dr B Harper.

EDGA816 Computer Resources Project
Autumn, Spring or Annual session; 8 credit points (2 hrs per wk for five wks, then individual study)
Pre-requisite: Completion of three subjects in the Graduate Diploma of Computer-Based learning
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.
Textbooks: No set text.
Co-ordinator: Associate Professor J Hedberg.

EDGA820 New Approaches to Teaching and Learning in History
Spring and Autumn session; 8 credit points (3 hrs per wk)
Co-requisite: HIST934 The Re-making of Australian History
Assessment: development of a computer-based inquiry project 30%, Instructional design project 40%, final seminar paper 30%.
This subject will focus on the development of historical inquiry skills and historiography supported by information technology. Instructional design processes will be used to access and link traditional historical sources. Emphasis will be placed upon the development of related inquiry process skills, including critical examination, interpretation and evaluation of sources, combined with database techniques to store and retrieve records, particularly sources which include visual and aural components in addition to traditional text and numerical information. The techniques and processes will emphasise the appropriate matching of instructional strategies with learning outcomes. The information technology component will develop skills and understandings in processes such as scripting, linking data and sources, information navigating, database construction and multimedia, while focussing upon the metacognitive aspects of learning with the information technology.
Textbooks:
Reference will be made to a series of resources as appropriate to the topic.
Co-ordinator: Associate Professor J Hedberg.

EDGA821 Curriculum Development and Evaluation Project
Spring session; 8 credit points (3 hrs per wk)
Pre-requisite: HIST934 The Re-making of Australian History
Co-requisite: EDGA820
Assessment: project proposal 15%, project report 50%, tutorial 20%, presentation of seminar paper suitable for publication through professional teaching journals 15%.
The students will develop understanding of action research and case study approaches to classroom inquiry, and relevant process of data analysis. This understanding will then be applied to the design, implementation and evaluation of a curriculum development and teaching project. The focus of this project will be on enhancing pupil learning of selected aspects of Australian History through the use of innovative teaching methods, including applications of relevant information technology. The communication to colleagues of the projects undertaken will be an important process within the Unit.

Textbooks:
Bell J, Doing Your Research Project, Open University, Milton Keynes, 1989.

Co-ordinator: Dr T Booth.

EDGA831 Career Management and the Organisation
Spring and Autumn session; 8 credit points (1 hr lecture, 2 hr seminar/workshop per wk or through self-study using CD-ROM materials equivalent to approximately 9 hrs study per wk).
Assessment: 4 essays 25% each.
This subject will address current trends in career development theory and introduce their application to individuals as they move from early career choice through life changes. The subject will focus on the organisation's perspective and identify the tools, resources and strategies available to the employer to provide for career development within the training and human resource development function. The importance of organisational change and planning on career development will be considered in the provision of facilities and resources to support the process by the organisation. It will discuss methods for linking career development to organisational plans, and strategies to financial plans within the human resource and training functions. Specific facilities such as computer based career information and guidance systems, action planning, for current job enrichment, promotion and transfer, mentoring, redeployment, coaching and outplacement will be discussed and demonstrated.

Textbooks:

Co-ordinator: Associate Professor J Hedberg.

EDGA832 Career Development and Support Services
Spring and Autumn session; 8 credit points (1 hr lecture, 2 hr seminar/workshop per wk or through self-study using CD-ROM materials equivalent to approximately 9 hrs study per wk).
Assessment: 4 essays 25% each.
This subject will focus upon the understandings and skills required of a person providing career development support services. It will identify the differences between this role and other counselling roles. In order to address these issues, the subject will examine styles of helping and identify methods of conflict resolution. It will examine specific work life issues and the importance of work, relationships, milestones, personal events in an employee's work life. The subject will develop specific career support skills including, problem exploration and clarification, client agreements, dynamics of the helping relationship and client occupational decision-making. The context will be examined through issues such as ethics and privacy, effective outcomes for the client, accreditation, possible conflict of interest. The effective career outcomes will be examined by reference to roadblocks, constraints, mapping and implementing options, action planning, resources and the problems of transition.

Textbooks:

Additional articles and specific readings will be provided.

Co-ordinator: Associate Professor J Hedberg.

EDGA836 Practicum and Project
Autumn, Spring or Annual session; 8 credit points (3 hrs tutorial).
Pre-requisite: EDGA831 and EDGA832.
Assessment: one major report/essay 100%.
This subject is the final subject in the Graduate Certificate in Adult Career Development. It is offered on a full-fee basis in an open-learning format. Students must contact the subject co-ordinator before enrolling. The project/practicum allows students' to demonstrate their knowledge and performance skills in their work environment. The project must demonstrate that the student has acquired the basic professional competencies of presentation, needs assessment, design, development, evaluation, implementation, and change management required of an adult learning program. The project/practicum is an individually defined and negotiated topic. Some initial meetings will focus on refining ideas and the development of a learning contract proposal. Students would then undertake their project with some help from a nominated supervisor.
EDG901 Advanced Qualitative Research Methods
Autumn or Spring session; 8 credit points (2 hrs lecture and 1 hr seminar each fortnight plus one full-day workshop).
Assessment: research proposal or case study and literature review 40%, seminar 20%, critical essay 20% review of research paper 20%.
An examination of the rationale for the use of the qualitative research paradigm will be undertaken 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:
Bogdan, R C and Biklen, S K, Qualitative Research for Education, Allyn and Bacon, 1992.
Co-ordinator: Dr T Booth.

EDG902 Advanced Quantitative Research Methods
Autumn session; 8 credit points (2 hrs lecture and 1 hr laboratory per wk)
Assessment: assignments 20%, examinations 80%
Topics will include: experimental and quasi-experimental designs for research, planning research, sampling, interviewing questionnaires, data processing, personality assessing, attitude measurement, observation and case studies, interpreting results and report writing.
Textbook:
Co-ordinators: Dr P Webb and Professor K Gannicott.

EDG903 Minor Project in Education
Autumn or Spring or Double session (A); 8 credit points (3 hrs per wk on a single session basis: lectures & seminars)
Co-requisite: three subjects from the student’s area of specialisation.
Assessment: research oriented project.
This subject is part of the research orientation in the MEd program. It enables a student to explore a research issue in a sustained piece of writing, as preparation for higher degree studies. No project work should be commenced without approval from the Program Area Co-ordinator and/or the Head of the Graduate School.

EDG904 Minor Thesis
Double session (A); 24 credit points
Pre-requisite: EDG901 or EDG902, completed at Credit level or better.
This is the research component of a combined coursework thesis and program in the MEd (Hons) course, undertaken by a candidate supervised in the Faculty of Education. A thesis must be submitted and assessed in line with University Rules for Honours Masters candidates. No thesis work should be commenced without approval from an appropriate academic supervisor and the Head of the Graduate School of Education.

EDGA905 Major Thesis Double session (A); 48 credit points
This is the thesis subject for candidates enrolled in MEd (Hons), MA or PhD in Education, supervised in the Faculty of Education. Candidates are required to submit a research thesis in line with the relevant University Rules. No thesis work should be commenced without approval from an appropriate academic supervisor and the Head of the Graduate School of Education.

EDGA906 Directed Study in Education I
EDGA907 Directed Study in Education II
EDGA908 Directed Study in Education III
Autumn or Spring or Double session (A); 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.
Co-ordinator: To be advised.

EDGA909 Doctoral Thesis
Double session (A); 48 credit points
Prerequisite: completion of required coursework at appropriate level.
This is the thesis subject for candidates enrolled in the Doctorate of Education. Candidates are required to submit a research thesis in line with the relevant University Rules. No thesis work should be commenced without approval from an appropriate academic supervisor and the Head of the Graduate School of Education.

EDGA910 Curriculum in a Changing Context
Autumn or Spring session; 8 credit points (1 hr lecture and 2 hr tutorial per wk).
Assessment: 1 major assignment 40%, 2 minor assignments 15% each, short tasks and exercises 20%, class test 20%.
An introduction to a number of broad and contrasting approaches to and models of the curriculum and their relation to contemporary curriculum issues and concerns. Curriculum decision making - school based curriculum development and the common core curriculum. Curriculum development and implementation at the classroom and institutional levels.
Textbook:
Co-ordinator: Dr M Wilson.

EDGA911 Managing Curriculum Change
Spring session (1 hr lecture, 2 hrs tutorials per wk).
Assessment: literature review 30%, seminar paper 20%, seminar 10%, major assignment 40%.
This subject will critically examine curriculum theory, instructional design and curriculum evaluation, including contemporary approaches to and principles of curriculum change. Different types of change as reflected in recent trends at the international national, state and school-levels will be examined in relation to curriculum policies and pedagogical practices. The subject will focus on theoretical and policy issues related to leading change and evaluating change processes. Students will be encouraged throughout the session critically to reflect on their own professional involvement in the management of curriculum change.
Textbook:
Co-ordinator: Dr C Fox.

EDGA912 Curriculum Special Topic
Autumn or Spring session; 8 credit points (1 hr lecture and 2 hr tutorial per wk)
Pre-requisite: EDGA910
Co-requisite: 8 credit points of curriculum specialisation
Assessment: major review 60%, project report 40%.
The Special Curriculum Topic will allow students following a subject-specific specialisation to appraise, extend and apply understanding and skills in their area of professional or academic concern. Students will be required to undertake a critical reading and reporting program. Some students may extend their investigation via a field based inquiry project which will explore the related theory and program issues in a professional setting.
Textbooks:
No set text, an initial reference list will be distributed in each specific area of inquiry.
Co-ordinator: Dr T Booth.

EDGA913 Curriculum and Program Evaluation
Spring or Autumn session; 8 credit points, (2 hrs of lectures and 1 hr seminar/tutorial per wk)
Pre-requisite: EDGA900 (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 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 collections strategies, analysis procedures, ethical issues, client negotiation and the communication of program findings.

Textbooks:
Patton, M Q, Qualitative Evaluation Methods, Sage, 1980.
Co-ordinator: Dr T Booth.

EDGA916 Maths Education
Autumn or Spring session; 8 credit points, (1 hr lecture, 2 hr seminar each wk)
Pre-requisite: EDGA900 and EDGA910
Assessment: 2 essays each 40%, 1 seminar presentation 20%
This subject allows students to apply their curriculum expertise through the study of contemporary research issues in school mathematics education. The emphasis throughout the subject is on the reading and analysis of recent publications in both journals and books, on the development of a critical and international perspective on mathematics education, and on the consideration of the implications of these research findings for classroom practices. Lectures, seminars, and action research topics will be selected from current research issues such as embodiments and mathematical representations, cognitive, psychological and social aspects of mathematics education, and the roles of information technologies in mathematics education.
Textbooks: To be advised.
Co-ordinator: Mr N Hall.

EDGA917 International and Intercultural Perspectives
Autumn or Spring session; 8 credit points (3 hrs per wk).
Assessment: major paper 40%, seminar presentation 30%, 2 short critical reviews 15% each.
The curriculum including curriculum change and classroom practice, is strongly influenced by international developments in education and multicultural contexts in the classroom. Students will critically analyse curriculum developments and curriculum resources from contemporary international and intercultural perspectives. Topics will include: implementing Key Learning Areas in a multicultural classroom; international publishers and their influence on curriculum through texts; critical theories about intercultural communication in the classroom; issues of ethnicity and classroom participation; and a comparative view of classrooms in cultural contexts both inside and outside Australia.
Textbooks:
The course will require extensive reading from recommended journals and a selection of texts.
Suggested preliminary reading:
Co-ordinator: Ms C Fox.

EDGA920 Curriculum Problems and Issues in Physical and Health Education
Autumn or Spring or Double session (A); 8 credit points (3 hrs per wk on a single session basis; lectures, seminars, workshops)
Assessment: assignments 60%, examinations 40%.
The subject is concerned with an expansion of the conceptual framework of curriculum theory, planning and instructional design with special application to Physical and Health Education. Specific problems and issues associated with curriculum development in the secondary school will be examined.
Textbooks:
None specified - students will draw from an extensive bibliography of selected primary and secondary literature.
Co-ordinators: Dr J Wright and Ms J Davy.

EDGA921 Studies in the Scientific Bases of Health Education and Health Promotion
Autumn or Spring or Double session (A); 8 credit points (3 hrs per session on a single session basis)
Assessment: 1 examination 50%, 2 assignments 20% each, 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.
Co-ordinator: Dr J Patterson.

EDGA922 Theoretical and Practical Bases of Coach Education
Spring session; 8 credit points (3 hrs per wk)
Assessment: student presentations 25%, seminar paper 25%, practical assessment 25%, practical field work 25%.
Pedagogical issues, time management and overseas developments in coaching will be covered. Students will undertake an in-depth analysis of behavioural coaching, assessment and skill acquisition as applied to coaching. A conceptual framework of coaching both in
Australia and overseas will be used with practical implications related to practice sessions and the athletic environment.

Textbooks:
And other selected primary reference material.
Co-ordinator: Dr P Webb.

EDGA923 Physical Activity, Culture and Education
Spring session; 8 credit points (1 hr lecture, 2 hr seminar/workshop)
Co-requisite: EDGA900
Assessment: seminar presentation and papers 30%, minor assignment 20%, major assignment 50%.
This subject will examine physical education, sport and other physical activities such as dance, as social forms that are produced by and in specific historical and social contexts. The economic, political and cultural forces influencing this production in the present and recent past will be discussed generally and in the context of schooling. As a major social institution, sport contributes to the reproduction of systems of beliefs and practices that constitute a particular culture. In this context the function of sport in maintaining and changing attitudes and practices that relate to class, age, gender and ethnicity will be discussed, particularly in relation to the representations of sport in the media. Various forms of analysis, including text analysis, surveys and interviewing will be examined as they apply to this field of study. Students will be expected to complete at least one assignment that includes primary data collection and analysis.

Textbook:
Co-ordinator: Dr J Wright.

EDGA924 Adolescent Health Status and Behaviour
Autumn or Spring session; 8 credit points (3 hrs per wk)
Assessment: assignments 60%, examinations 40%.
Adolescence provides a crucial access point for the improvement of health, not only now but in adult life and in the next generation. Health Education is recognised as a valuable means of realising this goal. A necessary precursor to the development of effective health education programs is the understanding of adolescent health status and behaviour and its relationship to the programming task. Subject content, therefore, will include an appraisal of health status indices and health behaviour patterns among young people. Factors affecting health behaviour will be discussed and models of adolescent health behaviour explored. An investigation of selected health behaviour-oriented programs for adolescent groups will be examined.

Textbooks: No set text.
Co-ordinators: Dr J Patterson and Ms Y Kerr.

EDGA925 Advanced Seminar
Autumn or Spring session; 8 credit points (3 hrs per wk seminars and workshops)
Pre-requisite: one subject of Health and Physical Education specialisation completed
Assessment: 2 seminar presentations 25% each, written paper 50%.
The advanced seminar will allow students to evaluate and extend knowledge in a specific area of physical and health education. Students will be required to undertake a critical reading program in this area and extend their work by applying their understanding in a school or community based project which integrates the theory and application. Regular seminars will be presented detailing issues, understandings, progress & final outcome.

Textbooks: To be advised.
Co-ordinator: Dr P Webb.

EDGA936 Learning Theories and Exceptionality
Autumn session; 8 credit points (3 hrs per wk)
Assessment: essay 40%, seminar presentation 30%, case study 30%.
This subject will require students to engage in a critical review of a range of explanations of human learning and their application to children with special needs. Learning will be examined from psychological, sociological and sociolinguistic perspectives. Topics to be considered will include: behaviourist learning theories and their educational applications; the impact of Piaget on educational practice and critiques of his theory; socio-cultural accounts of learning and their implications for teaching practice; information processing perspectives including the development of metacognition and self-regulation; the relationship between language, learning and thought; and issues in the assessment of intelligence.

Textbooks: To be advised.
Co-ordinator: Dr W Vialle.

EDGA937 Approaches to Reading Difficulties
Annual: 8 credit points (3 hrs alternate wks)
Assessment: essay 20%, exam 20% case studies 50%, presentation 10%.
Pre- or co-requisite: EDGA936 for students specialising in the Special Education Program.
This subject examines the relevant research literature and empirical evidence regarding the acquisition of reading skills. Individual differences in reading development in reading development will be explored from both theoretical and practical frameworks in order to identify the most relevant assessment and remediation strategies.
Textbook:
Co-ordinator: Ms D Konza.

EDGA938 Teaching Students with Learning Difficulties
Autumn or Spring session; 8 credit points (3 hrs per wk)
Assessment: intervention exercise 40%, review of literature 30%, examination 30%.
Pre- or co-requisite: EDGA936 for students specialising in the Special Education Program.
This subject aims to develop an understanding of how the teacher and the teacher’s beliefs about learning affect classroom practice. Students will examine a range of teaching strategies derived from the behaviourist and cognitive models, social learning theories and other interventions used in the education of students with particular learning needs. Both critical reviewing of the literature and practical application of the theories will be included in the structure of the subject.

Textbooks:
Co-ordinator: Ms D Konza.

EDGA939 Approaches to Behaviour Management
Annual session; 8 credit points (3 hrs per alternate wk)
Assessment: transcript analysis 15%, staff development plan 30%, comparison of theoretical approaches 30%, examination 25%.
Pre- or co-requisite: EDGA936 for students specialising in the Special Education Program.
This subject examines a range of approaches to behaviour management and the theoretical principles upon which they are based. (e.g. Rogers’ microskills approach, Canter and Canter’s Assertive Discipline, Dreikurs and Adlerian approaches, Compliance Training, Glasser’s Reality Therapy among others). The problems associated with non school attendance, oppositional disorders, attention deficit disorders and other commonly occurring behaviour disorders are critically examined within the context of increasing academic engaged time and developing social and conflict resolution skills.

Textbook:
Rogers, W, You Know the Fair Rule, Melbourne: ACER, 1990
Co-ordinator: Ms D Konza.

EDGA940 Teaching Gifted Children
Autumn or Spring session, 8 credit points, (1 hr lecture, 2 hrs seminar per wk)
Pre-requisite: EDGA936 for students wishing to specialise in Special Education.

Assessment: literature review 10%, seminar paper 20%, essay 30%, research paper 40%.
This subject will identify and critically examine the current issues related to the education of gifted & talented students. It will also prepare teachers to meet effectively the needs of such students through curriculum modification and application of special educational strategies. Topics will include: definition and identification issues; instructional models; educational strategies; creativity and thinking skills; counselling needs; special populations; and the implications of policy on educational practice. The subject will also provide opportunity for individualised study of a topic of special interest within the subject guidelines.

Textbook:
Co-ordinator: Dr W Vialle.

EDGA950 Information Technology and Education
Autumn session; 8 credit points (1 hr lecture, 2 hrs seminar/workshop)
Assessment: 1 computer based project 40%, 1 essay 40%, 1 seminar presentation 20%.
Topics will include: Survey of the policy, curriculum, pedagogical, and practical issues of using IT in teaching and learning. Develop an understanding of the range of possible IT applications. Human–computer interaction as a basis for instructional software. Overview of instructional systems design and evaluation for educational software.

Textbooks:
No set text, reference lists to current journals and monographs will be provided.
Co-ordinator: Associate Professor J Hedberg.

EDGA951 Information Technology and Educational Management
Spring session; 8 credit points (2 hrs lecture, 1 hr seminar/workshop)
Assessment: 1 computer based project 40%, 1 essay 40%, 1 seminar presentation 20%.
Topics will include: Information systems and their impact on educational management, Development of information analysis techniques, Writing specifications for systems, linking information systems with management processes and organisational structures, issues for educational management, course delivery, logistics, records management, databases, and curriculum organisation.

Textbooks:
No set text, reference lists to current journals and monographs will be provided.
Co-ordinator: Associate Professor J Hedberg.
EDGA952 Designing Instructional Systems
Autumn session; 8 credit points (1 hr lecture, 2 hrs seminar/workshop)
Pre-requisite: EDGA950
Assessment: 1 computer based project 40%, 1 essay 40%, 1 seminar presentation 20%.
This subject will examine the underlying cognitive implications of advanced information technology for independent learning systems. The focus is on supportive learning environments emphasising interactivity and individual learning, with particular reference to hypertext. It will include research into learning strategies using alternative structures of knowledge.
Textbooks:
No set text, reference lists to current journals and monographs will be provided.
Co-ordinator: Associate Professor J Hedberg.

EDGA953 Information Technology, Curriculum and Pedagogy
Spring session; 8 credit points (1 hr lecture, 2 hrs seminar/workshop)
Pre-requisite: EDGA950
Assessment: 1 computer based project 40%, 1 essay 40%, 1 seminar presentation 20%.
This subject allows students to investigate the links between educational theory and teaching and learning practice with information technologies. It will emphasise research into the use of information technology in education and training and software design for learning, curriculum innovation with information technologies, teaching with IT, and evaluation of software.
Textbooks:
No set text, reference lists to current journals and monographs will be provided.
Co-ordinator: Mr N Hall.

EDGA954 Interactive Multimedia in Education
Spring session; 8 credit points (2 hr lecture, 1 hr seminar/workshop)
Pre-requisite: EDGA950
Assessment: 1 computer based project 40%, 1 essay 40%, 1 seminar presentation 20%.
This subject will develop the skills for designing integrated learning environments which are to be delivered or experienced through computer-based systems. It will employ the research into learning from such systems, impact on educational organisation and delivery, design, instructional and evaluation strategies for these programs.
Textbooks:
No set text, reference lists to current journals and monographs will be provided.
Co-ordinator: Associate Professor J Hedberg.

EDGA955 Information Technology and Cognitive Processes
Autumn session; 8 credit points (1 hr lecture, 2 hrs seminar/workshop)

Pre-requisite: EDGA953
Assessment: 1 computer based project 40%, 1 essay 40%, 1 seminar presentation 20%.
This subject provides the opportunity to study information technology in the context of learning processes, especially as it relates to cognitive science and artificial intelligence. It will include research into the use of LOGO and other "programming" environments, artificial intelligence and cognition, development and implementation of intelligent tutoring systems, use of expert systems and embedded training.
Textbooks:
No set text, reference lists to current journals and monographs will be provided.
Co-ordinator: Mr N Hall.

EDGA956 Advanced Studies in Information Technology in Education
Spring session; 8 credit points (1 hr lecture, 2 hrs seminar/workshop)
Pre-requisite: EDGA952 or EDGA953 or EDGA954
Assessment: 1 computer based project 40%, 1 essay 40%, 1 seminar presentation 20%.
Advanced study on a specific topic which reflects the current state of research knowledge in the field of information technology in teaching and learning. Development of the skills for designing integrated learning environments which are to be delivered or experienced through computer-based systems. Research into learning from such systems, impact on educational organisation and delivery, design, instructional and evaluation strategies for these programs.
Textbooks:
No set text, reference lists to current journals and monographs will be provided.
Co-ordinator: Associate Professor J Hedberg.

EDGA960 Foundation of Policy Studies
Autumn or Spring session; 8 credit points (3 hrs per wk seminar alternating fortnightly with 3 hrs per wk workshop)
Assessment: 4 minor assignments 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.
Textbooks:
Co-ordinator: Professor C Fasano.
EDGA961 Policy Research and Policy Analysis
Autumn or Spring session; 8 credit points (3 hrs per wk seminar alternating fortnightly with 3 hrs per wk workshop)
Pre-requisite: EDGA960
Assessment: 4 minor assignments 20%, 1 major assignment 30%, 1 examination 30%, policy simulation 20%.

Policy analysts and researchers construct the information base out of which analysis can be carried out and efficient decisions can be made along the way from policy formulation to implementation and evaluation of policy programs. Knowledge of discipline-oriented policy enquiry methodologies - the tools of the trade of policy analysts and researchers - is indispensable in understanding how and why Australian educational policies take on their specific outlook.

Textbooks:
Co-ordinator: Professor C Fasano.

EDGA963 Education Policy in Australia
Autumn or Spring session; 8 credit points (3 hrs per wk seminar alternating fortnightly with 3 hrs per wk workshop)
Pre-requisite: EDGA960
Assessment: 4 minor assignments 20%, 1 major assignment 30%, 1 examination 30%, policy simulation 20%.

Many of the issues and debates in educational policy at any given point in time rest on situations emerged and decisions taken at various points in the past. This subject focuses on the evolution of educational policy in Australia as it has been shaped by political, social, economical, institutional and pedagogical factors. Current policy debates such as those on public and private education, federal and state roles in education, participation, special programs, representation and financing will be 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.

Textbooks: No set text.
Co-ordinator: Professor R Linke.

EDGA964 Educational Management and Administration
Autumn or Spring session; 8 credit points (2 hrs lectures and 1 hr seminar per wk)
Pre-requisite: EDGA960
Assessment: 3 seminar papers 15% each, final examination 55%.

This subject examines some of the ways in which improved management and administration can contribute to more effective planning and policy implementation in education. Topics covered include devolution/centralised control and the accountability of management, and the role of program budgeting in the management of resources. Case studies are drawn from Australia and overseas.

Textbook:
Co-ordinator: Professor K Gannicott.

EDGA965 Resource Allocation in Education
Autumn or Spring session; 8 credit points (2 hr lecture and 1 hr seminar per wk)
Pre-requisite: EDGA960
Assessment: 3 seminar papers 15% each and final examination 55%.

This subject examines the allocation of economic and financial resources to education in Australia and overseas. The extensive literature on the economic benefits from education is explored, with particular reference to the implications for educational policy and planning at both state and national level in Australia. The pattern and sources of educational expenditure are analysed and a study is made of cost concepts and their measurement in education. Particular attention is paid to the role of output budgeting in education, and the introduction of school-based budgeting in NSW and elsewhere.

Textbooks:
Co-ordinator: Professor K Gannicott.

EDGA966 Leadership and School Management
Autumn session; 8 credit points (1 hr lecture, 2 hrs tutorials/workshops per wk)
Assessment: written assignment 20%, project report 50%, project seminar 10%, research paper 10%.

This subject is designed to provide educational leaders with the knowledge and skills needed to facilitate the effective management of human resources in the implementation of policies and programs in educational settings. The content will include a critical examination of planning strategies, analysis of professional development models and current practices as applied to working with people in professional organizations. The subject will require a critical examination of the relationship between relevant theories, organizational structures and current professional development programs. Students will demonstrate competence in the design, implementation and evaluation of pertinent aspects of professional development.

Textbooks: To be advised.
Co-ordinator: Associate Professor M Harris.
EDGA970 Language Learning and Development
Autumn session; 8 credit points (1 hr lecture, 2 hr tutorial per wk)
Assessment: major assignment 50%, two minor assignments 25% each.
This subject focuses on the way language develops over the lifespan of the individual. It examines early development where oral language, interactions with caregivers and emergent literacy are studied, as well as the transition from home to school. Later phases include the early school period, the transition to secondary school, later schooling and the transition to adulthood in both tertiary education and the workplace. This developmental perspective highlights theories of language learning, models of language, sociocultural variation and the implications of theory for the role of the teacher. There will be a study of the language demands placed on the learner during the various developmental phases and of the ways in which the learner and the teacher, within the various phases, respond to these demands.
Textbooks: To be advised.
Co-ordinator: Dr P Harris.

EDGA971 Assessment and Evaluation of Language & Literacy
Autumn or Spring session; 8 credit points ((3 hrs per wk of workshops and tutorials)
Pre- or co-requisite: EDGA970 for students specialising in the Language and Literacy Program.
Assessment: two projects 40% each and a log book 20%.
This subject will require students to examine the relationship between the axioms and assumptions underlying different paradigms of evaluation and theories of language and literacy education. In particular the subject examines both past and current issues and theoretical underpinnings of evaluating student learning. It will critically examine these issues in terms of contemporary theories of language and literacy learning. It will draw on recent research and theory into psychometrics, qualitative evaluation, and linguistics. Students will also be required to trial and evaluate a range of assessment and evaluation instruments and procedures
Textbooks:
There is no set text. Students will be advised of appropriate readings and papers.
Co-ordinator: Associate Professor B Cambourne.

EDGA972 Literacy: Theory into Practice
Autumn session; 8 credit points (3 hrs per wk)
Pre- or co-requisite: EDGA970 for students specialising in the Language and Literacy Program.
Assessment: reflective journal 30%, two assignments 30% each, seminar 10%.
In this subject students will examine the nexus between literacy theories and classroom practices. The emphasis in this subject will be on literacy process and pedagogy rather than analysis of language. It will examine the processes which underpin effective and ineffective literacy behaviours and instructional practice. Students will critically analyse a range of past and current instructional strategies and identify their theoretical underpinnings. Finally students will examine the methodology for integrating the literacy within Key Learning Areas.
Textbooks:
Readings and papers to be selected.
Co-ordinator: Ms J Turbill.

EDGA973 Language, Ideology and Culture
Autumn or Spring session; 8 credit points (1 hr lecture, 2 hr seminar per wk)
Pre- or co-requisite: EDGA970 for students specialising in the Language and Literacy Program.
Assessment: seminar 25%, text analysis 30%, project 45%.
This subject will draw on current writing in sociology, cultural studies, semiotics and linguistics to study the relationship between language, ideology and culture. Students will examine the contribution of language to the (re)production of cultural values and social meanings through an analysis of written and spoken texts such as curriculum documents, journal articles, school text books and other resource materials, teacher/student talk and interaction in other educational settings. It has particular relevance to those teaching in literacy and/or literature contexts but with a more general relevance to those examining policy or curriculum documents and other written and spoken texts. Topics to be covered include: theories of ideology; the relationship between discourse(s) and ideology, subjectivity and language; power and language; the operation of ideology through texts and developing a critical reading position.
Textbook:
Co-ordinator: Dr J Wright.

EDGA974 Children's Literature
Autumn or Spring session; 8 credit points (1 hr lecture, 2 hrs seminars and tutorials per wk)
Pre- or co-requisite: EDGA970 for students specialising in the Language and Literacy Program.
Assessment: one essay 30%, seminar presentation and paper 30%, one report 40%.
In this subject students will be asked to analyse critically a selection of books written for children in the light of contemporary commentaries on the relationship between literature, the individual and society. Topics to be covered include the nature and consequences of literacy; literacy and schooling; narrative and thought; the transmission of norms through children's literature; and the relationship between the reader, the text and society. Students will be
asked to consider the ways in which social and psychological factors influence the ways in which the set texts might be interpreted, and to examine the possible influences they might exert on the children who read them.

Textbooks:
Co-ordinator: Mr P Geekie.

EDGA975 Educational Linguistics
Autumn or Spring session; 8 credit points (1 hr lecture, 2 hr tutorial per wk)
Pre- or co-requisite: EDGA970 and EDGA976 for students specialising in the Language and Literacy Program.
Assessment: assignments 50%, text analyses 50%.
This subject will extend the understandings about language introduced in EDGA976 Text and Context through a more detailed study of language and how it works. It will draw principally on a functional model of language which focuses on the effective use of language in order to understand the world and to interact socially. This knowledge will be applied to classroom contexts and deal with issues such as programming with a language focus, assessing students’ language and evaluating teaching materials. It will also be applied to research, particularly with a view to developing analytic techniques which can be used in studies where texts and language are the data base.
Textbooks: No set text.
Co-ordinator: Dr B Winser.

EDGA976 Text and Context
Autumn session; 8 credit points (1 hr lecture, 2 hr tutorial per wk)
Pre- or co-requisite: EDGA970 for students specialising in the Language and Literacy Program.
Assessment: assignments 60%, field report 40%.
This subject explores the relationship between texts and their contexts, focusing on the nature of language and its role in the learning process. It draws on a functional model of language in order to examine the way in which language is used for various purposes, both in the community and in education. Through an analysis of texts students will explore issues such as relationship between culture and language; similarities and differences between spoken and written language; the language of different subject areas; the ways in which interpersonal relationships influence language and the language of classroom interaction.
Textbooks: No set text. Students will be advised of appropriate readings.
Co-ordinator: Ms J Hammond.

EDGA980 Foundations of TESOL
Autumn session; 8 credit points (1 hr lecture, 2 hr seminar per wk)
Pre- or co-requisite: EDGA976 for students specialising in the TESOL program.
Assessment: three written assignments of equal weighting.
The major purpose of this subject is to assist students develop a theoretical framework from which to make informed and principled decisions in TESOL education. In developing this framework the subject will draw on understandings developed in the subject Text and Context, as well as other aspects of TESOL education. Specifically the content of the subject will include the following:
- an overview of the TESOL field and issues of significance in the teaching of English as a second language, English as a foreign language, English for specific purposes, English for academic purposes, English for vocational purposes and bilingual education
- first and second language development: similarities and differences; linguistic, educational, maturational and affective factors affecting success in learning a second or foreign language; bilingualism
- an historical overview of approaches to teaching TESOL and a critical analysis of these approaches.
Textbook:
Co-ordinator: Ms B Derewianka.

EDGA981 Second Language Literacy
Spring session; 8 credit points (1 hr lecture, 2 hr seminar per wk)
Pre- or co-requisite: EDGA976 for students specialising in the TESOL program.
Assessment: three written assignments of equal weighting.
This subject will explore the social, cultural and ideological nature of literacy through a consideration of what it means to be literate (and illiterate) within Australia and other cultures. It will consider the role of literacy within a range of social, educational and vocational contexts. As well it will cover the following: a critical analysis of theories of reading and writing and their relevance for second language literacy development; an analysis of approaches to teaching literacy, with a consideration of their relationship to approaches to TESOL; the relationship between spoken and written language; their similarities and differences and the different roles they play in learning; implications of this relationship for developing effective literacy programs for second/foreign language learners; principles for developing effective literacy programs; strategies for supporting the learning of literacy for ESL/EFL learners at beginner through to advanced levels.
EDUC892 Methodology and Programming in TESOL

Autumn session; 8 credit points (1 hr lecture, 2 hr seminar per wk)

Pre- or co-requisite: EDGA976 for students specialising in the TESOL program.
Assessment: assignment 50%, essay 50%.

This subject aims to prepare teachers of NESB learners to effectively meet the needs of such students. It will examine the cultural, educational and language backgrounds of NESB learners and will look at the development and implementation of TESOL programs according to the nature of the clientele (e.g. primary/secondary/adult; beginners/intermediate/advanced). The programming cycle will include a consideration of an underlying theory of language learning, the development of aims and objectives in light of this theory, appropriate teaching/learning activities, and evaluation of teaching materials, assessment strategies and program evaluation.

Textbooks: No set text.

Co-ordinator: Ms J Hammond.

EDGA983 Assessment in TESOL

Spring session; 8 credit points (1 hr lecture and 2 hr seminar per wk)

Pre- or co-requisite: EDGA976 for students specialising in the TESOL program.
Assessment: assignment 50%, essay 50%.

This subject will examine various approaches to language assessment, from informal observation and self-assessment through to formal testing. In order to develop appropriate programs, TESOL teachers must be able to identify the needs of their students. This requires a solid grounding in the assessment of learners' oral language, reading and writing. In addition, they need to be able to critically analyse and evaluate formal assessment procedures and if necessary, learn how to design assessment tasks and prepare their students to sit for external tests. Students will take into account the interests of various stakeholders and will review various reporting practices.

Textbooks: No set text. Students will be required to buy a set of subject readings.

Co-ordinator: Ms B Derewianka.

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: school practice teaching reports.

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 wks total practice teaching experience.

Co-ordinator: Dr M Wilson.

EDUC801 Learners with Special Needs

Spring session; 4 credit points (2 lectures, 1 tutorial)
Assessment: tutorial presentation 30%, major assignment 30%, minor assignment 10%, examination 30%.

This subject aims at developing an understanding of those learners in regular classrooms who do not succeed at the same rate as their peers, either through behaviour disorders or through some learning difficulty. The main focus of the subject is the development of teaching strategies and behaviour management skills which will enable teachers to increase the effectiveness of their teaching and facilitate the learning of all students.

Textbook:

Co-ordinator: Ms D Konza.

EDUC815 Perspectives in Education

Double session (A); 4 credit points (4 hrs lectures, 1 hr tutorial per wk for 7 wks).
Assessment: 2 essays 30% each, exam 40%.

The subject introduces students to basic concepts in Philosophy, Psychology, Sociology and the History of Australian Education in relation to the contribution each can make to an understanding of the process of education in the classroom and beyond. Lectures in each of the four areas will be supported by tutorials which examine the relationships between the four areas and their educational implications. The subject forms a foundation for studies in more depth offered as electives in EDUC819 and EDUC820.

Textbooks: To be advised

Co-ordinator: Ms N Southall.
EDUC816 Professional Studies B
Double session (A); 8 credit points
Assessment: attendance, exercises, essays.
This subject covers several elements related to classroom management 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. Teaching techniques and classroom dynamics will be included in this course. Final practice teaching session and group discussions may be held.
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 the end of this course, 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.
Co-ordinator: Dr M Wilson.

EDUC817 Curriculum Studies
Double session (A); 8 credit points
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.
Co-ordinator: Dr M Wilson.

EDUC819 Perspectives in Education B
Double session (A); 8 credit points
Assessment: varies between electives.
Secondary students enrol in this subject.
Co-ordinator: Dr M Wilson.

EDUC820 Perspectives in Education C
Double session (A); 4 credit points
Assessment: varies between electives.
Primary students enrol in this subject.
Perspectives in Education B and C are designed to give students flexibility and to allow them to pursue in depth area(s) of their choice following on from EDUC815. Secondary students will choose two topics and Primary students one, from the variety which will be offered depending on staff availability. It is strongly recommended that students choose topics outside the core areas of their undergraduate degrees.
Co-ordinator: To be advised.

METHOD SUBJECTS
These subjects relate the student's subject background, from their undergraduate studies, to the presentation of this material in the classroom.
The student will examine the implications of the conceptual frameworks and apply the knowledge, strategies and skills, established in the other strands of the course, to the study of the specific school curricula in the relevant teaching area of the students and the implementation of these curricula in the schools. The topics studied will include: the aims of the curriculum and their relationship to the aims of education; educational perspectives relevant to the subject area; the establishment of an appropriate learning environment; teaching styles, strategies and skills as they apply to the presentation of the curriculum; programming, unit writing and lesson planning; student assessment and evaluation of the learning programs and teacher performance in relation to the presentation of the curriculum; classroom management; and, the survey and evaluation of contemporary resources.

EDUC821 Social Science I Method
Double session (A); 4 credit points

EDUC822 Social Science II Method
Double session (A); 4 credit points
Students who wish to teach Social Science at the secondary school level will need to complete EDUC821 and EDUC822 successfully.
Co-ordinator: Dr M Wilson.

EDUC831 English Method*
Double session (A); 4 credit points
Co-ordinator: Dr M Wilson.

EDUC832 History Method*
Double session (A); 4 credit points
Co-ordinator: Dr M Wilson.

EDUC841 English as a Second Language Method*
Double session (A); 4 credit points
Co-ordinator: Dr M Wilson.

EDUC842 French Method*
Double session (A); 4 credit points
Co-ordinator: Dr M Wilson.

EDUC844 Italian Method*
Double session (A); 4 credit points
Co-ordinator: To be advised.

*EDUC831,832,841,842, 844 and 845 are single Methods subject, and students will need to complete two of these subjects successfully.
EDUC845 Japanese Method
Double session (A); 4 credit points
Co-ordinator: To be advised.

EDUC851 Mathematics I Method
Double session (A); 4 credit points
Co-ordinator: Dr M Wilson.

EDUC852 Mathematics II Method
Double session (A); 4 credit points
Students who wish to teach mathematics at the secondary school level will need to complete EDUC851 and EDUC852 successfully.
Co-ordinator: Dr M Wilson.

EDUC861 Primary I Method
Double session (A); 6 credit points
Co-ordinator: Dr M Wilson.

EDUC862 Primary II Method
Double session (A); 6 credit points
Students who wish to teach at the primary school level will need to complete EDUC861 and EDUC862 successfully.
Co-ordinator: Dr M Wilson.

EDUC871 Science I Method
Double session (A); 4 credit points
Co-ordinator: Dr M Wilson.

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 EDUC871 and EDUC872 successfully.
Co-ordinator: Dr M Wilson.

EDUC881 Art I Method
Double session (A); 4 credit points
Co-ordinator: Dr M Wilson.

EDUC882 Art II Method
Double session (A); 4 credit points
Students who wish to teach art at the secondary school level will need to complete EDUC881 and EDUC882 successfully.
Co-ordinator: Dr M Wilson.

EDUC891 Music I Method
Double session (A); 4 credit points
Co-ordinator: Dr M Wilson.

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 EDUC891 and EDUC892 successfully.
Co-ordinator: Dr M Wilson.

*EDUC831, 832, 841, 842, 844 and 845 are single Methods subject, and students will need to complete two of these subjects successfully.
FACULTY OF ENGINEERING
FACULTY OF ENGINEERING

PRINCIPAL OFFICERS

Dean: Professor Tibor G Rozgonyi
Sub Dean: Dr G John Montagner
Faculty Officer: Vacant

MEMBERSHIP

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

- Civil and Mining Engineering
- Environmental Engineering
- Materials Engineering
- Mechanical Engineering

(For Electrical and Computer Engineering, refer to Faculty of Informatics)

RESEARCH COURSES AVAILABLE

All Units offer Honours Master of Engineering and Doctor of Philosophy degrees by research.

POSTGRADUATE PROGRAMS

Programs are available in the Faculty in the following areas:

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For Electrical, Computer and Telecommunications Engineering, refer to Faculty of Informatics.
FULL TIME STAFF

Dean
Professor Tibor G Rozgonyi, DipMaths/Phys Eger, DipMining Eng PhD Miskolc

Sub-Dean
Dr G John Montagner, BE UNSW, PhD, CEng, MIEAust, AACS, FAIEA, MIEEE

Faculty Officer
Vacant

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Professor of Civil Engineering
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Senior Lecturer
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Lecturers
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Masoud Samandi, BSc Shiraz, MSc PhD Birm, MAVS
Geoffrey M Spinks, BAppSc PhD Melb, MRACI, MIEAust, CChem, CEng

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Ian Ashcroft, BSc, DPhil Ox
David Wedler, BSc Lat, MSc Melb, PhD Monash
Professional Officer
Nicholas D Mackie, BSc ANU, ASEM, MSA

DEPARTMENT OF MECHANICAL ENGINEERING

Departmental Head & Professor of Mechanical Engineering
Michael P West, BSc MSc PhD MIT, CEng, FIEAust

Professor of Manufacturing Engineering
Guenther Arndt, BE Mech MEngSc Melb, PhD Monash, CEng, FIEAust, FlMfgE, VDI, Mem CIRP

Professor of Materials Handling & Processing
Peter C Arnold, BE PhD UNSW, DSc, CEng, FIEAust, MIMechE

Associate Professors
A Kiet Tieu, BE PhD WA, MIEAust, MASME
Robert T Wheway, BE PhD UNSW, CEng, FIEAust

Senior Lecturers
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Peter R Gibson, BSc PhD L'borough, CEng, MIMfgE
Arnold G McLean, BE UNSW, PhD, CEng, MIEAust
G John Montagner, BE UNSW, PhD, CEng, MIEAust, AACS, FAIEA, MIEE
Elias Siores, BSc N'cle(UK), MSc PhD Brun, DipEd Lond, MBA, CEng, FWTA, MTWI, MAWS, MAINDT, MIQA
Wee-King Soh, BSc BE Sysd, MEngSc PhD UNSW, CEng, MIEAust
Peter W Wypych, BE PhD, CEng, MIEAust

Lecturers
Paul Cooper, BSc MSc PhD Lond, DIC, CEng, MIEAust, ACGI, MAIRAH, MANZ SES
X Daniel Fang, BE ME Beijing, PhD, CEng, MIEAust, MASME, MSME
Oliver C Kennedy, BE UNSW, PhD
Devi P Saini, BE Jodh, ME Pilani, PhD WA, CEng, MIEAust

Honorary Associate Professor
Keith Enever, BSc(Eng) PhD Lond, CEng, MICE

Fellows
Zhihong Gu, BE, ME NEU, PhD, CEng, MIEAust, MIMechEC
Renhu Pan, BE, ME USTB, PhD
Ching-Fu Yu, BSc Chung-Hsing, MSME, NJIT, PhD, CEng, MIEAust

Professional Officers
Des Jamieson, BA DipEd
Ian J Kirby, BSc(Eng) UNSW, CEng, MIEAust, MASME
Trent Z She, BE CSUT (China), MAusIMM

VISITING COMMITTEE

Mr Russ Bressington, General Manager Manufacturing, David Brown Gear Industries Limited
Mr Malcolm Burns, Group General Manager, BHP Collieries Division
Alderman Kerrie Christian, Materials Engineer, BHP Slab & Plate Products Division and Alderman Wollongong City Council
Mr Peter Fitch, Chief Executive, ANI Manufacturing Group
Dr Robert Hobbs, General Manager Research & Technology, BHP Sheet & Coil Products
Mr Greg Klamus, Regional Manager, Illawarra Water Board
Mr Ian McMaster, Group General Manager, BHP Sheet & Coil Products Division
Mr Michael Muston, Managing Director, MSB Illawarra Ports Authority
Mr Warwick Powis, Manager Maintenance Services, BHP Steel SPPD
Professor Alek Samarin, Chairman & Director of Research, Boral Resources Pty Ltd
Mr E J Whitehead, Director Education and Training, Institution of Engineers Australia
Mr Marsden Williams, Group Chairman, B & W Steel Pty Limited
Mr Bruce Williams, Manager Manufacturing & Engineering, M M Metals - Rod & Wire Products
Mr Peter Wolfe, Director Corporate Strategy, RTA
CIVIL ENGINEERING

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Engineering by Coursework or Research
3. Graduate Diploma in Engineering
4. Graduate Diploma in Engineering (Public Works)

POSTGRADUATE PROGRAMS

Structural and Transportation Engineering
Water & Geotechnical Engineering

CURRENT RESEARCH AREAS

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

- Geotechnical engineering
- Slope stability
- Reinforced earth
- Steel and concrete structures
- Cementitious materials for construction
- Finite element and finite strip methods
- Bridge engineering
- Structural dynamics
- Flood studies
- Hydraulics and hydrology
- Water quality engineering
- Waste management
- Road construction materials
- Roads engineering
- Traffic engineering
- Microcomputer applications in analysis and design
- Computer-aided design and drafting

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN STRUCTURAL & TRANSPORTATION ENGINEERING
leading to the Honours Master of Engineering

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<tr>
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<td>Electives</td>
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<td>CIVL905</td>
<td>Transportation Engineering</td>
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<tr>
<td>CIVL914</td>
<td>Analysis and Design of Bridge Structures</td>
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<td>CIVL918</td>
<td>Steel Structures</td>
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<tr>
<td>CIVL923</td>
<td>Advanced Reinforced Concrete</td>
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<tr>
<td>CIVL924</td>
<td>Advanced Studies in Computer Aided Design and Draughting</td>
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<tr>
<td>CIVL975</td>
<td>Environmental Planning</td>
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For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN WATER & GEOTECHNICAL ENGINEERING
leading to the Honours Master of Engineering

<table>
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<td>Reliability in Geotechnical Engineering</td>
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<td>CIVL908</td>
<td>Advanced Soil Mechanics</td>
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<td>CIVL909</td>
<td>Advanced Foundation Engineering</td>
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<td>CIVL912</td>
<td>Engineering Hydrology</td>
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<td>Environmental Engineering I</td>
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<td>CIVL919</td>
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<td>CIVL920</td>
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For further details, see Course Requirements below.
## OTHER POSTGRADUATE SUBJECTS

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<tr>
<td>CIVL901</td>
<td>Project</td>
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<td>CIVL903</td>
<td>Concrete Technology</td>
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<td>CIVL906</td>
<td>Traffic Engineering</td>
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<td>CIVL907</td>
<td>Civil Engineering Computations</td>
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<td>CIVL910</td>
<td>Vibration of Structures</td>
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<td>CIVL911</td>
<td>Finite Element Methods</td>
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<td>CIVL913</td>
<td>Estuary and Coastal Engineering</td>
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<td>CIVL916</td>
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<td>CIVL921</td>
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### Graduate Diploma in Engineering (Public Works)

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<td>CIVL972</td>
<td>Water Engineering</td>
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<td>CIVL973</td>
<td>Roads and Streets</td>
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<td>CIVL974</td>
<td>Traffic and Transportation</td>
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<td>CIVL975</td>
<td>Environmental Planning</td>
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<td>CIVL976</td>
<td>Powers, Duties and Financial Management</td>
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<td>CIVL977</td>
<td>Management and Industrial Relations</td>
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<td>CIVL978</td>
<td>Asset and Maintenance Management</td>
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## COURSE REQUIREMENTS

### 1. DOCTOR OF PHILOSOPHY

Candidates for the degree enrol in the subject CIVL957.

### 2. HONOURS MASTER OF ENGINEERING

The Department of Civil and Mining Engineering offers the following opportunities for graduates to conduct research or pursue an advanced course of study:

(a) **The Honours Master of Engineering Degree by Research Thesis**

The Honours Master of Engineering Degree by research thesis is intended for those engineers qualified and interested in specific problems.

(b) **The Honours Master of Engineering Degree by Combinations of Coursework and Research Thesis**

This is the normal course for the younger Civil Engineer, which provides him or her with training in research and also allows greater depth of understanding in specialist postgraduate areas.

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**Aims**

The programs of study allow the student to combine specialist postgraduate subjects according to his or her undergraduate background, with project work. It is intended to strengthen professional training in a context of problems and policies which reach beyond the conventionally recognised boundaries of single disciplines. Elective postgraduate subjects and introductions to disciplines in which the student has no experience, are available.

The program for the Honours Master of Engineering Degree offered by the Department of Civil and Mining Engineering has two explicit aims:

(i) **Specialist Training.** Postgraduate training is provided for students with appropriate backgrounds, to enable professional development in their particular discipline. This is achieved by providing access to existing postgraduate courses already offered by Civil Engineering.

(ii) **Interdisciplinary Training.** An interdisciplinary framework is provided, within which postgraduate training in Civil Engineering may be integrated with other disciplines. This is achieved by the provision of limited access to concentrated study in other disciplines.
A candidate who has a Bachelor of Engineering with Honours at Class III or higher from this University, or an approved equivalent qualification, will enrol in subjects listed in the Postgraduate Schedule and with a value of not less than 48 credit points. Programs approved by the Department of Civil and Mining Engineering comprise:

(i) the subject CIVL955 ME Major Thesis;
(ii) the subject CIVL951 Dissertation plus four subjects from the list CIVL901 through CIVL925; or
(iii) the subject CIVL950 Dissertation plus six subjects from the list CIVL901 through CIVL925.

* It should be noted that among the listed subjects from CIVL901 through 925, only some are offered in any one year.

3. GRADUATE DIPLOMA IN ENGINEERING

A candidate who has completed a degree of Bachelor of Engineering and:

(a) who has not qualified for any class of Honours; or
(b) who wishes to qualify for the Graduate Diploma in Engineering;

will enrol in the 48 credit point subject CIVL899.

Upon satisfactory completion of the subject CIVL899, the candidate is eligible for award of the Graduate Diploma in Engineering. A person who is awarded the Graduate Diploma in Engineering and who subsequently satisfies the requirements for award of the degree of Honours Master of Engineering is required by Course Rule 504(2) to surrender the testamur and associated rights for the Graduate Diploma prior to receiving the Honours Master degree.

4. 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:

(i) Acts, regulations and codes of practice;
(ii) Financial analysis;
(iii) 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 1 year full-time or 2 years part-time study for those candidates who hold a Bachelor Degree.

SUBJECT DESCRIPTIONS

CIVL899 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.
Co-ordinator: To be advised.

CIVL901 Project
Autumn or Spring session; 6 credit points
First stage of a comprehensive study concerning a specific topic; formulation of problem and literature study, critical examination of current work; planning of solution methods; discussion of results of initial work. With the approval of the Head of Department this subject may be taken by students who intend to enrol in a 12 credit point thesis. It will not be available to those students who enrol in a 24 credit point thesis.
Co-ordinator: To be advised.

CIVIL 902 Reliability in Geotechnical Engineering
Autumn or Spring session; 6 credit points
Conventional safety factor and its limitations in representing safety or reliability; geotechnical predictions and associated degree of confidence; variability of soil and rock deposits; uncertainties in material parameters, geotechnical models and failure mechanisms; statistical data and probabilistic approaches; failure probabilistic approaches compared; reliability of geotechnical systems; recent developments probability of failure propagation and initiation, most probable extent of embankment or slope failure.
Co-ordinator: Associate Professor R N Chowdhury.

CIVL903 Concrete Technology
Autumn or Spring session; 6 credit points
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.
Co-ordinator: Associate Professor D G Montgomery.
CIVL904 Highway Materials
*Autumn or Spring session; 6 credit points*
*Co-ordinator: To be advised.*

CIVL905 Transportation Engineering
*Autumn or Spring session; 6 credit points*
Transport problems; urban travel demands; the transport planning process; travel-demand forecasting; trip generation analysis; model split analysis; trip distribution analysis; route assignment analysis; economic analysis; employment and population forecasts; evaluation of transport plans; airport engineering; classification, design standards, layout and development, terminal facilities, city-airport transport systems; urban transportation; railroad engineering; light rail rapid transit; pipeline transportation; belt conveyors - freight and passengers.
*Co-ordinator: To be advised.*

CIVL906 Traffic Engineering
*Autumn or Spring session; 6 credit points*
Characteristics of vehicles, drivers and pedestrians; vehicle speeds, volumes, journey times; accident studies; traffic management; parking; traffic prediction; economic analysis.
*Co-ordinator: To be advised.*

CIVL907 Civil Engineering Computations
*Autumn or Spring session; 6 credit points*
(i) The use of problem oriented languages in solving Civil Engineering problems, including ICES STRUDL, COCO, 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.
*Co-ordinator: To be advised.*

CIVL908 Advanced Soil Mechanics
*Autumn or Spring session; 6 credit points*
The principle of effective stress and its implications; stress paths in soil mechanics; problems of 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.
*Co-ordinator: Associate Professor R N Chowdhury.*

CIVL909 Advanced Foundation Engineering
*Autumn or Spring session; 6 credit points*
General principles concerning selection of foundation type on different types of soil; difficult ground conditions including collapsing and swelling soils; performance observations in geotechnical engineering; preventative and remedial measures against ground movement and slope failure; buoyancy rafts and basements; selected problems of foundation analysis and design; dam foundations; stress distribution and stress analysis; soil sampling and exploration; soil stabilisation including drainage.
*Co-ordinator: Associate Professor R N Chowdhury.*

CIVL910 Vibrations of Structures
*Autumn or Spring session; 6 credit points*
*Co-ordinator: Dr R Kohoutek.*
CIVL911 Finite Elements Methods  
*Autumn or Spring session; 6 credit points*  
Variational principles; element shape functions, "displacement" and "stress" formulations, curved and isoparametric elements; computer programming techniques; the finite strip procedure; analysis of plates, shells and axisymmetric structures; analysis of slab- and box-type bridge superstructures.  
*Co-ordinator:* To be advised.

CIVL912 Engineering Hydrology  
*Autumn or Spring session; 6 credit points*  
Storm models, storm maximisation, extreme precipitation estimates, intensity-frequency duration analysis, design storms; rainfall losses, infiltration models, design losses; advanced unit - hydrograph theory, synthetic unit hydrographics; hydrograph synthesis by runoff - routing; design floods for rural and urban catchments.  
*Co-ordinator:* Associate Professor M J Boyd.

CIVL913 Estuary and Coastal Engineering  
*Autumn or Spring session; 6 credit points*  
Theory of deep and shallow water waves, wave generation and decay, wave breaking, wave forces on structures; harbour resonance and seiche action, wave refraction and diffraction; breakwater design; shoreline processes, beach protection; tidal theory, propagation of tides into estuaries; sediment transport; fixed and loose bed hydraulic models; inspection of hydraulic model.  
*Co-ordinator:* Associate Professor M J Boyd.

CIVL914 Analysis and Design of Bridge Structures  
*Autumn or Spring session; 6 credit points*  
Types of bridges; similarities between bridges and some plate- and shell-type building structures; 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.  
*Co-ordinator:* Associate Professor Y C Loo.

CIVL915 Numerical Methods in Civil Engineering  
*Autumn or Spring session; 6 credit points*  
*Co-ordinator:* Associate Professor M J Lowrey.

CIVL916 Research Topics in Civil Engineering I  
*Autumn or Spring session; 6 credit points*  
Topics will be selected from those areas of Civil Engineering in which staff members or visiting staff members to the department, are engaged in active research.  
*Co-ordinator:* To be advised.

CIVL917 Environmental Engineering I  
*Autumn or Spring session; 6 credit points*  
Collection and treatment of waste water; physical, chemical and biological treatment processes; measurement of pollutants; industrial and solid waste disposal; air pollution; noise pollution; environmental impact statements.  
*Co-ordinator:* Dr M Sivakumar.

CIVL918 Steel Structures  
*Autumn or Spring session; 6 credit points*  
*Co-ordinator:* Associate Professor Y C Loo.

CIVL919 Earth Structures  
*Autumn or Spring session; 6 credit points*  
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.  
*Co-ordinator:* Associate Professor R N Chowdhury.

CIVL920 Civil Engineering Hydraulics  
*Autumn or Spring session; 6 credit points*  
Uniform flow in rivers and flood plains; open channel roughness and flow resistance; non-uniform open channel flow; backwater curve computation; unsteady open channel flow. Flood wave routing; hydraulics of spillways; hydraulics of bridges and culverts; retarding basin hydraulics; urban stormwater drainage design; sediment transport in open channel flow.  
*Co-ordinator:* Associate Professor M J Boyd.

CIVL921 Wastewater Engineering  
*Autumn or Spring session; 6 credit points*  
Wastewater collection; sewer and storm drainage design; chemistry and microbiology of wastewater; effect on environment; physical, chemical and biological treatment processes and design facilities; sludge treatment and disposal; wastewater reuse; advanced wastewater treatment; treatment plant design.  
*Co-ordinator:* Dr M Sivakumar.

CIVL922 Water Supply Engineering  
*Autumn or Spring session; 6 credit points*  
Water quality; water supply sources and demand; chemistry and microbiology of water;
aeration and oxygen transfer; theory of coagulation, flocculation, sedimentation and filtration; disinfection; water softening, desalination; design of mains and service pipes; distribution of water.

Co-ordinator: Dr M Sivakumar.

CIVL923 Advanced Reinforced Concrete
Autumn or Spring session; 6 credit points
Strength and behaviour of reinforced concrete members in flexure, shear, torsion and compression; bond and anchorage; non-rectangular sections; numerical and semigraphical methods. Short and long-term deflections of beams; effect of repeated loading and impact. Analysis and design of deep beams. Yield line method for slabs. Design code provisions.

Co-ordinator: Associate Professor Y C Loo.

CIVL924 Advanced Studies in Computer Aided Design and Draughting
Autumn or Spring session; 6 credit points
Fundamentals of CADD; the workstation; hardware and software for CADD configurations; operation and facilities of CADD systems; AutoCAD, MeggaCAD, Prodesign II and other Micro-CAD systems; LISP language; programming with AutoLISP; customising AutoCAD, creating new commands, screen menus and tablet menus; CADD database, bill of materials; structural detailing; CADD management.

Co-ordinator: Dr Y W Wong.

CIVL925 Conservation of Structures
Autumn or Spring session; 6 credit points
Introduction to Principles of Conservation: the Burra Charter, the NSW Heritage Act. Understanding traditional construction methods. Structural forms of historical buildings and bridges. Conservation of foundations; conservation of masonry walls; conservation of roof structures; conservation of bridges and industrial structures; local case studies; international case studies.

Co-ordinator: Dr Y W Wong.

CIVL950 Dissertation
Double session (A); 12 credit points

CIVL951 Dissertation
Double session (A); 24 credit points

CIVL955 ME Major Thesis
Double session (A); 48 credit points

CIVL957 PhD Major Thesis
Double session (A); 48 credit points

CIVL971 Environmental Engineering II
Autumn or Spring session; 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.

Co-ordinator: Dr M Sivakumar.

CIVL972 Water Engineering
Autumn or Spring session; 6 credit points
Urban drainage design; design flood estimation techniques; culvert design; flood-way design; detention basin design; erosion and scour protection; flood mitigation practice; coastal engineering.

Co-ordinator: Associate Professor M J Boyd.

CIVL973 Roads and Streets
Autumn or Spring session; 6 credit points
Pavement design, maintenance and construction; geometric design of roads, road capacity, aesthetics, sociological impact, and landscaping; road structures.

Co-ordinator: To be advised.

CIVL974 Traffic and Transportation
Autumn or Spring session; 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.

Co-ordinator: To be advised.

CIVL975 Environmental Planning
Autumn or Spring session; 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.

Co-ordinator: Dr M Sivakumar.

CIVL976 Powers, Duties and Financial Management
Autumn or Spring session; 6 credit points
The local government act 1919; ordnance; 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.

Co-ordinator: To be advised.

CIVL977 Management and Industrial Relations
Autumn or Spring session; 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.

Co-ordinator: Associate Professor D G Montgomery.
CIVL978 Asset and Maintenance Management

Autumn or Spring session; 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.

Co-ordinator: To be advised.
ENVIRONMENTAL ENGINEERING

COURSES OFFERED
The following postgraduate courses are available:

1. Doctor of Philosophy by Research
2. Honours Master of Engineering by Research

POSTGRADUATE PROGRAMS
Water and Geotechnical Engineering
Structural and Transportation Engineering

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN ENVIRONMENTAL ENGINEERING
leading to the Honours Master of Engineering

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For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

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<td>Advanced Topics in Environmental Engineering</td>
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</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY
Candidates for the degree enrol in the subject EENG957.

2. HONOURS MASTER OF ENGINEERING
The Department of Civil and Mining Engineering offers the following opportunity for graduates to conduct research or pursue an advanced course of study:

(a) The Honours Master of Engineering Degree by Research Thesis
The Honours Master of Engineering Degree by research thesis is intended for those engineers qualified and interested in specific problems in environmental engineering.

CURRENT RESEARCH AREAS
The following areas of research are available to candidates undertaking the Honours Master of Engineering degree by research and the Doctor of Philosophy degree:

- Water quality engineering
- Sludge management
- Environmental hydraulics and unit processes
- Pollution control engineering
- Water quality and quantity modelling of catchments, rivers and lakes
- Reuse of industrial solid wastes
- Soil erosion and sediment transport
- Environmental pollution modelling
- Recycling and waste management
- Environmental Geotechnology
- Solid-liquid separation processes
- Transport and the environment

A candidate who has a Bachelor of Engineering with Honours at Class III or higher from this University, or an approved equivalent qualification, will enrol in subjects listed in the Postgraduate Schedule and with a value of not less than 48 credit points. Programs approved by the Department of Civil and Mining Engineering comprise:

(i) the subject EENG955 ME Major Thesis; or
(ii) for candidates seeking entry who have not satisfied the entry requirement, the course shall comprise subjects having a value of at least 96 credit points consisting of the subject EENG899 Advanced Topics in Environmental Engineering, plus EENG955 ME Major Thesis.
SUBJECT DESCRIPTIONS

EENG899 Advanced Topics in Environmental Engineering
Double session; 48 credit points
One or more advanced topics taken from the following: computer aided analysis and design; computer methods; environmental hydraulics; pollution control; erosion and land rehabilitation; waste management; environmental impact assessment; legislation; environmental modelling processes; environmental geotechnology; transport and the environmental ground and mine-water.
Co-ordinator: Dr M Sivakumar.

EENG955 ME Major Thesis
Double session (A); 48 credit points
Candidate carries out research under the general direction of supervisor(s) on an approved specialised topic within the area of Environmental Engineering.
Co-ordinator: Dr M Sivakumar.

EENG957 PhD Major Thesis
Double session (A); 48 credit points
Candidate carries out research under the general direction of the appointed supervisor(s) in an approved specialised topic within the area of environmental engineering.
Co-ordinator: Dr M Sivakumar.
MATERIALS ENGINEERING

COURSES OFFERED
The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Engineering by Coursework or Research
3. Master of Engineering Studies
4. Graduate Diploma in Engineering
5. Graduate Diploma in Materials Welding and Joining

POSTGRADUATE PROGRAMS
Advanced Engineering Materials
Materials Processing

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

SCHEDULE OF PROGRAMS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Recent Developments in Materials</td>
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<tr>
<td>MATL905</td>
<td>Metallic Materials</td>
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<tr>
<td>MATL906</td>
<td>Ceramic Materials</td>
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<td>MATL907</td>
<td>Polymeric Materials</td>
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<tr>
<td>MATL972</td>
<td>Materials Design</td>
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For further details, see Course Requirements below.
# POSTGRADUATE PROGRAM IN MATERIALS PROCESSING

leading to the Honours Master of Engineering

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
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<tr>
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<tr>
<td>Electives</td>
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<tr>
<td>MATL901</td>
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<td>MATL902</td>
<td>Special Topic in Materials B</td>
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<tr>
<td>MATL903</td>
<td>Recent Developments in Materials</td>
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<tr>
<td>MATL921</td>
<td>Formability of Sheet Material</td>
<td>6</td>
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<tr>
<td>MATL931</td>
<td>Mineral Processing</td>
<td>6</td>
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<tr>
<td>MATL932</td>
<td>Surface Engineering of Materials</td>
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<tr>
<td>MATL937</td>
<td>Process Metallurgy</td>
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</tr>
</tbody>
</table>

For further details, see *Course Requirements* below.

# POSTGRADUATE PROGRAM IN METALLURGY

leading to the Honours Master of Engineering

<table>
<thead>
<tr>
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<th>Credit Points</th>
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<tbody>
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<tr>
<td>MATL905</td>
<td>Metallic Materials</td>
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<tr>
<td>MATL911</td>
<td>Mechanical Behaviour of Materials</td>
<td>6</td>
</tr>
<tr>
<td>MATL951</td>
<td>Performance of Materials A</td>
<td>6</td>
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<td>MATL952</td>
<td>Performance of Materials B</td>
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<tr>
<td>MATL971</td>
<td>Prescription and Selection of Materials</td>
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</table>

For further details, see *Course Requirements* below.

# POSTGRADUATE PROGRAM IN MATERIALS ENGINEERING

leading to the Master of Engineering Studies

<table>
<thead>
<tr>
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<td>MATL987</td>
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<td>MATL988</td>
<td>Metallurgical Processing 2</td>
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<tr>
<td>MATL989</td>
<td>Metallurgical Processing 3</td>
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<tr>
<td>MATL974</td>
<td>Engineering Materials 1</td>
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<td>MATL975</td>
<td>Engineering Materials 2</td>
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<tr>
<td>MATL976</td>
<td>Refractories</td>
<td>6</td>
</tr>
<tr>
<td>MATL977</td>
<td>Corrosion and Degradation</td>
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<tr>
<td>MATL978</td>
<td>Mechanical Behaviour</td>
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<tr>
<td>MATL981</td>
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<tr>
<td>MATL982</td>
<td>Special Topic B</td>
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<td>MATL983</td>
<td>Special Topic C</td>
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<tr>
<td>MATL985</td>
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<tr>
<td>MATL986</td>
<td>Dissertation B</td>
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</table>

For further details, see *Course Requirements* below.
OTHER POSTGRADUATE SUBJECTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>MATL899</td>
<td>Advanced Topics in Materials</td>
<td>48</td>
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<tr>
<td>MATL901</td>
<td>Special Topic A</td>
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<tr>
<td>MATL902</td>
<td>Special Topic B</td>
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<tr>
<td>MATL955</td>
<td>ME Major Thesis</td>
<td>48</td>
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<tr>
<td>MATL992</td>
<td>Dissertation</td>
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</tr>
<tr>
<td>MATL957</td>
<td>PhD Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in MATL957.

2. HONOURS MASTERS OF ENGINEERING

A candidate who has a degree of Bachelor of Engineering with Honours at Class III or higher from this University, or an approved equivalent qualification, will enrol in subjects listed in the Postgraduate Schedule and with a value of not less than 48 credit points. Programs approved by the Department of Materials Engineering comprise:

(i) the subject MATL955 Major Thesis;
(ii) a dissertation MATL992 plus four subjects, each with a value of 6 credit points.

For any particular year the availability of subjects offered will be determined by student numbers and demand.

3. MASTER OF ENGINEERING STUDIES

A candidate who has completed a relevant major study, or approved equivalent work, either as part of, or in addition to, a bachelor degree will enrol in subjects having a value of not less than 48 credit points, and listed in the Postgraduate Schedule. A candidate who has not completed such a major study, or the equivalent, will enrol in subjects having a value of not less than 72 credit points.

The subjects available for the course are listed in the Schedule. Each subject:

(a) will be offered normally over one session,
(b) has a value of 6 credit points, and
(c) will be assessed by a combination of quizzes, assignments, practical work and examination.

The Head of the Department may approve the inclusion, in the course, of subjects with value of no more than 18 credit points from other sections of the Schedule.

4. GRADUATE DIPLOMA IN ENGINEERING

A candidate who has completed a degree of Bachelor of Engineering and

(a) who has not qualified for any class of Honours, or
(b) who wishes to qualify for the Graduate Diploma in Engineering,

will enrol in the 48 credit point subject MATL899.

Upon satisfactory completion of the subject MATL899 the candidate is eligible for award of the Graduate Diploma in Engineering. A person who is awarded the Graduate Diploma in Engineering and subsequently satisfies requirements for award of the degree of Honours Master of Engineering is required by Course Rule 504(2) to surrender the testamur and associated rights for the graduate diploma prior to receiving the honours masters degree.

5. GRADUATE DIPLOMA IN MATERIALS WELDING AND JOINING

A candidate who has completed a degree of Bachelor of Engineering, or the equivalent, and who wishes to qualify for the Graduate Diploma in Materials Welding and Joining will enrol in the 48 credit point subject ENGG899.

Upon satisfactory completion of the subject ENGG899 the candidate is eligible for award of the Graduate Diploma in Materials Welding and Joining. A person who is awarded the Graduate Diploma in Materials Welding and Joining and subsequently satisfies requirements for award of the degree of Honours Master of Engineering is required by Course Rule 504(2) to surrender the testamur and associated rights for the graduate diploma prior to receiving the honours masters degree.
SUBJECT DESCRIPTIONS

Each of the subjects described below, with the exception of ENGG899, MATL958, MATL957, MATL899 and MATL992, 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 program (ii) subject to the approval by the Head of Department.

ENGG899 Advanced Topics in Materials Welding and Joining
48 credit points
A program, approved by the Head of Department, of 16 modules of theoretical and practical training in welding and joining.
Co-ordinator: Professor D Dunne.

MATL899 Advanced Topics in Materials
48 credit points
A program, approved by the Head of Department, of project work and studies of advanced topics in materials selected from the fields of processing, physical and mechanical behaviour, microstructure and observational methods.
Co-ordinator: Associate Professor N F Kennon.

MATL901/MATL902 Special Topics in Materials A/B
There are no set syllabi for these subjects. It is intended that they will be offered on a specialised materials engineering topic by members of the Department, or visitors to the Department.
Co-ordinator: Associate Professor N F Kennon.

MATL903 Recent Developments in Materials
Considerations of the structures, properties, technology and applications of advanced materials with emphasis on materials important to the Australian economy.
Co-ordinator: Associate Professor N F Kennon.

MATL905 Metallic Materials
Co-ordinator: Associate Professor D P Dunne.

MATL906 Ceramic Materials
Co-ordinator: Mrs S Nightingale.

MATL907 Polymeric Materials
Polymers, formation and classification. Effects of structure and additives on properties. Composite materials with polymeric matrices.
Co-ordinator: Dr G Spinks.

MATL908 Phase Transformations
Analysis and theories of solid state phase transformations, nucleation phenomena, diffusional and diffusionless growth; application to precipitation, eutectoid, proeutectoid, martensitic and other processes.
Co-ordinator: Associate Professor N F Kennon.

MATL911 Mechanical Behaviour of Materials
Behaviour of ceramics, metals and polymers under stress, stress-strain relationships, time and temperature dependent phenomena.
Co-ordinator: Dr T Chandra.

MATL921 Formability of Sheet Material
Flow behaviour of sheet materials under uniaxial and biaxial stress; analyses of industrial forming processes.
Co-ordinator: Dr T Chandra.

MATL931 Mineral Processing
Co-ordinator: Professor N Standish.

MATL932 Surface Engineering of Materials
Surface coating processes, coating of materials with ceramics, metals and polymers; quality and performance of the product; surface heat treatment processes.
Co-ordinator: Professor D Dunne.

MATL937 Process Metallurgy
Ironmaking. Sintering and pelletising; time-temperature effects; phase composition; strength-reducibility relationships; mix selection; cokemaking; fundamental relations; coke strength and reactivity; blast furnace process; Rist and Reichert diagrams; burden design and distribution; stack, bosh and hearth processes; DRI.
Steelmaking. Hot metal pretreatment - thermodynamic and kinetic aspects; BOF steelmaking; top and bottom blowing; thermodynamics and kinetics of refining; vacuum methods; alloy recovery; deoxidation; continuous casting; solidification.
Co-ordinator: Professor N Standish.

MATL951 Performance of Materials A
Mechanical behaviour. Elastic, plastic, anelastic and viscoelastic responses. Fracture-brittle and ductile. Fracture toughness and crack growth. Effects of temperature, strain rate and geometry. Griffith equation and
Co-ordinator: Dr T Chandra.

MATL952 Performance of Materials B
Co-ordinator: Associate Professor G W Delamore.

MATL955 ME Major Thesis
48 credit points
Co-ordinator: Associate Professor N F Kennon.

MATL957 PhD Major Thesis
48 credit points
Co-ordinator: Associate Professor N F Kennon.

MATL961 Materials Analysis A
Co-ordinator: Professor D P Dunne.

MATL971 Prescription and Selection of Materials
Co-ordinator: Associate Professor N F Kennon.

MATL972 Material Design
Relationship between composition, structure, properties and behavioural characteristics of industrially significant materials control of structure; developments in design of advanced materials for engineering applications.
Co-ordinator: Professor D Dunne.

MATL974 Engineering Materials 1
6 credit points
Co-ordinator: Professor D Dunne.

MATL975 Engineering Materials 2
6 credit points
Co-ordinator: Associate Professor N Kennon.

MATL976 Refractories
6 credit points
Chemical composition and properties of oxide and non-oxide ceramics commonly used in refractory applications, bonding of refractories, monolithic refractories and installation techniques, refractory cements, degradation examples of applications in the iron and steel industry, methods for testing refractory properties.
Co-ordinator: Mrs S Nightingale.

MATL977 Corrosion and Degradation
6 credit points
Co-ordinator: Dr G Spinks.

MATL978 Mechanical Behaviour
6 credit points
Mechanical properties of materials: strength, hardness, strain hardening, creep, rupture, impact, dislocation and grain boundary effects. Mechanical forming operations: rolling, extrusion, forging and wire drawing, flow stress determination. Thermomechanical processing: time and temperature dependent behaviour, die design, high temperature materials problems, defects in mechanical processing. Industrial applications.
Co-ordinator: Dr T Chandra.

MATL981 Special Topic A
6 credit points
Specialist topic in materials engineering offered by members of staff, industrial experts or visitors to the Department.
Co-ordinator: Associate Professor N F Kennon.

MATL982 Special Topic B
6 credit points
Specialist topic in materials engineering offered by members of staff, industrial experts or visitors to the Department.
Co-ordinator: Associate Professor N F Kennon.
MATL983 Special Topic C
6 credit points
Specialist topic in materials engineering offered by members of staff, industrial experts or visitors to the Department.
Co-ordinator: Associate Professor N F Kennon.

MATL985 Dissertation A
6 credit points
Extensive literature survey and analysis of some topic relevant to materials engineering and approved by the Head of the Department.
Co-ordinator: Associate Professor N F Kennon.

MATL986 Dissertation B
6 credit points
Extensive literature survey and analysis of some topic relevant to materials engineering and approved by the Head of the Department.
Co-ordinator: Associate Professor N F Kennon.

MATL987 Metallurgical Processing 1
6 credit points
Co-ordinator: Professor N Standish.

MATL988 Metallurgical Processing 2
6 credit points
Thermodynamics and kinetics of metallurgical systems: Gibbs free energy, Ellingham diagrams, slag-metal equilibria, reaction order, rate constants, temperature and pressure effects. Transport phenomena: momentum, heat and mass transfer. Metallurgical reaction engineering: batch and flow reactors, design principles.
Co-ordinator: Professor N Standish.

MATL989 Metallurgical Processing 3
6 credit points
Co-ordinator: Professor N Standish.

MATL992 Dissertation
24 credit points
This subject may comprise a minor research project, an extensive literature survey and analysis, or the development of improved modelling methods of materials processes.
Co-ordinator: Associate Professor N F Kennon.
MECHANICAL ENGINEERING

COURSES OFFERED

The following courses are available:

1. Doctor of Philosophy
2. Honours Master of Engineering (Mechanical Engineering)
3. Honours Master of Engineering (Maintenance Management)
4. Graduate Diploma in Engineering (Mechanical Engineering)
5. Graduate Diploma in Engineering (Maintenance Management)

POSTGRADUATE PROGRAMS

Advanced Manufacturing
Applied Mechanics
Maintenance Management
Materials Handling
(Total Quality Management is available as a cross Faculty program)

CURRENT RESEARCH AREAS

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

Materials Handling:
Bulk solids handling and prediction of bin wall loads and flowrates
Energy technology

Pneumatic and hydraulic conveying
Manufacturing & Management:
Automated QC and reliability engineering
Automated statistical process control
Knowledge-based computer simulation of machining process
Automated warehousing systems
Automated welding and joining
Chip control in automated manufacture
Fuzzy set and fuzzy logic control
Cost-effective quality management
Cybernetic quality system
Intelligent manufacturing systems
Expert/knowledge system in automated machining
Japanese quality and manufacturing techniques
Maintenance management
Manufacturing technology and systems
Mechanical engineering design
Monitoring/diagnosis of manufacturing processes and machinery conditions
New algorithms in robotics
Non-destructive testing
Recreation engineering
System identification and control
Total quality management
Applied Mechanics and Heat Transfer:
Bio-mechanics
Computational fluid mechanics
Cavitation
Finite element analysis
Heat transfer in two phase flow
Microwave applications
Mine water flows in longwall operation
Rolling mill technology
Solar thermal system analysis and design
Solid mechanics of elastic and magneto-elastic bodies
Ozone transfer into water for disinfection
Tribology - bearings, friction and wear

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN ADVANCED MANUFACTURING leading to the Honours Master of Engineering

<table>
<thead>
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<tr>
<td>Electives</td>
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<tr>
<td>MECH919</td>
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<td>MECH929</td>
<td>Advanced Topics in Mechanical Engineering 2</td>
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<tr>
<td>MECH932</td>
<td>Reliability Systems Management</td>
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<tr>
<td>MECH934</td>
<td>Advanced Manufacturing Processes</td>
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<tr>
<td>MECH935</td>
<td>Integrated Manufacturing Systems</td>
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<td>MECH939</td>
<td>Advanced Topics in Mechanical Engineering 3</td>
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<td>MECH942</td>
<td>Expert Systems in Manufacturing</td>
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<tr>
<td>MECH949</td>
<td>Advanced Computer Control of Machines and Processes</td>
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<tr>
<td>MECH950</td>
<td>Advanced Robotics</td>
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<td>MECH960</td>
<td>Industrial Quality Management</td>
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<tr>
<td>MECH961</td>
<td>Quality Improvement Systems and Implementation</td>
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<tr>
<td>MECH963</td>
<td>Industrial Quality Technology</td>
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<td>MECH965</td>
<td>Quality in Engineering Design</td>
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<tr>
<td>MECH967</td>
<td>International Quality Techniques</td>
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For further details, see Course Requirements below.
## POSTGRADUATE PROGRAM IN APPLIED MECHANICS

leading to the Honours Master of Engineering

<table>
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<td>Plus at least three (3) from:</td>
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<td>MECH906</td>
<td>Experimental and Analytical Modelling</td>
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<tr>
<td>MECH908</td>
<td>Computer Aided Design</td>
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<td>MECH917</td>
<td>Air Conditioning and Refrigeration</td>
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<td>Advanced Topics in Mechanical Engineering 1</td>
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<td>MECH920</td>
<td>Numerical Methods in Mechanical Engineering</td>
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<tr>
<td>MECH921</td>
<td>Hydrodynamics</td>
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<tr>
<td>MECH924</td>
<td>Continuum Mechanics</td>
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<tr>
<td>MECH925</td>
<td>Advanced Fluid Power</td>
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<td>MECH926</td>
<td>Applied Fluid Mechanics</td>
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<td>MECH929</td>
<td>Advanced Topics in Mechanical Engineering 2</td>
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<tr>
<td>MECH930</td>
<td>Mechanical Vibration and Condition Monitoring</td>
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<tr>
<td>MECH931</td>
<td>Friction Lubrication and Wear</td>
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<td>Solar Energy</td>
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<td>MECH944</td>
<td>Heat Transfer 2</td>
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For further details, see Course Requirements below.

## POSTGRADUATE PROGRAM IN MAINTENANCE MANAGEMENT

leading to the Graduate Diploma in Engineering (Mtce Mgt) and the Honours Master of Engineering (Mtce Mgt)

### Graduate Diploma in Engineering (Mtce Mgt)*

<table>
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<tr>
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<tr>
<td>MATH949</td>
<td>Statistical Thinking</td>
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<tr>
<td>or ENGG901</td>
<td>Engineering Data Reduction and Error Analysis</td>
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<tr>
<td>MECH970</td>
<td>Maintenance Management</td>
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<tr>
<td>MECH973</td>
<td>Systems Engineering and Life Cycle Management</td>
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<tr>
<td>MGMT911</td>
<td>Organisational Behaviour</td>
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</table>

Plus 4 electives to be selected from the list below.

### Honours Master of Engineering (Mtce Mgt)*

<table>
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<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td></td>
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</tr>
<tr>
<td>MECH951</td>
<td>Dissertation</td>
<td>24</td>
</tr>
<tr>
<td>MECH972</td>
<td>Condition Based Maintenance</td>
<td>6</td>
</tr>
<tr>
<td>MECH974</td>
<td>Information Systems in Maintenance Management</td>
<td>6</td>
</tr>
</tbody>
</table>

Plus 2 electives to be selected from the list below.

### Electives

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCY901</td>
<td>Accounting for Managers</td>
<td>6</td>
</tr>
<tr>
<td>LAW960</td>
<td>Legal Studies for Professionals</td>
<td>6</td>
</tr>
<tr>
<td>MECH971</td>
<td>Systems Analysis for Maintenance</td>
<td>6</td>
</tr>
<tr>
<td>MECH975</td>
<td>Maintenance in Manufacturing Industry</td>
<td>6</td>
</tr>
<tr>
<td>MECH976</td>
<td>Industrial Engineering Techniques in Maintenance Management</td>
<td>6</td>
</tr>
<tr>
<td>MECH977</td>
<td>Advanced Topics in Maintenance 1</td>
<td>6</td>
</tr>
<tr>
<td>MECH978</td>
<td>Advanced Topics in Maintenance 2</td>
<td>6</td>
</tr>
<tr>
<td>MGMT912</td>
<td>Organisation Structure and Control</td>
<td>6</td>
</tr>
<tr>
<td>MGMT953</td>
<td>Human Resource Management</td>
<td>6</td>
</tr>
<tr>
<td>MGMT976</td>
<td>Competitive Strategy and Analysis</td>
<td>6</td>
</tr>
</tbody>
</table>

* This is considered to be the normal progression. Candidates entering the masters course directly may be required to take one or more of the core subjects listed under Graduate Diploma.

For further details, see Course Requirements below.
POSTGRADUATE PROGRAM IN MATERIALS HANDLING SYSTEMS
leading to the Honours Master of Engineering

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MECH951</td>
<td>Dissertation</td>
<td>24</td>
</tr>
<tr>
<td>MECH911</td>
<td>Bulk Solids Handling Systems 1</td>
<td>6</td>
</tr>
<tr>
<td>MECH912</td>
<td>Bulk Solids Handling Systems 2</td>
<td>6</td>
</tr>
<tr>
<td>MECH913</td>
<td>Pneumatic Transport of Bulk Solids</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
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<tr>
<td>MECH906</td>
<td>Experimental and Analytical Modelling</td>
<td>6</td>
</tr>
<tr>
<td>MECH914</td>
<td>Hydraulic Transport of Bulk Solids</td>
<td>6</td>
</tr>
<tr>
<td>MECH919</td>
<td>Advanced Topics in Mechanical Engineering 1</td>
<td>6</td>
</tr>
<tr>
<td>MECH922</td>
<td>Energy Technology 1</td>
<td>6</td>
</tr>
<tr>
<td>MECH923</td>
<td>Energy Technology 2</td>
<td>6</td>
</tr>
<tr>
<td>MECH927</td>
<td>Physical Processing of Bulk Solids</td>
<td>6</td>
</tr>
<tr>
<td>MECH929</td>
<td>Advanced Topics in Mechanical Engineering 2</td>
<td>6</td>
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<tr>
<td>MECH931</td>
<td>Friction, Lubrication and Wear</td>
<td>6</td>
</tr>
<tr>
<td>MECH939</td>
<td>Advanced Topics in Mechanical Engineering 3</td>
<td>6</td>
</tr>
<tr>
<td>MECH945</td>
<td>Bulk Solids Handling Systems 3</td>
<td>6</td>
</tr>
<tr>
<td>MECH960</td>
<td>Industrial Quality Management</td>
<td>6</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MECH899</td>
<td>Advanced Topics in Engineering</td>
<td>48</td>
</tr>
<tr>
<td>MECH928</td>
<td>Finite Element Techniques in Mechanical Engineering</td>
<td>6</td>
</tr>
<tr>
<td>MECH955</td>
<td>ME Major Thesis</td>
<td>48</td>
</tr>
<tr>
<td>MECH957</td>
<td>PhD Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in MECH957 PhD Major Thesis (48 credit points).

2. HONOURS MASTER OF ENGINEERING (Mechanical)

A candidate who has a Bachelor of Engineering with Honours Class III or higher from this University, or an approved equivalent qualification, will enrol in subjects listed in the Postgraduate Schedule and with a minimum value of 48 credit points. Approved programs comprise:

(i) the subject MECH955 ME Major Thesis, for full-time and part-time candidates, or

(ii) the subject MECH951 Dissertation plus 24 credit points of coursework according to one of the 3 approved programs: Advanced Manufacturing; Applied Mechanics; Materials Handling Systems.

3. HONOURS MASTER OF ENGINEERING (Mtce Mgt)

Direct entry to the Honours Master of Engineering (Mtce Mgt) course will require a tertiary degree of approved standard from a recognised institute, eg a BE (Hons) degree or equivalent.

Maintenance engineers having completed their Graduate Diploma degree (Maintenance Mgt/Engineering) will be given appropriate credits for the course they already have completed. Credits may also be approved for other qualifications or experience for suitable applicants.

In order to then obtain an Honours Masters of Engineering (Mtce Mgt), the candidate must have a Graduate Diploma in Engineering (Mtce Mgt) or equivalent and have completed successfully a further 48 credit points. These must consist of four subjects selected from 2 core and 2 elective subjects and a 24 credit point research project leading to a dissertation. Note that prior to the conferring of the master degree, the candidate is required according to
Course Rule 504(2) to surrender the testamur and associated rights for the diploma.

The research project required for the honours master degree will run in parallel with the formal coursework throughout the anticipated last year of a candidate's study. Students will be able to choose a suitable investigation from the current research activities at any of the Departments involved.

4. GRADUATE DIPLOMA IN ENGINEERING (Mechanical)

A candidate who has completed a degree of Bachelor of Engineering and
(a) who has not qualified for any class of Honours, or
(b) who wishes to qualify for the Graduate Diploma in Engineering will enrol in the 48 credit point subject MECH899.

Upon satisfactory completion of the subject MECH899, the candidate is eligible for award of the Graduate Diploma in Engineering (Mechanical).

A person who is awarded the Graduate Diploma in Engineering and subsequently satisfies requirements for award of the degree of Honours Master of Engineering is required by Course Rule 504(2) to surrender the testamur and associated rights for the graduate diploma prior to receiving the honours masters degree.

5. GRADUATE DIPLOMA IN ENGINEERING (Mtc Mgt)

Entry to this Diploma normally will require an approved Bachelor degree from this University or an approved equivalent qualification. However, maintenance managers/engineers without tertiary qualifications in engineering but with significant industrial experience, will also be considered for admission to a limited number of places.

A candidate will be awarded a Graduate Diploma in Engineering (Mtc Mgt) on successful completion of 48 credit points. 24 credit points of the core is compulsory, made up of four 6 credit point course work subjects - one subject from each of the Departments of Management and Mathematics, and two from Mechanical Engineering. The other 24 credit points will come from four 6 credit point electives.

Students completing the Graduate Diploma in Engineering (Mtc Mgt) at the University of Wollongong will have the option to enter into the Honours Master of Engineering (Mtc Mgt).

SUBJECT DESCRIPTIONS

Each of the subjects described below, with the exception of MECH899, MECH951, MECH955 and MECH957, has 3 contact hours per week for one session.

Subjects offered by other Departments will be acceptable for the Masters degree course in Mechanical Engineering subject to the approval by the Head of the Department.

ENGG901 Engineering Data Reduction and Error Analysis
Autumn or Spring Session; 6 credit points (3 hrs per week).
Assessment: final examination and compulsory assignments during session.
Textbook: To be advised.
Co-ordinator: Associate Professor A K Tieu.

ENGG902 Statistical Process Control in Manufacturing and Service Industries
Autumn or Spring session; 6 credit points (3 hrs per week).
Assessment: final examination and compulsory assignments during session.
Process capability and indices, Process stability, Specification and control limits, The seven statistical tools, x-bar charts, R Charts, p charts, pn charts, u charts, c charts, CUSUM charts, Exponentially weighted moving averages, Human behaviour requirements in SPC, Leadership requirements, Small group activities, Decision making for process improvement, Acceptance Sampling, Use of computers and Artificial Intelligence in SPC, SPC case studies.
Textbook: To be advised.
Co-ordinator: Dr P Gibson.

MECH899 Advanced Topics in Engineering
Double session; 48 credit points
Students will normally take a selection of topics at advanced level. The selection of the topics will be subject to the approval of the Head of the Department in which the student wishes to enrol and subsequently specialise.
Co-ordinator: Dr W K Soh.

MECH906 Experimental and Analytical Modelling
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination, and compulsory assignments during session.
Stochastic processes; Random signal analysis; Correlation function; Probability functions and spectral density functions; System identification; Correlation analysis; Spectral analysis. Modelling of continuous systems using analytical methods; Lumped parameter systems; Linearisation. Solution of equations. Parameter estimation. Review of classical control techniques; Multi-input multi-output systems; Transfer functions; State space analysis; Stability analysis; Interaction and inverse Nyquist array; Optimal control.

Co-ordinator: Dr G J Montagner.

MECH908 Computer Aided Design
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Application of boundary element method; computer simulation of engineering systems; optimization techniques; computer graphics, visualisations and animations.
Co-ordinator: Associate Professor R T Wheway.

MECH911 Bulk Solids Handling Systems 1
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Flow patterns of bulk solids constrained by bins and hoppers; theory of flow; determination of flow properties; hopper design; bin loads; design of feeders.
Co-ordinator: Professor P C Arnold.

MECH912 Bulk Solids Handling Systems 2
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Further consideration concerning bin design; failure criteria for bulk solids; flow promotion; two-phase flow; effects of interstitial gas on flow of fine powders; mixing and segregation of bulk solids; design of trough belt conveyors and bucket elevators.
Co-ordinator: Professor P C Arnold.

MECH913 Pneumatic Transport of Bulk Solids
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination, mid-session examination and compulsory assignments during session.
Classification and selection of transport systems; flow patterns; pressure drop, minimum transport velocities; design parameters and examples; feeding and disengaging methods.
Co-ordinator: Dr P W Wypych.

MECH914 Hydraulic Transport of Bulk Solids
Autumn or Spring Session: 6 credit points (28 hrs lectures; 14 hrs tutorials/lab)
Assessment: 2 hr final examination. Other short examinations, tutorials/assignments may be incorporated in the final assessment.
Properties of slurries, slurry classification; flow behaviour, flow predictions, friction losses; system equipment, system design & operation; economics; wear of equipment & material degradation.
Co-ordinator: Dr A G McLean.

MECH917 Air Conditioning and Refrigeration
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Air conditioning of buildings; design heat load calculation; plant sizing and design; refrigeration plant components; thermodynamic analysis and design.
Co-ordinator: Dr P Cooper.

MECH919 Advanced Topics in Mechanical Engineering 1
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
There is no set syllabus for this subject. It is intended that it normally be offered on a specialised mechanical engineering topic given by members of the Department, visiting academic staff or engineering consultants.
Co-ordinator: Dr W K Soh.

MECH920 Numerical Methods in Mechanical Engineering
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Studies using finite difference and boundary element techniques. Topics are selected from the following areas of Mechanical Engineering: Aerodynamics, boundary layer flow, elasticity, gas dynamics, heat transfer, hydraulics and hydrodynamics.
Co-ordinator: Dr W K Soh.

MECH921 Hydrodynamics
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Applications of complex potential; unsteady fluid flows; foil theory and applications; cavitations and discontinuous flows; body hydrodynamics.
Co-ordinator: Dr W K Soh.
MECH922 Energy Technology 1  
**Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)**  
Assessment: final examination and compulsory assignments during session.  
Energy source evaluation; energy management; economics of coal utilisation; coal properties; handling and storage, preparation and beneficiation; combustion, environmental aspects of coal utilisation, advanced utilisation technologies; introduction to renewable energy sources.  
Co-ordinator: Dr A G McLean.

MECH923 Energy Technology 2  
**Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)**  
Assessment: 2 hr final examination. Other short examinations, tutorials/assignments may be incorporated in the final assessment.  
Evaluation of alternate fuels and energy sources; burner and combustor arrangements; cogeneration; co-production; combined cycle systems; MHD power generation; waste energy minimisation techniques; fuel handling and injection systems; combustion products, collection, treatment, handling & disposal; green house gas emission minimisation; alternate energy sources.  
Co-ordinator: Dr A G McLean.

MECH924 Continuum Mechanics  
**Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)**  
Assessment: final examination and compulsory assignments during session.  
An introduction to tensor analysis, classical theory of elasticity, fluid mechanics, thermodynamics of solids, thermoelasticity, viscoelasticity, plasticity, finite deformation theory.  
Co-ordinator: Dr A Basu.

MECH925 Advanced Fluid Power  
**Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)**  
Assessment: final examination and compulsory assignments during session.  
Fluid power components; circuit design: analysis of transmission, valve-controlled and feedback systems; electronic controls; vibration and transient response.  
Co-ordinators: Dr W K Soh and Associate Professor A K Tieu.

MECH926 Applied Fluid Mechanics  
**Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)**  
Assessment: final examination and compulsory assignments during session.  
A study of applied fluid mechanics which will include the analysis, design and control of a selection of fluid flow systems in industry.  
Co-ordinator: Dr W K Soh.

MECH927 Physical Processing of Bulk Solids  
**Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials/lab)**  
Assessment: 2 hr final examination. Other short examinations, tutorials/assignments may be incorporated in the final assessment.  
Bulk solids description and characterisation; crushing, grinding, thickening, separation, precipitation, filtration, blending, tableting, briquetting and agglomeration, sizing and classification; introduction to beneficiation; drying; intermediate processing and handling; control and instrumentation; dust generation and abatement.  
Co-ordinator: Dr A G McLean.

MECH928 Finite Element Techniques in Mechanical Engineering  
**Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)**  
Assessment: final examination and compulsory assignments during session.  
Co-ordinator: Dr A Basu.

MECH929 Advanced Topics in Mechanical Engineering 2  
As for MECH919.

MECH930 Mechanical Vibration and Condition Monitoring  
**Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)**  
Assessment: final examination and compulsory assignments during session.  
Co-ordinator: Associate Professor A K Tieu.

MECH931 Friction, Lubrication and Wear  
**Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)**  
Assessment: final examination and compulsory assignments during session.  
Co-ordinator: Associate Professor A K Tieu.
MECH932 Reliability Systems Management
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination. Other examinations, tutorials and assignments may be incorporated in the final assessment.
Failure modes and rates, reliability testing, redundancy, maintenance systems, design for reliability, failure interactions, systems safety analysis, reliability management.
Co-ordinator: Dr E Siores.

MECH933 Solar Energy
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Principles and techniques applicable to the analysis and design of solar thermal energy systems. Solar radiation; transmission and absorption by collectors; analysis and design of collectors; energy storage; system thermal calculations; solar process economics.
Co-ordinator: Dr G J Montagner.

MECH934 Advanced Manufacturing Processes
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Modelling of advanced manufacturing processes; manufacturing cost analysis; productivity and quality methods and measurements in manufacture; group technology; computer-assisted process planning; manufacturing optimisation; trends in advanced manufacturing processes.
Co-ordinator: Professor G Arndt.

MECH935 Integrated Manufacturing Systems
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
CIM concepts and applications; FMS; computer-process interfacing, monitoring and control; computer-aided quality control; component handling systems; human interface in the manufacturing system; future trends.
Co-ordinator: Professor G Arndt.

MECH936 Systems Modelling and Simulation in Manufacturing
Autumn or Spring session; 6 credit points (3 hrs lecture/lab per wk).
Assessment: final examination and compulsory assignments during session.
Modelling concepts; simulation concepts; basic simulation modelling; complex simulation modelling; random number generator; probabilistic input distribution; output data analysis; model validation; shop floor operation simulation; production planning simulation.
Co-ordinator: Dr G J Montagner.

MECH938 Economic Optimisation in Engineering
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Cost analysis and control, time value of money operations, measuring the work of investments, comparison of alternatives, depreciation and income tax, economic analysis of projects, forecasting, productivity, appraisal, break-even sensitivity and risk analysis, inventory and queuing problems, project management and operations research, contractual bidding and legal considerations.
Co-ordinator: Dr E Siores.

MECH939 Advanced Topics in Mechanical Engineering 3
As for MECH919.

MECH942 Expert Systems in Manufacturing
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials/lab)
Assessment: final examination and compulsory assignments during session.
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.
Co-ordinator: Dr G Siores.

MECH944 Heat Transfer 2
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials/lab)
Assessment: final examination and compulsory assignments during session.
Conduction: review of one-dimensional heat conduction and fin theory; analysis of two-dimensional and transient heat conduction using analytical and numerical methods. 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.
Co-ordinator: Dr P Cooper.

MECH945 Bulk Solids Handling Systems 3
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination and compulsory assignments during session.
Two phase solids flow; control and instrumentation of solids flow; feeding of fine bulk solids; mechanical conveyors and feeders, materials handling plant project management; materials handling plant design; maintenance and operation; flow of very cohesive, wet and fibrous bulk solids; container wall loads.
Co-ordinator: Dr A G McLean.
MECH949 Advanced Computer Control of Machines and Processes
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorial).
Assessment: final examination and compulsory assignments during session.
Applications of advanced computer control techniques, such as intelligent control, optimal control, fuzzy logic control, expert system-based control.
Co-ordinator: Dr X D Fang.

MECH950 Advanced Robotics
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorial).
Assessment: final examination and compulsory assignments during session.
Design of advanced robot structures and control systems, modelling of sensor-based robot systems, application of artificial intelligence in robot control.
Co-ordinator: Dr X D Fang.

MECH951 Dissertation
24 credit points.
Co-ordinator: To be advised.

MECH955 ME Major Thesis
Double Session; 48 credit points.
Co-ordinator: To be advised.

MECH957 PhD Major Thesis
Double Session; 48 credit points
Co-ordinator: To be advised.

MECH960 Industrial Quality Management
Autumn or Spring sessions; 6 credit points (28 hrs lectures; 14 hrs tutorials).
Assessment: final examination. Other examinations, projects, tutorials and assignments may be incorporated in the final assessment.
Quality systems, Accreditation v TQC; National and international quality policies (e.g. ISO9000); Supplier appraisal and auditing; Quality costs, JIT (Just In Time); Quality, process capability studies and statistical process control case-studies; Defect analysis; TPM: Total Productive Maintenance v TQC; Worker involvement in improvement role of quality circles (SGIA); Improvement management, education and training; Introduction to quality of design, reliability, safety and product liability.
Co-ordinator: Dr P R Gibson.

MECH961 Quality Improvement Systems and Implementation
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials).
Assessment: final examination. Other examinations, projects, tutorials and assignments may be incorporated in the final assessment.
Basic quality philosophy as per Feigenbaum, Juran, Deming and Crosby – emphasis on system, cost and people improvement;
Introduction to Practical Industrial Quality Systems (PIQS) (Kaizen, Ishikawa, Improvement Methodology and tools); Measurement of conformance and prevention of non-conformance; Team approaches to problem solving – the roles of management; Suppliers and customers; Implementation examples through case-studies of prominent organizations.
Co-ordinators: Professor G Arndt and Dr P R Gibson.

MECH963 Industrial Quality Technology
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials).
Assessment: final examination. Other examinations, projects, tutorials and assignments may be incorporated in the final assessment.
Appraisal systems: Vision, CNC measuring machines, in-process, in-cycle, and post process gauging, integrated quality in automated manufacturing processes, quality information systems; Measurement of geometry, size and surface texture; Calibration systems; The use of integrated SPC and expert systems.
Co-ordinator: Dr P R Gibson.

MECH965 Quality in Engineering Design
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials).
Assessment: final examination. Other examinations, projects, tutorials and assignments may be incorporated in the final assessment.
Design as the source of quality; Value engineering, failure mode and effects analysis; Organization for design quality; Design case studies in Taguchi methods and quality function deployment; Design standards, testing, reliability, safety maintainability, product liability, product certification; Contract and design reviews.
Co-ordinator: Dr P R Gibson.

MECH967 International Quality Techniques
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials).
Assessment: final examination. Other examinations, projects, tutorials and assignments may be incorporated in the final assessment.
Japan v the "West": Cultural and other differences, historical background; Specific Japanese quality and management concepts; International comparison; Training program/seminars: "Kaizen" philosophy, concepts, techniques and tools. Emphasis on people, simplicity and visibility in quality; Applications in manufacturing and service sectors.
Co-ordinator: To be advised.
MECH970 Maintenance Management
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination. Other short examinations, assignments and laboratory reports may be incorporated in the final assessment.
Overall perspective for maintenance in business context; Maintenance philosophies; Evolution of the need for maintenance management; Cost & profit drivers in maintenance; Maintenance organisation department structure (Resource and administration); Maintenance documentation & computer control; Quality assurance in maintenance; Implementation of maintenance planning; Human factors & motivation skills in maintenance environment; TQM Aspects: improvement methodology (Plan-Do-Check-Act).
Textbook:
Co-ordinator: Dr D P Saini.

MECH971 Systems Analysis for Maintenance
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination. Other short examinations, assignments and laboratory reports may be incorporated in the final assessment.
Maintenance Concept Design Methodology, Reliability Theory, Data Recordings and Analysis, Identification and Analysis of Failure Modes, Maintenance Rule Selection, Preventative Replacement Policies, Optimisation of Inspection Frequencies, Clustering of Tasks, Opportunity Maintenance, Specification of Resource Requirements.
Textbook: None.
Recommended Books:
Co-ordinator: Dr D P Saini.

MECH972 Condition Based Maintenance
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination. Other short examinations, assignments and laboratory reports may be incorporated in the final assessment.
Overview of fault diagnosis techniques (electrical-mechanical-computer); Identification of critical plant, failure types-modes. Diagnosis documentation, tables, and algorithms; Maintenance history documentation costs; Maintenance strategies; Target areas for successful applications; Sensor technology overview; Condition monitoring strategy, techniques and organisation; Automation aspects in condition monitoring; Expert-AI systems; Costs & problems associated with condition monitoring; Decisions on the periodicity of condition monitoring; Case studies.
Textbook:
Recommended Book:
Co-ordinator: Dr D P Saini.

MECH973 Systems Engineering and Life Cycle Management
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination. Other short examinations, assignments and laboratory reports may be incorporated in the final assessment.
Textbooks:
Co-ordinator: Dr E Stores.

MECH974 Information Systems in Maintenance Management
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination. Other short examinations, assignments and laboratory reports may be incorporated in the final assessment.
Analysis of maintenance information needs, data collection, types, and uses; Human factors in information systems; Computer information systems - a summary with a view to maintenance; Computer system selection for maintenance organisation, networking, economics; Distributed versus centralised computing; Computerisation of maintenance functions; Maintenance planning, appropriate costing and budget systems, control; Maintenance history records, condition monitoring equipment, spare parts inventory and control; Creation of user application software for various aspects of maintenance management; Survey and critical assessment of standard available maintenance related software packages.
Textbooks:
Co-ordinator: To be advised.

MECH975 Maintenance in Manufacturing Industry
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination. Other short examinations, assignments and laboratory reports may be incorporated in the final assessment.
Overview of manufacturing environment, industries and processes; Historical development and role of maintenance; Specific technologies, e.g. transportation and material handling equipment; Storage and retrieval equipment; Problems associated with the production-maintenance interface; Selection of maintenance strategy for particular manufacturing environments (e.g. job, batch and mass production, process industries); Fault diagnosis in computerised manufacturing machinery: Total productive maintenance; Historical and international perspective; Japanese input: "Kaizen" in maintenance; TQM and TPM; Human considerations; TQM methodology; Implementation of TPM; Developmental strategy, stages and steps; Importance of issues such as cleaning, losses, overall equipment effectiveness; Economic and organisational issues; Case studies, Australian application.
Textbooks:
Co-ordinator: To be advised.

MECH976 Industrial Engineering Techniques in Maintenance Management
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination. Other short examinations, assignments and laboratory reports may be incorporated in the final assessment.
Human Aspects of Maintenance and Reliability; Ergonomics; Work Measurement, Methods Engineering and Activity Sampling Applied to Maintenance Activities; Estimation of Maintenance Times; Maintenance Facilities Layout. Planning for Shutdowns and Overhauls; Inventory Control for Maintenance, Inventory Control Systems, Configuration Management, Warehouse Control, Evaluation of Maintenance Performance, Improving Maintenance Performance, TPM.
Textbooks:

Co-ordinator: Dr P R Gibson.

MECH977 Advanced Topics in Maintenance 1
Autumn or Spring session; 6 credit points
Assessment: to be advised.
There is no set syllabus for this subject. It is intended that it normally be offered on a specialised maintenance topic given by members of the Department, visiting academic staff or engineering consultants.
Co-ordinator: To be advised.

MECH978 Advanced Topics in Maintenance 2
Autumn or Spring session; 6 credit points
Assessment: to be advised.
There is no set syllabus for this subject. It is intended that it normally be offered on a specialised maintenance topic given by members of the Department, visiting academic staff or engineering consultants.
Co-ordinator: To be advised.

MECH980 Functional Analysis and Risk Management
Autumn or Spring session; 6 credit points (3 hrs per week).
Assessment: final examination and compulsory assignments during session.
Textbook:
Blanchard, BS and Fabrycky, WJ, Systems Engineering and Analysis.
Recommended Reference:
US MIL-STD-499B
Co-ordinator: Associate Professor A K Tieu.

MECH981 Concurrent Design
Autumn or Spring session; 6 credit points (3 hrs per week).
Assessment: final examination and compulsory assignments during session.
Textbook:
Recommended Reference:
US MIL-STD-499B
Co-ordinator: Associate Professor A K Tieu.
**MINING ENGINEERING**

**COURSES OFFERED**

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Engineering by Coursework or Research
3. Master of Mining Management
4. Graduate Diploma in Engineering
5. Graduate Diploma in Mining Management

**CURRENT RESEARCH AREAS**

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

- Roof bolting studies
- Longwall mining
- Rock mechanics
- Surface mining
- Mine simulation, planning and design
- Mine safety
- Geostatistics
- Computer applications in mining engineering

**SCHEDULE OF PROGRAMS**

**POSTGRADUATE PROGRAMS IN MINING MANAGEMENT**

Leading to the Graduate Diploma of Mining Management or the Master of Mining Management

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<td>MINE975</td>
<td>Evaluation in the Coal Mining Industry</td>
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<td>Placer Technology</td>
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<td>MINE947</td>
<td>Introductory Computing and Statistics for Geologists and Mining Engineers</td>
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<td>MINE948</td>
<td>Mine Ventilation and Environment</td>
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<td>MINE952</td>
<td>Geostatistics and Mine Planning</td>
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<td>MINE953</td>
<td>Mine Water - Origin, Inflow Predictions and Control</td>
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<td>MINE954</td>
<td>Strata Control - from First Principles to Practice</td>
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<td>MINE958</td>
<td>Environmental Impacts of Mining and Mineral Operations</td>
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<td>GEOL921</td>
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For further details, see Course Requirements below.
POSTGRADUATE PROGRAMS IN MINING ENGINEERING
Leading to the Honours Master of Engineering

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<td>Advanced Studies in Mining Engineering</td>
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<td>MINE903</td>
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<td>MINE905</td>
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<td>MINE906</td>
<td>Mining Engineering Techniques</td>
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<td>MINE911</td>
<td>Mine Service Engineering</td>
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For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

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COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY
Candidates for this degree enrol in MINE957.

2. HONOURS MASTER OF ENGINEERING
The Department of Civil and Mining Engineering offers graduates the following opportunities to conduct research or pursue an advanced course of study in Mining Engineering:

(a) The Honours Master of Engineering Degree by Research Thesis
The Honours Master of Engineering Degree by research thesis is intended for those engineers qualified and interested in specific problems.

(b) The Honours Master of Engineering Degree by Combination of Coursework and Research Thesis
This is the normal course for the younger mining Engineer, which provides him or her training in research and also allows greater depth of understanding in specialist postgraduate areas.

Aims
The programs of study allow the student to combine specialist postgraduate subjects according to his or her undergraduate background, with project work. It is intended to strengthen professional training in a context of problems and policies which reach beyond the conventionally recognised boundaries of single disciplines. Elective postgraduate subjects and introduction to disciplines in which the student has no experience, are available.

The program for the Honours Master of Engineering Degree has two explicit aims:

(i) Specialist Training. Postgraduate training is provided for students with appropriate backgrounds, to enable professional development in their particular discipline. This is achieved by providing access to existing postgraduate courses already offered;

(ii) Interdisciplinary Training. An interdisciplinary framework is provided, within which postgraduate training in Mining Engineering may be integrated with other disciplines. This is achieved by the provisions of limited access to concentrated study in other disciplines.
Entry Requirements
A candidate who has a Bachelor of Engineering with Honours at Class III or higher from this University, or an approved equivalent qualification, will enrol in subjects listed in the Postgraduate Schedule and with a value of not less than 48 credit points. Programs approved by the Department of Civil and Mining Engineering comprise:

(i) the subject MINE955 Major Thesis; or
(ii) the subject MINE951 Dissertation plus four subjects from the list MINE901 through MINE911; or
(iii) the subject MINE950 Dissertation plus six subjects from the list MINE901 through MINE911.

3. & 4. MINING MANAGEMENT PROGRAM

The Graduate Diploma in Mining Management and the Master in Mining Management are intended for mining industry personnel who wish to improve their employment opportunities. It is anticipated that the majority will have backgrounds in either engineering or science, and will take the opportunity to develop their knowledge of management through a course of study orientated towards a career in the mining industry. Particular emphasis is to be placed on making the courses available to candidates in remote locations, and subsequently it is intended that the courses be offered in a modular form comprising one wk of intensive formal coursework supplemented by precoursework and post-coursework assignments.

As many potential candidates are located in remote regions they will welcome the unique opportunity offered by an external postgraduate course. The courses will be offered in conjunction with the Key Centre for Mines, a joint initiative of the Departments of Civil and Mining Engineering and Geology at the University of Wollongong and the School of Mines at the University of New South Wales.

Aims
The courses aim to satisfy the continuing education needs of those minerals sector personnel wishing to upgrade and expand their credentials by presenting them with the opportunity to further their technical understanding of practices within the minerals industry whilst gaining valuable skills in Mining Management, Industrial Relations, Marketing and Financial Control. The management skills acquired from the courses will be a sound foundation for future executive positions.

Graduate Diploma in Mining Management
Candidates will be required to complete a total of 54 credit points: of which 24 credit points may be from 300/400 level subjects and 30 credit points from 900 level subjects. Advanced standing of up to 24 credit points of 300/400 level work may be granted on the basis of previous qualifications. A maximum of 18 credit points will be in Business Management or Science and Engineering with each candidate's course content being approved by an academic advisor.

Entry Requirements
Entry into the Graduate Diploma in Mining Management requires a three year degree or diploma in the fields of science and technology or commerce and economics with the qualifications of candidates applying for entrance to be assessed by the Head of the Department of Civil and Mining Engineering and the Head of the Department of Geology.

Master in Mining Management
This course will be offered on a part-time basis and will require a minimum study period of two years with full advanced standing. Candidates will be required to complete 96 credit points of work, a maximum of 24 credit points from 300/400 level subjects and a minimum of 24 credit points by research. Advanced standing of up to 24 credit points of 300/400 level subjects may be granted on the basis of to 24 credit points of 300/400 level subjects may be granted on the basis of previous qualifications.

Candidates with a technical background will be advised to undertake at least 50% of the formal coursework from Business Management whilst those with a business management background will be encouraged to undertake at least 50% of the postgraduate level coursework from Science and Engineering. The research project will be industry-based and tailored to the candidate's work-place requirements.

Entry Requirements
Entry into the Master of Mining Management requires a four year degree of appropriate standard from a recognized tertiary institution. Following the successful completion of the Graduate Diploma in Mining Management, a candidate will have the option of entering into the Master of Mining Management; where prior to the conferring of the degree of Master in Mining Management upon a candidate, that candidate shall surrender the testamur for the Diploma in Mining Management, and in so doing, shall be deemed to have surrendered all rights pertaining to the diploma. Other qualifications or professional experience may also be approved.
5. GRADUATE DIPLOMA IN ENGINEERING

A candidate who has completed a degree of Bachelor of Engineering and
(i) who has not qualified for any class of Honours, or
(ii) who wishes to qualify for the Graduate Diploma in Engineering (Mining)

will enrol in the 48 credit point subject MINE899.

Upon satisfactory completion of the subject MINE899 the candidate is eligible for award of the Graduate Diploma in Engineering (Mining). A person who is awarded the Graduate Diploma in Engineering and who subsequently satisfies the requirements for the award of the degree of Honours Master of Engineering is required by Course Rule 504(2) to surrender the testamur and associated rights for the Graduate Diploma prior to receiving the Honours Masters degree.

SUBJECT DESCRIPTIONS

MINE899 Advanced Topics in Mining Engineering
Double session (A); 48 credit points

Computer aided analysis and design; computer methods; ore reserve estimation; finite element techniques; hydrology; hydraulics; numerical techniques; reliability; rock mechanics; simulation; structural analysis and design; structural topology; mine planning.

Co-ordinator: Dr I Porter.

MINE901 Transportation of Minerals and Personnel
Autumn or Spring session; 6 credit points

Transport of minerals from initial winning to stockpile and to distribution points. Safety problems, hygiene, the environment. Transport of personnel, equipment, safety, regulations. Cost involved. Current research.

Co-ordinator: Associate Professor N I Aziz.

MINE902 Advanced Studies in Mining Engineering
Autumn or Spring session; 6 credit points

Topics will be selected from those areas of Mining Engineering in which staff members or visiting staff members to the Department are engaged in active research.

Co-ordinator: Dr E Y Baafi.

MINE903 Simulation of Underground Mining Operations and Problems
Autumn or Spring session; 6 credit points

Assessment: assignments and examinations.

Including coal reserves, mining dimensions, surface effects, cost benefit effects of operation and management and economic evaluation and feasibility of a mining enterprise.

Co-ordinator: Dr E Y Baafi.

MINE904 Rock Mechanics
Autumn or Spring session; 6 credit points
(42 contact hrs)

Assessment: assignments and examinations.

Fundamentals of strata mechanics together with advanced topics including engineering technology and rock mechanics aspects of coal mining strata control. Design aspects of mine structures, such as mine pillars, gate roads and longwall mining. Instrumentation in providing for the safe design of the mine opening. Rock and cable bolting techniques and powered support design.

Co-ordinator: Dr B Indraratna.

MINE905 Environmental Control in Mines
Autumn or Spring session; 6 credit points
(42 contact hrs)

Assessment: assignments and examinations.

Environmental regulation as a constraint on business operations; Environmental planning and management as a component of overall business planning; Financial costs and benefits of environmental management and their timing; Environmental risks and uncertainty; Integrated design strategies; Emission control technologies; Formal environmental impact assessment procedures, including public submissions and hearings; Lease and licence conditions; Compliance with planning and pollution control legislation; Developing and using environmental operations manuals; In-house environmental training programs; Corporate environmental audit procedures; Liaison with public and community groups; Particular EPM applications in mining, oil, manufacturing, petrochemical, civil engineering and infrastructure; Building and construction; Coastal management and other industries; EPM issues and concerns in Asia-Pacific nations and the region as a whole.

Co-ordinator: Associate Professor N I Aziz.

MINE906 Mining Engineering Techniques
Autumn or Spring session; 6 credit points

Assessment: assignments and examinations.

A selection of advanced laboratory and field exercises in mine support, temporary and long term; in situ testing, laboratory testing, rock properties and parameters; mine design and plant related to extraction areas.

Co-ordinator: Professor R N Singh.

MINE907 Gases in Mines
Autumn or Spring session; 6 credit points

Assessment: assignments and examinations.

Natural occurrence and prediction of rockbursts; collection of mine gases; mine atmospheres, gases, dusts, fires, rescue and recovery; computer analysis.

Co-ordinator: Associate Professor N I Aziz.
MINE908 Mine Fires and Explosions  
*Autumn or Spring session; 6 credit points*  
**Assessment:** assignments and examinations.  
Formation of coal dust; Explosibility of coal dust; Initiation of explosions. Methane accumulation; Development and propagation of explosion wave front; Pressure pulse and flame front; Prevention and control of coal dust formation; Barriers, active and passive. Experimental galleries. Rescue and recovery of both mine and personnel; Resultant fires. Computer modelling of resulting crisis situations in ventilation; Current research; Relevant legislation.  
**Co-ordinator:** Associate Professor N I Aziz.

MINE909 Mine Subsidence  
*Autumn or Spring session; 6 credit points*  
**Assessment:** assignments and examinations.  
**Co-ordinator:** Dr I Porter.

MINE911 Mine Service Engineering  
*Autumn or Spring session; 6 credit points*  
*(42 contact hrs plus field visits)*  
**Assessment:** assignments and examinations.  
Advanced studies in power reticulation in mines; economics of power reticulation, maintenance engineering; equipment monitoring and preventive maintenance. Quality control and equipment specifications; current research.  
**Co-ordinator:** Professor R N Singh.

MINE941 Environmental Management for the Mining Industry  
*Annual; 6 credit points (42 contact hrs)*  
**Assessment:** 4 major assignments.  
Environmental regulation as a constraint on business operations; Environmental planning and management as a component of overall business planning; Financial costs and benefits of environmental management and their timing; Environmental risks and uncertainty; Integrated design strategies; Emission control technologies; Formal environmental impact assessment procedures, including public submissions and hearings; Lease and licence conditions; Compliance with planning and pollution control legislation; Developing and using environmental operations manuals; In-house environmental training programs; Corporate environmental audit procedures; Liaison with public and community groups; Particular EPM applications in mining, oil, manufacturing, petrochemical, civil engineering and infrastructure; Building and construction; Coastal management and other industries; EPM issues and concerns in Asia-Pacific nations and the region as a whole.  
**Co-ordinator:** Associate Professor N I Aziz.

MINE942 Safety in the Mining Industry  
*Annual; 6 credit points (42 contact hrs)*  
**Assessment:** 4 major assignments.  
**Co-ordinator:** Associate Professor N I Aziz.

MINE943 Drilling and Blasting  
*Annual; 6 credit points (42 contact hrs)*  
**Assessment:** 4 major assignments.  
Drilling methods, types of drills, types of bits and other accessories, drilling economics maintenance schedules for drills and accessories, history and theory of explosives, explosive types, new developments and applications, blast design and secondary blasting, controlling ground vibration, airblast and flyrock, blasting economics, controlled blasting, precautions against extraneous electricity, misfires and deteriorated explosives, safety and legislation for storage, transportation and handling of explosives.  
**Co-ordinator:** Associate Professor N I Aziz.

MINE944 Application of Computers in the Mineral Industry  
*Annual; 6 credit points (42 contact hrs)*  
**Assessment:** 4 major assignments.  
Topics will be selected from geostatistical ore reserve estimation on a personal computer, computerised open-pit design and planning, mine system simulation an expert system for the mineral industry, mine ventilation planning on a personal computer, using commercial packages to solve mining problems including rock mechanics.  
**Co-ordinator:** Dr E Y Baafi.

MINE945 Mining Management Project  
*Annual; 6 credit points (42 contact hrs)*  
**Assessment:** 4 major assignments.  
A study of either an administrative or technical nature with relevance to the management of a mining or mineral processing operation. This may be based on simulated or actual situations but projects of relevance to the candidates’ employment will be encouraged. As far as is possible, projects will be designed in consultation with the mining industry.  
**Co-ordinator:** Associate Professor N I Aziz.
MINE946 Placer Technology  
*Annual; 6 credit points (42 contact hrs)*  
*Assessment: 4 major assignments.*  
Sources of placer minerals, natural processes producing concentration of placer minerals, nature of placer deposits, trends in placer exploration, placer sampling, reserves calculations, mining methods, processing methods, project evaluation, environmental implications and pollution control technology.  
*Co-ordinator: Associate Professor N I Aziz.*

MINE947 Introductory Computing and Statistics for Geologists and Mining Engineers  
*Annual; 6 credit points (42 contact hrs)*  
*Assessment: 4 major assignments.*  
Computer hardware for geological data processing; Peripheral devices; operating systems; VAXVMS, IBM, VM/XA, MS DOS, UNIX; Programming in Fortran and C; Statistics for geologists and mining engineers; Data base packages and macros.  
*Co-ordinator: Dr E Y Baafi.*

MINE948 Mine Ventilation and Environment  
*Annual; 6 credit points (42 contact hrs)*  
*Assessment: 4 major assignments.*  
Ventilation network analysis and simulation; Fan selection, Role of booster fans; Ventilation of long headings; Recirculation; Gases from diesel engines and their control; Methane and its control in underground coal mines; Dust in mine air and its control; Mine climate and its control; Ventilation planning.  
*Co-ordinator: Associate Professor N I Aziz.*

MINE952 Geostatistics and Mine Planning  
*Annual 6 credit points (42 contact hrs)*  
*Assessment: 4 major assignments.*  
When to apply Geostatistics, Brief review of univariate statistics, Bivariate statistics and correlation, Exploratory data analysis, Measures of spatial correlation: The variogram - the covariance, Variogram calculation and how to obtain a good variogram, Random function models and stationarity, Desirable properties of estimators, Estimation of variance, dispersion variance and uses, Optimal weighted average estimator - ordinary kriging, Recoverable reserve estimation - problems and solutions, Indicator and probability kriging. Application examples - coal, copper, gold, Blast-hole Kriging for Ore-waste selection, Geotechnics and the environment.  
*Co-ordinator: Dr E Y Baafi.*

MINE953 Mine Water - Origin, Inflow Predictions and Control  
*Annual; 6 credit points (42 contact hrs)*  
*Assessment: assignments and examinations.*  
Water problems in surface and underground mining, hydrogeological factors affecting mine water inflow, hydrological considerations in origin of mine water, hydrogeological characterisation of rock mass and pumping tests, pumping test calculations, effects of ground water on surface mining stability, ground water control in surface mining, calculation of mine water inflow to surface mining, underground mine dewatering techniques, pumps and pumping systems, underground pumping stations and pump design, mine inundation, working under the body of water, inflow prediction by chemical analysis method, mine water pollution control; treatment of mine water pollution, biotechnical approach, constructed wetlands and lagoons.  
*Co-ordinator: Professor R Singh.*

MINE954 Strata Control from First Principles to Practice  
*Annual; 6 credit points (42 contact hrs)*  
*Assessment: 4 major assignments.*  
Fundamentals of strata mechanics together with advanced topics including engineering and rock mechanics aspects of coal mining strata control. Design aspects of mine structures, such as mine pillars, gate roads and longwall mining. Instrumentation in providing for the safe design of the mine opening. Rock and cable bolting techniques and powered support design.  
*Co-ordinator: Associate Professor N I Aziz.*

MINE956 Mineral Law  
*Annual; 6 credit points (42 contact hrs)*  
*Assessment: 4 major assignments.*  
*Co-ordinator: Associate Professor N I Aziz.*

MINE958 Environmental Impacts of Mining and Mineral Operations  
*Annual; 6 credit points (42 contact hrs)*  
*Assessment: 4 major assignments.*  
Aspects of environmental impacts of surface and underground mining operations; Visual impact assessment, air pollution, including dust, noise and vibration; Solid waste management, water pollution and acid mine drainage; Restoration, land use, subsidence and the socio-economic effects of mining will also be discussed.  
*Co-ordinator: Professor R N Singh.*

MINE962 Management Perceptives  
*Annual; 6 credit points (42 contact hrs)*  
*Assessment: 4 major assignments.*  
What is Management? Managing Individuals, Managing Groups, Managing Organisations, Managing Information, Managing Operations,
Managing Decision Making.
Co-ordinator: Associate Professor N I Aziz.

MINE963 Economic Decision Making
Annual; 6 credit points (42 contact hrs)
Assessment: 4 major assignments.
Co-ordinator: Associate Professor N I Aziz.

MINE964 Management of Innovation
Annual; 6 credit points (42 contact hrs)
Assessment: 4 major assignments.
Innovation and Innovators, Technology and Innovation; Opportunity Analysis; Marketing and Innovation; The Business Plan, Management of Innovation; Innovations in Corporations, Maintaining Innovations.
Co-ordinator: Associate Professor N I Aziz.

MINE965 Strategic Planning
Annual; 6 credit points (42 contact hrs)
Assessment: 4 major assignments.
The Nature and Scope of Strategic Management; The Practice of Strategic Management; The Mission of the Organisation; Analysing Organisational Resources; Formulating Strategic Objectives; Generating Strategic Alternatives; Evaluating Strategic Implementation; Assessing Strategic Performance.
Co-ordinator: Associate Professor N I Aziz.

MINE971 Financial Management
Annual; 6 credit points (42 contact hrs)
Assessment: 4 major assignments.
Financial Management - An Overview; Accounting Concepts and the Accounting Process, Financial Statements; Public Sector Accounting; Corporate Accounting; The Interpretation of Financial Statements; The Recording of Costs; Management Cost Information (1); Management Cost Information (2); The Budgeting Process.
Co-ordinator: Associate Professor N I Aziz.

MINE972 Export Marketing for the Mining Industry
Annual; 6 credit points (42 contact hrs)
Assessment: 4 major assignments.
Marketing as applied to the mineral industry. Sources and types of market-related information. Particular international market characteristics, political, social and economic. Trade barriers, cartels, regional and sub-regional economic groupings. Marketing to Asia, Buyer behaviour, private and government sectors. Design, conduct and analysis of surveys of overseas markets for mineral products. Factors related to particular mineral commodities. The recognition of export opportunities. Stages in the development of a market strategy. Market decision making under conditions of uncertainty. The relationship between corporate and marketing strategy for mineral products. Value added mineral products and export marketing. Sources of assistance for export marketing.
Textbooks:
Short course manual.
Monograph collection may require supplementation, subject to further review. Various journals and recent publications relating to topics.
Co-ordinator: Associate Professor N I Aziz.

MINE973 Mine Evaluation and Project Assessment
Annual; 6 credit points (42 contact hrs)
Assessment: 4 major assignments.
Valuation tools and techniques; Valuation Reports; Preliminary Investigation; Asset Determination; Impact of Financing Options; Published Assessments; Feasibility Studies; Valuation of Exploration Tenements; residual values of property and plant; variations to value.
Co-ordinator: Associate Professor N I Aziz.

MINE974 Mine Management
Annual; 6 credit points (42 contact hrs)
Assessment: 4 major assignments.
The general management functions; planning; organisation; control; communication; command; coordination; production functions; marketing; financial aspects; personnel; purchasing; public relations; environmental matter; contracts and stock market requirements and implications.
Co-ordinator: Associate Professor N I Aziz.

MINE975 Evaluation in the Coal Mining Industry
Autumn or Spring session; 6 credit points
An introduction to the theory and practice of financial modelling of mining projects, financial evaluation and economic decision making Long life and large sustaining capital needs of coal projects and the techniques of evaluating operational alternatives are reviewed and illustrated by industry case histories. Evaluation of new mine projects are studies by means of case histories.
Co-ordinator: Associate Professor N I Aziz.

MINE950 Dissertation
Double session (A); 12 credit points
Co-ordinator: Dr I Porter.

MINE951 Dissertation
Double session (A); 24 credit points
Co-ordinator: Dr E Y Baafi.
MINE955 ME Major Thesis
*Double session (A); 48 credit points*
*Co-ordinator: Associate Professor N I Aziz.*

MINE957 PhD Major Thesis
*Double Session (A); 48 credit points*
*Co-ordinator: Professor R N Singh.*

GEOL921 Environmental Geology
*Spring or Autumn Session; 6 credit points*  
*(42 contact hrs)*  
*Assessment: 4 major assignments.*  
*Refer to Faculty of Science, Geology subjects course description.*
FACULTY OF
HEALTH AND
BEHAVIOURAL
SCIENCES
FACULTY OF HEALTH AND BEHAVIOURAL SCIENCES

PRINCIPAL OFFICERS

Dean: Vacant*
Sub Dean: Dr Graham Ward
Executive Officer: Mr David Muscio

MEMBERSHIP

The Faculty of Health and Behavioural Sciences is made up of the following Units:

- Biomedical Science
- Nursing
- Psychology
- Public Health and Nutrition

RESEARCH COURSES AVAILABLE

All Units offer Honours Master of Science and Doctor of Philosophy degrees by research. In addition, the Honours Master of Arts is offered in the Departments of Biomedical Science and Psychology.

POSTGRADUATE PROGRAMS

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<tr>
<td>Occupational Health and Rehabilitation</td>
<td>307</td>
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<tr>
<td>Primary Health Care</td>
<td>311</td>
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<tr>
<td>Public Health</td>
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<td>- General</td>
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<td>- Health Promotion</td>
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<td>- International Health</td>
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<tr>
<td>- Nutrition</td>
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</tbody>
</table>

* Selection process underway at time of printing.
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Vacant

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* Selection process underway at time of printing.
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Professional Officer
Annette Owen, BAppSc

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Mr R Gould, Chief Executive Officer, Illawarra Area Health Service
Mr S Martin, Speaker of the House of Representatives, Member for Cunningham
Dr David Warner, Director, Institute of Medicine and Diagnostic Services, Illawarra Regional Hospitals
COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Science by Coursework and Research
3. Graduate Diploma in Science (Human Movement Science)

CURRENT RESEARCH AREAS

The Department's research activities are placed under the general areas of cardiorespiratory physiology, human performance, and movement rehabilitation with an emphasis towards physical activity and ageing. Examples of current projects in these areas are identified below:

Cardiorespiratory Physiology
- Autonomic dysfunction in diabetics
- Effect of ageing on thermal perception and thermogenesis
- Assessment of thermal stress in the workplace
- Gas exchange kinetics in aerobic exercise
- Effect of aerobic training on vagal response in the elderly

Human Performance
- Age based characteristics in the prevention of injury in contact sports
- Influence of climate on work performance
- EMG analyses of movement preparation and execution processes in the elderly
- EMG and EEG correlates of movement accuracy
- Modelling of the human knee joint under dynamic loading

Movement Rehabilitation
- Gait and postural changes in the elderly
- Mechanisms of adaptation and injury in musculo-skeletal tissues
- The relationship between muscle strength and bone density in veteran athletes
- Mechanical and physiological correlates of wheelchair propulsion

SUBJECT DESCRIPTIONS

GHMA900 Applied Cardiovascular Physiology
- Autumn or Spring session; 8 credit points (56 contact hrs)
- Pre-requisites BMS202 or approved subject.
- Assessment: Project 60%, labs 15%, presentation 5%, mid-term examination 20%.
- This subject focuses on the cardiovascular system, describes and provides access to a range of noninvasive indices of cardiovascular function, and examines the relationships between exercise, physical and psychological stressors, chronic disease, and cardiac function. At the finish of the course students will have had indepth experience with noninvasive measures of cardiac function such as impedance cardiography, beat-by-beat blood pressure monitoring, and ambulatory cardiac monitoring.

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in GHMA999 Major Thesis

2. HONOURS MASTER OF SCIENCE

The primary aim of the Honours Masters program in Human Movement Science is to provide research opportunities and training at the postgraduate level.

Students with a degree at less than Honours Class II, Division 1 level will be required to complete subjects with a value of at least 96 credit points to graduate. The credit points will be divided into 48 credit points of coursework and 48 credit points of research.

Those students with a degree of at least Honours Class II, Division 1 level will be required to complete a program with a value of at least 48 credit points.

3. GRADUATE DIPLOMA IN SCIENCE (HUMAN MOVEMENT SCIENCE)

This one-year Graduate Diploma is designed principally for graduate students who have an inadequate preparation for direct entry into Masters degree courses. It is appropriate for students with previous undergraduate preparation in areas related to Human Movement Science who wish to reorientate their focus of study, as well as international students or those who completed their first degree in Human Movement Science several years earlier.

Students must consult with the postgraduate co-ordinator for approval of entry. The specific combination of subjects will be determined after discussion with the postgraduate co-ordinator and will take into account the previous background and needs of the student and be consistent with University's Course Rules for Graduate Diplomas.
pressure, spectral analysis of ECG, and ECG electrophysiology.

Textbooks:
Journal articles and selected book chapters will be used.
Co-ordinator: Dr S Boutcher.

GHMA902 Exercise in Special Populations
Autumn or Spring session; 8 credit points (3 hrs per wk)
Assessment: seminar presentations, 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 select from an extensive bibliography of primary and secondary literature.
Co-ordinator: Dr G Ward.

GHMA903 Motor Control of Skilled Movement
Autumn or Spring session; 8 credit points (56 contact hrs)
Assessment: written examination, laboratory reports and presentations.
Motor control is the study of how the nervous system controls muscular activation to produce voluntary and reflex movement. This course will primarily present a neurophysiological approach to the study of control of human voluntary movement. It will be presented through a series of seminar presentations and group laboratory research projects which will utilise EMG and EEG techniques.

Textbook:
Co-ordinator: Dr J Brown

GHMA904 Advanced Study in Exercise Physiology
Autumn or Spring session; 8 credit points (3 hr lecture plus laboratory work each wk)
Assessment: semester paper 30%, seminar presentations 15%, seminar preparation and involvement 10%, and major research project 45%.
The aim of the assessment is to evaluate the understanding of essential core components, which is consistent with both professional training and the quantification of the preparedness of the student to undertake research in exercise physiology.

This subject shall involve seminar-based, detailed study in current topics in exercise physiology as they pertain to research in the broad areas of exercise, health and disease. While certain key topics will be maintained as core components, the subject material and supplementary topics will change regularly to reflect recent trends in research. Subject core topics include: gas exchange kinetics; fatigue mechanisms; acid base regulation; muscle plasticity.

Textbooks:
There is no prescribed text. However, a collection of essential readings (research and review papers), will be held in the reserve section of the library. All students are expected to copy these papers for class use.
Co-ordinator: Dr N A S Taylor.

GHMA905 Biomechanics
Autumn or Spring session; 8 credit points (4 hrs per wk; lectures, seminars, laboratory)
Assessment: assignments 50% and laboratory projects 50%.
Biomechanics is the application of mechanical laws to living structures. The emphasis in this subject will be on the human locomotor system and its responses to external stress. Specific topics covered include the methods used to quantify human motion, mechanical efficiency of the locomotor system, and normal and pathological movement patterns.

Textbook:
Co-ordinator: Dr P Milburn.

GHMA906 Projects in Human Movement Science
Autumn or Spring session; 8 credit points (28 hrs workshop per session)
Assessment: substantial report and seminar.
This subject requires the student to research in detail a problem identified in an approved topic in Human Movement Science. Approval to enrol in this subject will only be granted to students who have demonstrated the capacity to undertake research by their performance in earlier work.

Textbooks: None.
Co-ordinator: Dr S Boutcher.

GHMA907 Occupational Biomechanics
Spring session; 8 credit points (4 hrs per wk)
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.

Textbook:
Co-ordinator: Dr P Milburn.
GHMA908 Lifestyle Evaluation, Appraisal and Programming  
Autumn or Spring session; 8 credit points (56 hrs of lectures, seminars and laboratory sessions)  
Assessment: assignment work, mid session and final examination.  
This unit provides students with the skills and information relevant to the implementation of appropriate lifestyle programs within the corporate culture. It enhances the skills of exercise appraisal and management, and develops research skills appropriate to evaluation of lifestyle management programs. Students will be expected to develop practical expertise in planning and implementing lifestyle related events and activities, and will be exposed to outdoor programs designed to develop team-building in adolescents and adults through this unit.  
Textbooks: To be advised.  
Co-ordinator: Mr O Curtis.  

GHMA909 Practicum  
Autumn or Spring session; 8 credit points (field work plus 28 hrs of university-based laboratory/workshops)  
Pre-requisite: approved subjects in designated Human Movement Science specialisations.  
Assessment: report by University and field supervisors; field notebooks and case presentations. Students will undertake a period of supervised on-site experience in selected agencies and will provide a substantial report on this experience.  
Textbooks: None.  
Co-ordinator: Mr T Penrose and Mr O Curtis.  

GHMA910 Biophysical Bases of Movement Disorders  
Autumn or Spring session; 8 credit points (56 hrs of lectures, seminars and laboratory sessions)  
Assessment: assignment work, mid session and final examination.  
This subject examines the nature and assessment of movement disorders relevant to human movement science. Topics will include the nature and evaluation of congenital and acquired movement disability, movement disorders across the life span and acute and chronic manifestations of movement disorder.  
Textbooks: None specified - students will select from an extensive bibliography of primary and secondary literature.  
Co-ordinator: Dr G Ward.  

GHMA911 Advanced Injury Prevention and Rehabilitation  
Autumn or Spring session; 8 credit points (56 hrs of lectures, seminars and laboratory sessions)  
Pre-requisite: GHMA910  
Assessment: assignment work, mid session and final examination.  
An extension of BMS351 to provide opportunities to apply the skills of the human movement scientist to the evaluation of movement capability, the identification of movement disorders, and the design of appropriate procedures to restore and enhance individual movement capacities of a variety of movement settings.  
Textbooks: To be advised.  
Co-ordinator: Mr T Penrose.  

GHMA912 Environmental Physiology  
Autumn or Spring session; 8 credit points  
Assessment: semester paper 30%, seminar presentations 15%, seminar preparation and involvement 10%, and major research project 45%. The aim of the assessment is to evaluate the understanding of essential core components which is consistent with both professional training, and quantification of the preparedness of the student to undertake research in environmental physiology. This subject shall involve seminar-based, detailed study across four areas of environmental physiology: hot and cold thermoregulation, hyper- and hypobaric physiology. The emphasis shall be slanted towards the worker/exerciser within these environmental conditions. Certain key topics will be maintained as core material, but other topics will vary to reflect recent trends in research.  
Textbooks: There is no prescribed text. However, a collection of essential readings (research and review papers), will be held in the reserve section of the library. All students are expected to copy these papers for class use.  
Co-ordinator: Dr N A S Taylor.  

GHMA913 Special Topic in Human Movement Science A  
Autumn or Spring; 8 credit points.  
Individual directed study.  

GHMA914 Ergonomics  
Autumn or Spring session; 8 credit points (56 hrs of lectures, seminars and laboratory sessions)  
Assessment: assignment work, laboratory reports and final examination.  
This subject will analyse the relationship between the nature of work and the workplace environment. Topics covered will include the design of workstations and jobs and the capacities and limitations of the human body.  
Textbooks: To be advised.  
Co-ordinator: Dr P D Milburn.  

GHMA999 Major Thesis  
Multi-session subject; 48 credit points
NURSING

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Nursing By Research
3. Honours Master of Science By Research
4. Master of Nursing
5. Master of Science (Midwifery)
6. Graduate Diploma in Nursing

POSTGRADUATE PROGRAM

Nursing

CURRENT RESEARCH AREAS

The major current areas of nursing research use educational, demographic, and ethnographic techniques. Studies using a variety of approaches associated with disciplines such as Psychology, History, Economics, Philosophy and Sociology will be considered.

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

- Maternal and child care
- Gerontology
- Medical/surgical nursing
- Special care nursing
- Developmental disability
- Psychiatric nursing
- Health promotion
- Cardiovascular disease prevention
- Mental health
- Health services evaluation
- Migrant health
- Geriatrics and rehabilitation
- Women's health
- Palliative care
- and other areas relevant to nursing

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAMS IN NURSING

leading to the Graduate Diploma in Nursing, Master of Nursing and Master of Science (Midwifery), Master of Science (Honours), Master of Nursing (Honours) and Doctor of Philosophy

Number | Subject |
--- | --- |

SCHEDULE 1

Graduate Diploma core subjects for general stream (2a) and specialist stream in Critical Care (2b).

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>GHMB900</td>
<td>Nursing: The Professional Context</td>
<td>6</td>
</tr>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>GHMD984</td>
<td>Health Research methodology</td>
<td>6</td>
</tr>
<tr>
<td>NURS327</td>
<td>Health and Human Ecology</td>
<td>6</td>
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</tbody>
</table>

SCHEDULE 2

Schedule of specific requirements for Graduate Diploma programs

2a Graduate Diploma in Nursing

Core subjects

24

plus 24 credit points from Schedule 6

2b Graduate Diploma in Nursing (Critical Care)

Core subjects

24

plus the following

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>GSMB902</td>
<td>Nursing Management</td>
<td>6</td>
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<tr>
<td>GSMB903</td>
<td>Scientific and Quantitative Developments in Critical Care Nursing</td>
<td>6</td>
</tr>
<tr>
<td>GHMB906</td>
<td>Critical Care Nursing: Reflections on Practice</td>
<td>6</td>
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</table>

plus subjects totalling 6 credit points from Schedule 6
POSTGRADUATE PROGRAMS IN NURSING (Cont’d)
leading to the Graduate Diploma in Nursing, Master of Nursing and Master of Science (Midwifery), Master of Science (Honours), Master of Nursing (Honours) and Doctor of Philosophy

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<td>NURS224</td>
<td>Research and Design Methods</td>
<td>6</td>
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<tr>
<td>GHMD923</td>
<td>Legal and Professional Issues</td>
<td>6</td>
</tr>
<tr>
<td>GHMD936</td>
<td>Behavioural Aspects of Nutrition</td>
<td>6</td>
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<tr>
<td>GHMD922</td>
<td>Psychosocial Development of the Family</td>
<td>6</td>
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<td>GHMB921</td>
<td>Reproductive Bioscience</td>
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<tr>
<td>GHMD920</td>
<td>Midwifery Studies</td>
<td>20</td>
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<tr>
<td>GHMB923</td>
<td>Legal and Professional Issues</td>
<td>6</td>
</tr>
<tr>
<td>GHMB983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>GHMB998</td>
<td>Minor Thesis</td>
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<tr>
<td>GHMB905</td>
<td>Special Topic in Nursing</td>
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SCHEDULE 3
Master of Nursing subjects

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<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>GHMB905</td>
<td>Special Topic in Nursing</td>
<td>12</td>
</tr>
<tr>
<td>GHMB998</td>
<td>Minor Thesis</td>
<td>24</td>
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</table>

SCHEDULE 4
Master of Science (Midwifery)

<table>
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<th>Subject</th>
<th>Credit Points</th>
</tr>
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<tbody>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>NURS224</td>
<td>Research and Design Methods</td>
<td>6</td>
</tr>
</tbody>
</table>
POSTGRADUATE PROGRAMS IN NURSING (Cont'd)
leading to the Graduate Diploma in Nursing, Master of Nursing and Master of Science (Midwifery), Master of Science (Honours), Master of Nursing (Honours) and Doctor of Philosophy

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<th>Subject</th>
<th>Credit Points</th>
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<tr>
<td>GHMB999</td>
<td>Major Thesis</td>
<td>48</td>
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<tr>
<td>GHMB902 or</td>
<td>Nursing Management</td>
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</tr>
<tr>
<td>GHMD967</td>
<td>Service Planning and Evaluation</td>
<td>6</td>
</tr>
<tr>
<td>GHMD966 or</td>
<td>Family and Systems Intervention for Mental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD975</td>
<td>Socio-cultural Issues in Mental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD968 or</td>
<td>Legal and Ethical Issues</td>
<td>6</td>
</tr>
<tr>
<td>GHMB923</td>
<td>Legal and Professional Issues</td>
<td>6</td>
</tr>
</tbody>
</table>

Subject descriptions for GHMB - Department of Nursing

Subject descriptions for GHMD - Department of Public Health and Nutrition

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

For the Doctor of Philosophy degree candidates enrol in the subject GHMB999 Thesis.

2. HONOURS MASTER OF NURSING BY RESEARCH

The Honours Master of Nursing by Research is intended to provide candidates with the opportunity to pursue a research program in a specialised field of nursing.

For Master of Nursing and Honours Master of Nursing by Research please refer to the Course Rules and note the following additions:

1. the basic entry requirement is current registration as a practising nurse;

Candidates who successfully complete the Graduate Diploma in Advanced Nursing (general or specialisation stream) with an average of credit pass or higher shall gain entry into the Master of Nursing Degree or Master of Nursing (Honours) Degree.

2. a candidate will undertake an approved course recommended by the Head of the Department of Nursing;

3. a candidate for the Master of Nursing: Please refer to the Pass Masters Degree Rules and note the following additions:

(a) Each 48 credit program shall include a minimum of 24 credit points from the core subjects listed in schedule 1 and the minor thesis (24 credit points) in schedule 3;

4. a candidate who has completed a degree of Bachelor of Nursing or equivalent shall undertake a course comprising subjects having a value of at least 72 credit points which shall have:

(a) subjects having at least 24 credit points from schedule 1, 36 credit points from schedule 3, the topic of
the thesis shall be approved by the Head of the Department of Nursing (24 credit points);

5. a person wishing to use previous postgraduate studies to qualify for admission to the Master of Nursing (Honours) degree shall be expected to:

(i) carry 48 credit points advanced standing from the graduate diploma into the Master of Nursing (Honours); or
(ii) carry 48 credit points advanced standing from the Pass Master of Nursing to the Master of Nursing (Honours) with the additional requirement of 48 credit points from thesis work; or
(iii) proceed straight into 96 credit points Master of Nursing (Honours) as per Course Rules;

6. a candidate for the Honours Master of Nursing will successfully complete subjects with a total value of not less than 96 credit points:

(a) 24 credit points will comprise the core subjects listed in Schedule 1;
(b) 12 credit points will be selected from Schedule 3;
(c) 12 credit points constituting electives;
(d) a thesis consisting of the results of an investigation to the value of 48 credit points; or
(e) a minor thesis consisting of the results of an investigation whose credit point value is 24 together with satisfactory completion of directed study subjects to the value of 24 credit points.

Candidates for this degree enrol in GHMB999.

3. HONOURS MASTER OF SCIENCE BY RESEARCH

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 Rules in this Calendar.

Candidates for this degree enrol in GHMB999.

4. MASTER OF NURSING

The Pass Masters degree is designed to prepare nurses for leadership roles in nursing and the health care system.

Candidates select subjects from Schedule 3. Refer to Section 2 above for further details.

5. MASTER OF SCIENCE (MIDWIFERY)

The Master of Science (Midwifery) is to prepare graduates to function as independent autonomous practitioners in the pursuit of excellence in the professional practice of midwifery. This course of study will lead to professional recognition and certification by the NSW Nurses' Registration Board.

6. GRADUATE DIPLOMA IN NURSING

(a) (General Stream)
The Graduate Diploma in Nursing (General Stream) is a professional course in nursing which will provide preparation in research design and methodology for nurses wishing to progress into higher degree programs, and preparation for the nurse who seeks an expanded role in the health system. Candidates will be introduced to professional nursing issues and a variety of research paradigms. Students wishing to prepare for higher degrees will be encouraged to develop research skills, other students will have the opportunity to develop a more general based knowledge and problem solving abilities within a research based milieu.

Candidates complete 48 credit points of core subjects and selected elective subjects from Schedule 6.

(b) (Specialisations)
The Graduate Diploma in Nursing provides nurses with the opportunity to develop skills and knowledge in a specialised area of nursing. At present two such courses are being offered, namely, one which allows the candidate to graduate with a specialisation in critical care nursing, or a clinical education nursing specialisation option.

Candidates select subjects from Schedules 1 and either 2a or 2b.

The basic entry requirement is current registration as a practising nurse.

A minimum of two years experience in some aspect of nursing is preferred (but not essential) in addition to other qualifications for entry (in consultation with the Head of the Nursing Department).
Normal entry requirements are as stated in the Course Rules.

**SUBJECT DESCRIPTIONS**

**GHMB900 Nursing: The Professional Context**
*Spring session; 6 credit points (4 hrs per wk)*
Assessment: one seminar presentation 20%, written assignment 60%, a critical annotated bibliography 20%.

Students will be encouraged to explore nursing topics currently creating controversy and debate within the professional milieu of the nursing profession. Issues which impact on nursing education and management will be examined. Topics will include the career structure for the nursing profession and the role of the nurse within this context. Because of the degree of change currently affecting the nursing profession topics will be varied and opportunities will be available for discussion and critical analysis.

Textbook:
Journal articles and portions of books will be used in lieu of a set text.
Co-ordinator: Ms T MacDonald.

**GHMB902 Nursing Management**
*Autumn session; 6 credit points (4 hrs per wk).*
Assessment: tutorial presentation and participation 50%, research project 50%.

This subject will introduce the basic concepts of nursing administration at all levels - at the ward, middle management and at senior levels. Differences in management styles will be addressed; ward design and its impact on care delivery; and nursing care delivery assignments will be examined in detail. Nursing involvement in the public and the private sector will be examined.

Textbook:
Co-ordinator: Mr B Janes.

**GHMB903 Scientific and Qualitative Developments in Critical Care Nursing**
*Spring session; 6 credit points (4 hrs per wk).*
Assessment: seminar presentation 20%, 1 research proposal report 60%, 1 written assignment 20%.

This subject investigates technological, biological, psychological and sociological developments that have created an impact in critical care nursing in recent times. Insights into specific technology and pharmacology used for diagnostic or therapeutic purposes by nurses and the health team will be targeted, including their characteristics, uses and efficacies within an holistic nursing care framework. Pre and Pro surgical as well as operative nursing developments will also be discussed in terms of the efficacy of nursing care provision.

Textbook:
Journal articles and portions of books will be used in lieu of a set text.
Co-ordinators: Mr B Janes.

**GHMB904 Modalities of Care: Mental Health**
*Autumn session; 6 credit points (4 hrs per wk)*
Assessment: seminar presentation 20%, 1 written assignment 20%, 1 case report 60%.
This subject addresses the most frequently used of therapeutic modalities from mental health nursing perspectives. Selected theoretical approaches are discussed for each treatment modality. Specific characteristics of each type of therapy are presented. In addition the psychiatric nurse’s role, and goals for therapy are described and analysed.

Textbook:
Co-ordinator: Dr F Yuen.

**GHMB905 Special Topic in Nursing**
*Autumn or Spring session; 12 credit points (3 hrs per wk and seminars as required)*
Pre-requisite: demonstrated expertise in a special area of nursing as determined by the Head of the Department of Nursing.
Assessment: seminar presentation 20%, research report 80%.

The special topic in nursing will be selected from the list of current research areas provided by supervisors in the Nursing Department. The specific topic in nursing will be closely related to the research subjects and will consist of a research proposal which will be expected to provide the basis for the major investigation to be carried out by the candidate in the subsequent major thesis subject.

Textbook: To be advised.
Co-ordinator: Co-ordinator of Graduate Studies in the Department of Nursing.

**GHMB906 Critical Care Nursing: Reflections on Practice**
*Autumn session; 6 credit points (4 hrs per wk)*
Assessment: seminar presentation 20%, critical annotated bibliography 20%, research proposal report 60%.

This subject focuses on relevant theories, themes and issues that have a practical bearing upon critical care clinical practice, (Intensive Care, Accident and Emergency and Coronary Care), and models of critical care nursing that address the practical aspects of this knowledge.

* Not on offer in 1994.
** Not on offer in 1995.
Theories include Hans Selye’s Stress concepts, Melzack and Wall’s Gate Control Theory (pain perception), Endorphin and Enkephalin research, Pascal’s Theory and Open Systems Theory. Themes and Issues include death and dying, sleep and rest, motivation and rehabilitation, legal and ethical issues, and burnout. Practical aspects include pathophysiology of the Cardiovascular, Respiratory, Nervous and Alimentary systems and Acid Base balance; and Introduction to Electrocardiograph Interpretation.

Textbook:
McCance, K & Huether, S E Pathophysiology. The Biologic Basis for Disease in Adults and Children, St Louis, Mosby Year Book, 1990.

Co-ordinators: To be advised.

GHMB907 Fundamental Concepts in Developmental Disability

Autumn session; 6 credit points (2 hrs per wk)
Assessment: seminar presentation and participation 20%, two 1500-2000 word written assignments 40% each.

This subject will provide the basic scientific knowledge on which developmental disability practice is based. Emphasis will be placed upon the student gaining sound understanding of the nature of developmental disability and its complex interactions with society. The study of developmental disability is not merely a medical and educational issue, but rather one of wide social significance that is correctly placed in a broad social context. The body of knowledge which defines and identifies the nature of the clientele and the philosophical and ethical foundations for practice will be addressed in this course.

Textbook: To be advised.
Co-ordinator: Ms M Gerry.

GHMB908 Applied Behavioural Science For Developmental Disability Practice

Spring session; 6 credit points (2 hrs per wk)
Assessment: seminar presentation and participation 20%, two 1500-2000 word written assignments 40% each.

Developmental disability practice makes extensive use of such skills and roles as assessment, teaching, programming, behaviour management and supportive counselling. To use these skills effectively, the student requires a knowledge of selected principles drawn from the behavioural sciences. This subject will provide the necessary theoretical framework, together with an emphasis on practical application and problem-solving skills.

Textbook: To be advised.
Co-ordinator: Ms M Gerry.

GHMB909 Multiple Disability

Autumn session; 6 credit points (2 hrs per wk)
Assessment: seminar presentation and participation 20%, two 1500-2000 word written assignments 40% each.

Many clients with developmental disabilities, particularly those who are the heaviest users of specialised services, have more than one disability. The problems associated with these clients are usually more complex and long-term than those of clients with a single disability. These clients provide a particular challenge to staff and demand highly individualised and innovative care. Underlying problems of developmental disability may also be complicated by the stresses of transition through the life-cycle, by the disabling effects of institutionalisation or by the socio-economic problems that frequently accompany developmental disability. This subject will address these issues.

Textbook: To be advised.
Co-ordinator: Ms I Bowen.

GHMB910 Contemporary Issues in Developmental Disability

Spring session; 6 credit points (2 hrs per wk)
Assessment: seminar presentation and participation 20%, research proposal 30%, research project 50%.

Developmental disability is a field that has changed constantly through its history and a field in which there is a continual questioning of current policies and practices and a searching for better alternatives. It is vitally important therefore, that practitioners in the field are willing to critically assess what is currently being done and to honestly and objectively consider other options. There are also a number of controversial issues in relation to the rights and responsibilities of people with developmental disabilities that must be addressed. This subject will require independent and thoughtful analysis of such issues and critical assessment of current practices.

Textbook: To be advised.
Co-ordinator: Ms M Gerry.

GHMB920 Midwifery Studies

Double session (A); 20 credit points (2 hrs per wk and 2 days clinical practice per wk)
Assessment: two seminars 20% each, formal written examination 40%, two critical analyses of Research Papers 10% each, mastery of designated competencies of the midwife and completion of supervised clinical experience.

This subject is designed to prepare the student as an autonomous practitioner to care for the family throughout pregnancy, parturition and the puerperium. Initially, special emphasis will be on the well mother and healthy baby. Potential complications during childbearing and management of high risk clients will be examined. This subject will have integrated theoretical and clinical components. Clinical practice will consist of the experiences suggested by the NSW Nurses’ Registration Board.
Textbooks:
Co-ordinator: Ms M Wallace.

GHMB921 Reproductive Bioscience
Double session (A); 8 credit points (2 hrs per wk)
Assessment: student seminar presentation and report 25%, written assignment 25%, formal written examination 50%.
The content of this subject is designed to provide students with advanced knowledge of anatomy, physiology and pathophysiology related to conception, pregnancy and birth. Biochemical, nutritional, genetic and teratogenic influences on conception and embryonic, foetal, neonatal and maternal development will be addressed. Technology used for prenatal diagnosis and intrapartum assessment will be explained in terms of scientific principles.
Textbooks: To be advised.
Co-ordinator: Dr J Sibbald.

GHMB922 Psychosocial Development of the Family
Double session (A); 8 credit points (2 hrs per wk)
Assessment: one class presentation (including written report) 20%, two critical reviews of published articles 10% each one discussion paper 60%.
This subject will provide the student with an in depth knowledge of theory and research, applied largely in the Australian context on psychological, sociological and cultural influences on the family and extended family networks.
Textbooks:
Co-ordinator: Professor C Morse.

GHMB923 Legal and Professional Issues
Spring session; 6 credit points (2 contact hrs per week)
Assessment: seminar presentation 20%, seminar paper 30%, major written assignment 50%.
This subject is designed to provide students with a knowledge of legal and professional issues in relation to their area of clinical practice. Relevant Australian legislation, appropriate case law and examples of moral reasoning will be used to provide a framework for clinical decision-making.

Textbooks:
CCH Health & Medical Law (Eds) Law for the Nursing Profession, North Ryde, NSW, 1990.
Co-ordinator: Ms M Wallace.

GHMB930 Clinical Education
Autumn session: 6 credit points (3 hrs per week)
Assessment: one seminar presentation 30%, written assignment 50%, observed clinical teaching 20%.
The subject will introduce the concepts and practice of clinical education, it will address issues related to the role of the clinical educator, factors influencing student learning, teaching strategies and teaching resources in clinical settings, the clinical environment as an educational topic, and bridging the theory and practice gap. Clinical education research and the health professional responsibilities and leadership in clinical education will be discussed.
Textbook:
Co-ordinator: Dr F Yuen.

GHMB931 Clinical Supervision and Assessment.
Spring session: 6 credit points (4 hrs per week)
Pre-requisite GHMB930
Assessment: various assessment techniques will be employed including seminar presentations, supervision report and a mentor project.
This subject covers the theoretical and practical aspects of clinical supervision and assessment within the health service context. It introduces the concept of competency based assessment, its origins, limitations and practical applications to assessment of professional performance. Students will critically assess and utilise a range of assessment tools and develop skills in assessing students both formatively and summatively. The subject will include practical experience in supervising performance and giving feedback.
Textbooks: To be advised.
Co-ordinator: Ms L Newman.

GHMB998 Minor Thesis
Autumn or Spring or Double session (A); 24 credit points (1 hr of research supervision per wk and 2 hr seminars as required to complete assessment paper)
Assessment: minor thesis.
This is a major component of a combined coursework/thesis program in the Masters of Nursing undertaken by candidates enrolled in the Department of Nursing. A thesis must be submitted and assessed according to the Course Rules for Masters’ Candidates. Thesis work is only commenced with the approval from the co-ordinator of the subject and the Head of the Nursing Department. Students
will be required to present a seminar on their chosen thesis topic prior to completion of the thesis.

Co-ordinator: Dr F Yuen.

GHMB999 Major Thesis
48 credit points.

GHMD903 Methods Research and Evaluation
Refer to Public Health and Nutrition.
PSYCHOLOGY

COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Doctor of Philosophy (Clinical Psychology)
3. Doctor of Philosophy (Industrial and Organizational Psychology) *
4. Honours Master of Arts in Clinical Psychology
5. Honours Master of Arts by Research
6. Master of Science (Pass) in Psychology

POSTGRADUATE PROGRAMS

Clinical Psychology
Industrial and Organizational Psychology *

CURRENT RESEARCH AREAS

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

Adolescent Drug Use and Deviance
Clinical Applications of Biofeedback
Clinical, Community and Health Psychology (especially constructivist approaches)
Cognition in Sport Performance
Coping with Acute Stress
Health Psychophysiology

Human Pavlovian Autonomic Conditioning
Indices of Stress, Anxiety, and Arousal
Mood Disorder
Movement Perception, Especially Visual Processing During Eye Movements
Orienting Reaction
Personal Construct Psychology
Phonological Processes in Reading
Psychiatric Rehabilitation
Psychoanalytic Research in the areas of:
Mother-Infant Interactions
Psychoanalytic group work with children
Brief work with parents and children up to 5 years
Psychology and women/sex and gender roles
Psychophysiological correlates of individual differences
Psychophysiology of attentional processes
Psychosocial Functioning in Adults and the Elderly
Social Support
Spatio-temporal Processing in Human Vision
Specific Reading Disabilities
The Causes of Drug and Alcohol Use in Adolescence
The Development and Evaluation of Programs for Intervention with Adolescent and Adult Drug Users
The Development of Reading
Theoretical/Metatheoretical issues in psychology and clinical theory
Visual masking applied to perceptual processes
Working Memory

* Not on offer in 1994.

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAMS IN CLINICAL PSYCHOLOGY
leading to the Honours Master of Arts or the Doctor of Philosophy

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For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

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COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this research degree enrol in GHMC999.

2. DOCTOR OF PHILOSOPHY (CLINICAL PSYCHOLOGY)

To qualify for entry candidates must have an Honours Bachelor Degree of at least Class II, Division 1 standard.

The program will normally involve six academic sessions of full-time study. Full-time students are required to present for examination not later than 8 academic sessions from the date of registration.

The program for 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. Candidates will be considered eligible for entry to the program only if some of their earlier preparatory work is considered to be relevant to Clinical Psychology.

3. The program will involve four sessions of full-time study or their equivalent part-time. The program requires 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:
- GHMC900 Socio-cultural Applications in Clinical Psychology
- GHMC901 Interpersonal Skills for Clinical Psychologists
- GHMC902 Assessment in Clinical Psychology
- GHMC903 Research Skills for Clinical Psychologists;
- GHMC904 Clinical Psychology
- GHMC905 Child Clinical Psychology
- GHMC906 Clinical Neuropsychology
- GHMC907 Psychotherapy for Individuals and Groups

(b) 32 credit points in four areas of advanced study, that is, GHMC904 Clinical Psychology; GHMC905 Child Clinical Psychology; GHMC906 Clinical Neuropsychology; and GHMC907 Psychotherapy for Individuals and Groups;

(c) at least 12 credit points in supervised practicums GHMC908 Practicum 1 and GHMC909 Practicum 2;

(d) 24 credit points of independent but supervised research in the subject GHMC912 Research Project.

5. HONOURS MASTER OF ARTS BY RESEARCH

Candidates for this research degree enrol in GHMC 998.

6. MASTER OF SCIENCE (PASS) IN PSYCHOLOGY

The Master of Science (Pass) in Psychology is available to graduates with the degree of Bachelor with at least 24 credit points in 300-level Psychology subjects, or their equivalent. The Master of Science enables pass students to update or extend their psychological studies into an 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 Rules governing the award of Master of Science.

The Master of Science requires successful completion of 48 credit points made up as follows:

* Not on offer in 1994.
(1) **24 credit points in the core subjects:**

- GHMC959 Research Project
- GHMC961 Assessment in Applied Psychology
- GHMC962 Counselling Psychology

(2) **16 credit points selected from one of two streams:**

**Stream 1:**
- GHMC953 Psychology of Information Processing
- GHMC960 Psychology of Reading and Reading Disabilities

**Stream 2:**
- GHMC951 Health Psychology
- GHMC974 Principles of Personal Construct Psychology

3. **8 credit points selected from the following:**

- GHMC950 Psychology Honours Theory Seminar
- GHMC958 Topics in Data Analysis
- GHMC963 Child and Adolescent Psychology
- GHMC964 Cognitive and Affective Neuroscience
- GHMC965 Advanced Sport and Exercise Psychology

**SUBJECT DESCRIPTIONS**

**(CLINICAL PSYCHOLOGY)**

**GHMC900 Socio-Cultural Applications in Clinical Psychology**

*Double session (A); 8 credit points (2 hrs lectures/seminars/practicals per wk).*

*Assessment: seminar presentations, practical and theory assignments.*

The course arises from the fact that psychological problems occur within a social and cultural context. It aims to sensitize students to the impact of different social, cultural, and familial structures on psychopathology, and to the different assessment and treatment needs of the various linguistic and cultural groups that make up Australian society. The course also aims to equip students with skills to make clinically informed and culturally appropriate decisions in the assessment, management, treatment, and referral procedures for clients from ethnocultural groups other than their own. In conjunction with the psychology practica the course arranges for students to have placements in settings where they get exposure to the psychological problems of non Anglo-Australian clients. The course also encourages students with community language skills to specialize in the clinical psychological issues of particular importance to their selected ethnocultural community.

Topics include: the cultural context of clinical problems; cultural concepts of mental health; mental health, social and family structure; migration and psychopathology; minority groups in the clinical population; aboriginal issues; cross cultural counselling and psychotherapy; use of interpreters in clinical settings; referral procedures with non English speaking clients.

*Textbooks:* There is no set text.

*Co-ordinator:* Dr N Mackay.

**GHMC901 Interpersonal Skills for Clinical Psychologists**

*Double session (A); 8 credit points (52 hrs)*

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, 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 program.

*Textbooks:* To be advised.

*Co-ordinator:* Associate Professor L. L. Viney.

**GHMC902 Assessment for Clinical Psychologists**

*Double session (A); 8 credit points (52 hrs)*

*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 workshops, 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
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.

References: Lists will be distributed during the course. There will be considerable use of test manuals and accompanying texts.
Co-ordinator: Mr J Freestone.

GHMC903 Research Skills for Clinical Psychologists
Double session (A); 6 credit points (40 hrs)
Assessment: seminar presentations.
This subject has been designed to prepare its participants to conduct rigorous and yet useful research in clinical psychology. Building on the earlier achievements of those who are eligible for it, it aims to develop research expertise in these specific areas:
1. evaluation of the existing clinical psychology research literature, from the points of view of both researchers and practising clinicians
2. selection of viable clinical problems for research
3. development of research projects/programs appropriate to those problems
4. preparation and evaluation of funding proposals
5. consultation about the research of other associated professional groups, including critical evaluation and proposal of solutions; and
6. awareness and minimizing of ethical problems in research in clinical psychology.

Textbooks: To be advised.
Co-ordinator: Associate Professor L L Viney.

GHMC904 Clinical Psychology
Double session (A); 8 credit points (52 hrs)
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.
Co-ordinator: Dr J de Wet.

GHMC905 Child Clinical Psychology
Double session (A); 8 credit points (2 hrs per wk for 2 sessions)
Assessment: assignments.
The subject addresses topics in theory, assessment and clinical issues concerning children, adolescents and families.

Theoretical issues cover developmental topics in classical psychoanalytic theory, object relations theory, American ego psychology, cognitive behaviour theory and family systems approaches.

Students are introduced to formal testing as well as unstructured techniques of assessment, eg, play, interview, observation and family assessments.

Interventions covered include:
1. psychodynamic interventions: brief work with parents and toddlers; brief counselling with adolescents; psychotherapy; work with parents; group therapy;
2. cognitive behavioural approaches: compliance training; on task training; self instructional training and cost response programs; social skills training; peer friendship training.

Following an introduction to principles in establishing the clinical setting and the relationship between client and worker, students are introduced to clinical issues in a number of areas of work: eg., disturbances in pregnancy, childbirth, postpartum; separation, loss and bereavement; physical and developmental disability; deprivation, disadvantage and abuse; adoption and fostering.

Textbooks: There is no set text.
Co-ordinator: Dr R M Henry.

GHMC906 Clinical Neuropsychology
Double session (A); 8 credit points (2 hrs per wk)
Assessment: seminar presentations, assignments and examinations.

The aim of this subject is to provide students with sufficient theory and knowledge about brain functioning for them to be able to carry out neuropsychological assessments and to plan and implement interventions to assist
brain-damaged people. The subject will deal with:
1. basic brain anatomy
2. theories of brain functioning
3. the causes of brain dysfunction
4. principles of neuropsychological assessment
5. the use of neuropsychological tests
6. neuropsychological report writing
7. treatment and rehabilitation of the brain damaged.

Textbooks:

GHMC907 Psychotherapy with Individuals and Groups
Double session (A); 8 credit points (52 hrs)
Assessment: seminar papers, case work.
The aim is to provide students with both an integrated theoretical and practical grounding in psychotherapy. The course offers 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 reconstructive, cognitive-behavioural, psychoanalytic and family approaches. The subject consists of clinical reading and seminars in the selected areas and supervision of work (therapeutic programs, 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.

Textbooks: To be advised.
Co-ordinator: Ms V Bliokas.

GHMC908 Practicum 1
Double (A) or single sessions; 6 credit points (field work plus 30 hrs of university-based case conference)
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.
Co-ordinator: Dr J de Wet.

GHMC909 Practicum 2
Double (A) or single sessions; 6 credit points (field work plus 30 hrs of university-based case conference)
Assessment: as for GHMC908
This practicum extends the work of GHMC908.
Co-ordinator: Dr J Wragg.

GHMC910 Other Practicum Work
Single session; 6 credit points (26 hrs of seminars)
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.
Co-ordinator: To be advised.

GHMC911 Extended Practicum: Clinical Psychology
Double session (A); 24 credit points (field work, plus 52 hrs seminars)
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 MA degree or as miscellaneous students.
Co-ordinator: Associate Professor L L Viney.

GHMC912 Research Project
24 credit points
All applied psychologists should know how to answer psychological questions by recourse to raw data. All students are required to design and carry out a small research project under supervision. This research will be in any area of Psychology relevant to Clinical Psychology subject to the availability of supervision. To fulfil the requirements of this course the student will:
1. review the relevant literature and formulate a valid and testable hypothesis
2. give an oral presentation of the theoretical background and the intended study to a critical audience before data collection begins
3. collect, analyse and interpret those data;
4. report their findings in the form of an article suitable for a refereed journal of their choice.
GHMC913 Clinical Research Methods
Double session (A); 8 credit points (52 hrs of lectures and seminars)
Assessment: assignments to be determined.
This subject has been devised to prepare participants for their doctoral level research program. It aims to develop research expertise in these areas: research design; evaluation; advanced statistics; computing; the study of experience; behavioural medicine; biofeedback research psychology; critical skills of evaluating one's own research proposals to a doctoral level; research in health psychology; information processing.
Co-ordinator: Associate Professor L L Viney.

GHMC914 Major Thesis (Clinical)
48 credit points
For students who have an appropriate honours degree in Psychology. Refer to Department for details.

MSC (PASS) IN PSYCHOLOGY

GHMC950 Psychology Honours Theory Seminar
Autumn session; 8 credit points
The Honours Theory Seminar, which is available as a separate subject to candidates for the Master of Science (Pass) will examine key theoretical and metatheoretical issues in psychology, especially as they affect the specializations and chosen courses of the students. The course also aims to sharpen critical reasoning and arguing skills. Topics may include ethical issues in psychological practice; the relation of psychology to other disciplines; and conceptual problems in contemporary psychological theories.
Co-ordinator: Dr N Mackay.

GHMC951 Health Psychology
Spring session; 8 credit points (3 hrs lecture/seminar)
Assessment: essay, take home exam, program and evaluation presentations and final research report.
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. Since the delivery of any effective service or program presupposes that personal and social systems interact in health care, current theories about biological, psychological, social and cultural determinants of behaviour will be examined from a scientist practitioner model. A range of psychological principles will be examined within the context of formulating a treatment and evaluation proposal or prevention program designed to change health injurious behaviour or support health enhancing behaviour. Topics that will be examined in this course include drug and alcohol problems, stress, pain management and weight control.

Textbook:
Co-ordinator: Dr J Wragg.

GHMC953 Psychology of Information Processing
Spring session; 8 credit points (2 hrs lectures, 2 hrs laboratories)
Assessment: seminar presentations and assignments. This course covers advanced theoretical topics in cognitive psychology. An emphasis is placed on theoretical models of cognition. The areas covered will include face recognition, ecological optics, selective attention and an introduction to neural network models. Classes will involve seminar presentations and discussions, but there will also be some laboratory classes to demonstrate and develop principles of neural networks.
Textbook No set text.
Co-ordinator: Dr S Avons.

GHMC954 Occupational Psychology*
Autumn session; 8 credit points (1 hr lecture/per wk; 18 hrs practical per session).
Assessment: essay 30%, seminar papers 30% and one 3 hr examination at the end of session 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.
Textbooks:
Co-ordinator: To be advised.

GHMC958 Topics in Data Analysis
Double session (A); 8 credit points (26 hrs of seminars)
Assessment: practical exercises and major assignment.
A course of seminars dealing with the fitting of models to psychological data. Topics will include multidimensional scaling and

* Not on offer in 1994.
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 it. Students will also be encouraged to discuss problems in data analysis arising from their own research projects. A reading list will be provided.

**Co-ordinator:** To be advised

**GHMC959 Research Project**

*Double session (A); 8 credit points*

This subject involves the completion of a single empirical study.

**Co-ordinator:** Dr S Ginsberg.

**GHMC960 Psychology of Reading and Reading Disabilities**

*Annual session; 8 credit points*

**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:** To be advised.

Research articles will mostly be used in this subject.

**Co-ordinator:** Professor W J Lovegrove.

**GHMC961 Assessment in Applied Psychology**

*Annual session; 8 credit points (2 hrs lecture/seminar)*

**Pre-requisite:** PSYC347 or its equivalent plus eligibility to MSc(Pass)

**Assessment:** 2 assignments worth 35% each and 2 assignments worth 15% each.

This is a skills oriented course aimed at providing students with the opportunity to administer, score and interpret psychological tests under supervision. Assessment techniques used in a number of fields of applied psychology will be studied. In addition, attention will be devoted to ethical standards in psychological assessment.

**Textbooks:**

There is no set text. A list of references will be provided at the start of the course.

**Co-ordinator:** Dr J de Wet.

**GHMC962 Counselling Psychology**

*Autumn session; 8 credit points (3 hrs lectures/practicals)*

**Assessment:** tape transcript analysis, major essay, videotaped counselling skills assignment.

This course will initially focus on a microskills approach to working with clients. A workshop format with roleplay, observation, feedback and discussion will be used. Students will be expected to develop a critical and analytical understanding of the conceptual and developmental framework from which different counselling orientations can develop. In order to provide students with an alternative but complimentary framework from which counselling can proceed the second half of the course will examine a cognitive behavioural approach.

**Textbooks:**


**Co-ordinator:** Dr J Wragg.

**GHMC963 Child and Adolescent Psychology**

*Spring session; 8 credit points (2 hrs lecture, 1 hr practical per wk)*

**Assessment:** 2 child reports 25% each, 1 major essay 30%, 1 take home examination 20%.

This subject focuses on a range of childhood and adolescent concerns or problem behaviours within a broad developmental framework. The subject will provide students with a general introduction to the specific problems and needs of children and parents who present at community health or child guidance clinics. Individual and family based assessment and intervention approaches will be examined for such problems as conduct disorders, attention deficit hyperactive disorders, school based adjustment and learning problems, anxiety disorders, problems of abuse and adolescent health risk behaviours such as substance abuse and adolescent deviancy.

**Textbooks:** No set text. Readings from several sources.

**Co-ordinator:** Dr J Wragg.

**GHMC964 Cognitive and Affective Neuroscience**

*Autumn session; 8 credit points (2 hrs lecture/seminars per wk and labs 18 hrs per session)*

**Pre-requisites:** PSYC341

**Assessment:** individual project 50%, 5 x 10% lab reports based on laboratory exercise.
The emphasis in this subject will be on the use of physiological measures to explore human brain function in relation to a range of psychological concepts such as arousal, stress, anxiety and repression, personality, perception, learning, cognition. Selected examples of recent research investigating these connections in both normal and psychiatric patients will be discussed. The subject will include laboratory sessions developing expertise in electrophysiological recording, involvement in on-going departmental research, and a small individual pilot project (which may form the basis for subsequent independent research).

Textbooks: To be announced, plus readings from current journals.
Co-ordinator: Professor R J Barry.

GHMC965 Advanced Sport and Exercise Psychology
Spring session; 8 credit points (3 contact hrs)
Pre-requisite: PSYC399 or equivalent subjects
Assessment: mid-term exam 30%, oral presentation 20%, lab report (3000 words) 20%, paper eg observations, counselling, research proposal 30%.
The subject will focus on the role of psychological factors in sport and exercise particularly as they relate to aspects of cognitive processes, psychosocial factors and health-related issues. Students will become familiar with and be able to interpret and apply research literature in sport and exercise psychology. They will experience the processes of research experimentation, including data collection and analysis, and complete a manuscript in reporting their experiment using APS style. Students will also lead a seminar on a segment of the scientific literature and be familiar with the application and presentation of performance enhancement strategies.

Textbooks:
Co-ordinator: Associate Professor M Anshel.

GHMC974 Principles of Personal Construct Psychology
Spring session; 8 credit points (42 hrs)
Prerequisites: The completion of the requirements for any Bachelor level degree.
Assessment: laboratory report, case study and personal diary (relating their own construing to their own behaviour).
This subject will provide an introduction to the underlying assumptions, principles and methodologies of Personal Construct Psychology, including constructive alternativism, the person as scientist, behaviour as an experiment, construing as bipolar and hierarchical, relations with others and the process of transition. Laboratory work will focus on understanding of self and others using constructivist methods, ranging from self-characterisation to the repertory grid and dependency grid techniques. The resulting understanding of principles and methods will then provide a basis for examination of current applications of Personal Construct Psychology in counselling, organisational and health psychology.

Textbook:
Co-ordinators: Associate Professor L L Viney and Dr B M Walker.

GHMC998 Thesis
48 credit points

GHMC999 Thesis
48 credit points
COURSES OFFERED

1. RESEARCH DEGREES

1.1 DOCTOR OF PHILOSOPHY

1.2 DOCTOR OF PUBLIC HEALTH

1.3 HONOURS MASTER OF SCIENCE

2. MASTERS DEGREES BY COURSEWORK AND RESEARCH

2.1 MASTER OF PUBLIC HEALTH
   a) Master of Public Health (General, Health Promotion, Nutrition, International Health)
   b) Master of Public Health (Occupational Health and Rehabilitation)

2.2 MASTER OF SCIENCE
   a) Master of Science (Health Policy and Management)
   b) Master of Science (Mental Health)
   c) Master of Science (Nutrition and Dietetics)
   d) Master of Science (Primary Health Care)

3. GRADUATE DIPLOMAS

3.1 GRADUATE DIPLOMA IN PUBLIC HEALTH

3.2 GRADUATE DIPLOMA IN SCIENCE
   a) Graduate Diploma in Science (Health Policy and Management)
   b) Graduate Diploma in Science (Mental Health)
   c) Graduate Diploma in Science (Occupational Health and Rehabilitation)
   d) Graduate Diploma in Science (Primary Health Care)

3.3 GRADUATE DIPLOMA IN GENERAL PRACTICE
   (not offered in 1994)

4. GRADUATE CERTIFICATE IN HEALTH POLICY AND MANAGEMENT

CURRENT RESEARCH AREAS

Supervision in the following areas of research is likely to be available to candidates undertaking the Honours Master degree, the Doctor of Philosophy degree and the Doctor of Public Health degree:

- Cardiovascular disease prevention
- Child and family health
- Geriatrics and rehabilitation
- Health information systems
- Health policy and management
- Health promotion
- Health services development and evaluation
- Mental health
- Migrant health
- Nutrition (Obesity, Diabetes)
- Occupational health and rehabilitation

POSTGRADUATE PROGRAMS OFFERED

1. Research degrees
   i) Doctor of Philosophy
   ii) Doctor of Public Health
   iii) Master of Science (Hons)

2. Public Health (Public Health, Health Promotion, Nutrition, International Health)
   i) Master of Public Health
   ii) Graduate Diploma in Public Health

3. Occupational Health and Rehabilitation
   i) Master of Public Health
   ii) Graduate Diploma in Science

4. Health Policy and Management*
   i) Master of Science
   ii) Graduate Diploma in Science
   iii) Graduate Certificate in Health Policy and Management.

5. Mental Health
   i) Master of Science
   ii) Graduate Diploma in Science

6. Nutrition and Dietetics
   i) Master of Science

7. Primary Health Care
   i) Master of Science
   ii) Graduate Diploma in Science

8. Graduate Diploma in General Practice
   (Not offered in 1994)

* Also offered externally through the Wollongong Graduate Consortium.
SCHEDULE OF PROGRAMS

1 RESEARCH DEGREES

(i) DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy (PhD) is available to candidates in the major research areas of the Department of Public Health and Nutrition for which supervision is available, namely, Public Health, Primary Health Care, Health Policy and Management, Mental Health, Nutrition, Health Information Systems, International Health, Epidemiology, Medical Anthropology. The PhD is designed to provide supervised research training of excellence in a program of not less than three years duration (full-time).

Admission details and regulations governing the award are set out in the General Information: Postgraduate Admission section of the Calendar.

Potential candidates should discuss their research plan with the Head of Department at which time the supervision arrangements of the Department will be outlined. Research seminars are held in Autumn and Spring sessions to assist research students structure their program and, in particular, make rapid progress with proposal design and construction. Opportunities exist for suitably qualified candidates to gain scholarship support by application to the University. For information regarding the award refer to the Calendar, General Information: Postgraduate Scholarships section. Details of Research Scholarships are listed under Conditions of University Postgraduate Research Awards, also in the General Information section.

Leaders are required to conduct research into clinical and population-based issues concerned with protecting, promoting, maintaining and restoring the health of individuals and groups.

The Doctor of Philosophy degree is a widely recognised pathway to excellence in Public Health research.

(ii) DOCTOR OF PUBLIC HEALTH

The Doctor of Public Health program requires the successful completion of 72 credit points of coursework and 72 credit points of thesis research. Coursework can either broaden the education in Public Health of a candidate who has a strong disciplinary background (e.g., a health economist who requires more reading in Public Health) or provide more specialised knowledge for a candidate who has already achieved a general education (e.g., MPH) in Public Health. The coursework provides a basis for the thesis. Additionally, the Doctor of Public Health degree includes a thesis of 72 credit points. Admission to the thesis component is consequent upon acceptance of a formal proposal, presented after at least 48 credit points of coursework have been completed.

Schedules A and B represent the coursework moiety of a standard program for a candidate with a strong disciplinary background. A different selection of subjects will be recommended for a candidate with a need to focus particularly on a specific area.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>Schedule 1: 48 credit points in the following subjects:</td>
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<tr>
<td>GHMD904</td>
<td>Epidemiology</td>
<td>6</td>
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<tr>
<td>GHMD905</td>
<td>Social Foundations of Public Health</td>
<td>6</td>
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<tr>
<td>GHMD906</td>
<td>Health Services Organisation and Management</td>
<td>6</td>
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<tr>
<td>GHMD908</td>
<td>Health Services Planning and Evaluation</td>
<td>6</td>
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<tr>
<td>GHMD909</td>
<td>The Australian Health System - Policies and Politics</td>
<td>6</td>
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<tr>
<td>GHMD924</td>
<td>Health Information Systems</td>
<td>6</td>
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<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
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<tr>
<td>GHMD984</td>
<td>Health Research Methodology</td>
<td>6</td>
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(ii) DOCTOR OF PUBLIC HEALTH (Cont'd)

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<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<td></td>
<td>Schedule 2: PLUS 24 credit points from the following subjects:</td>
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<tr>
<td></td>
<td>ECON918 Economics of Health Care</td>
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<tr>
<td></td>
<td>GHMC951 Health Psychology</td>
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<td></td>
<td>GHMD902 Communication and Education</td>
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<td>GHMD913 Drug Problems and Issues</td>
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<td>GHMD939 Human Nutrition in Health and Disease</td>
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<tr>
<td></td>
<td>GHMD940 Principles and Practice of Occupational Health and Rehabilitation</td>
<td>6</td>
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<td></td>
<td>GHMD950 Financial Management</td>
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<td></td>
<td>LAW960 Legal Studies for Professionals</td>
<td>6</td>
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<td></td>
<td>STS936 Critical Studies in Medicine and Health Care</td>
<td>6</td>
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<td></td>
<td>or other subjects offered and for which prior approval has been obtained.</td>
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<tr>
<td></td>
<td>Schedule 3: PLUS a major thesis (72 credit points)</td>
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<td></td>
<td>GHMD997 Major Project</td>
<td>24</td>
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<td></td>
<td>GHMD999 Major Thesis</td>
<td>48</td>
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(iii) MASTER OF SCIENCE (HONOURS)

The degree of Master of Science (Honours) is designed to provide supervised training in independent research. For candidates who are admitted with an Honours Bachelor Degree, the program will consist of 48 credit points of research leading to the submission of a thesis. For candidates who are admitted with a Bachelor Degree the program will consist of 96 credit points of research leading to the submission of a thesis, and may involve directed coursework in research design, methodology and skills.

Potential candidates will discuss their area of interest with the coordinator of the program and present a research project title and general outline. Once a supervisor has been nominated the candidate will undertake an approved course recommended by the Departmental Head, together with such examinations and other work as may be prescribed by Council. Otherwise requirements shall be the same as requirements specified in the Honours Masters Degree Rules (refer to Calendar, General Information).

2. POSTGRADUATE PROGRAM IN PUBLIC HEALTH (GENERAL, HEALTH PROMOTION, NUTRITION, INTERNATIONAL HEALTH)

leading to the degree of Master of Public Health (General, Health Promotion, Nutrition, International Health) or the Graduate Diploma in Public Health.

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<tr>
<th>Number</th>
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<th>Credit Points</th>
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<tbody>
<tr>
<td></td>
<td>(i) Master of Public Health</td>
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<td></td>
<td>Schedule 1: MPH Core Subjects</td>
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<td></td>
<td>GHMD904 Epidemiology</td>
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<td></td>
<td>GHMD905 Social Foundations of Public Health</td>
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<td></td>
<td>GHMD906 Health Services Organisation and Management</td>
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<td>GHMD983 Statistics in Health Research</td>
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<td></td>
<td>GHMD984 Health Research Methodology</td>
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<td></td>
<td>GHMD997 Major Project</td>
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<td></td>
<td>Schedule 2: MPH General</td>
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<td></td>
<td>A candidate for the MPH not specialising in Health Promotion, Nutrition or International Health shall undertake a 72 credit point program which includes subjects listed in Schedule 1 together with:</td>
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<td></td>
<td>GHMD912* Health Promotion: A Practical Approach to Program Delivery</td>
<td>6</td>
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*Not on offer in 1994.
### POSTGRADUATE PROGRAM IN PUBLIC HEALTH (GENERAL, HEALTH PROMOTION, NUTRITION, INTERNATIONAL HEALTH) (Cont’d)

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<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tr>
<td></td>
<td>together with subjects comprising 12 credit points chosen from subjects listed in Schedules 2 to 4, approved by the Head of Department.</td>
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</table>

#### Schedule 3: MPH Health Promotion

A candidate for the Master of Public Health specialising in Health Promotion shall undertake a program which includes at least 18 credit points from Schedule 3, in addition to those in Schedule 1.

- GHMD911 Health Promotion in the Health Care System 6
- GHMD912 Health Promotion - A Practical Approach to Program Delivery 6

* together with at least 6 credit points chosen from the following subjects

- GHMC951 Health Psychology 8
- GHM901 Community Health Services 6
- GHM902 Communication and Education 6
- GDM907 Special Topic in Public Health 6
- GDM913 Drug Problems and Issues 6
- GDM938* Behavioural Aspects of Nutrition 6
- GDM962 Adolescent Mental Health 6
- GDM975 Socio-cultural Issues in Mental Health 6
- ECON918 Economics of Health Care 6

#### Schedule 4: MPH Nutrition

A candidate for the Master of Public Health specialising in Nutrition shall undertake a program which includes at least 18 credit points from Schedule 4, in addition to those in Schedule 1.

- GHMD936 Public Health Nutrition 6

* together with at least 12 credit points chosen from the following subjects

- ECON918 Economics of Health Care 6
- GEOG934 Nutrition and Hunger: Analysis and Policy 12
- GDM902 Communication and Education 6
- GDM911* Health Promotion in the Health Care System 6
- GDM938* Behavioural Aspects of Nutrition 6
- GDM939 Human Nutrition in Health and Disease 6

#### Schedule 5: MPH International Health

A candidate for the Master of Public Health degree specialising in International Health shall undertake a 72 credit point program of which 54 credit points shall be as prescribed below including the major project.

- GHMD904 Epidemiology 6
- GHMD980 International Health: Health Care Delivery in Developing Countries 6
- GHMD981 Maternal and Child Health in Developing Countries 6
- GHMD982 Special Topic in International Health 6
- GHMD983 Statistics in Health Research 6
- GHMD997 Major Project 24

* together with subjects worth 18 credit points to be selected from Schedules 1 to 4 of the Master of Public Health Schedule, approved by the Head of Department.

(ii) Graduate Diploma in Public Health

- GHMD904 Epidemiology 6
- GHMD905 Social Foundations of Public Health 6
- GHMD906 Health Services Organisation and Management 6
- GHMD983 Statistics in Health Research 6

* and one or both of

- GHMD911* Health Promotion in the Health Care System 6
- GHMD912* Health Promotion: A Practical Approach to Program Delivery 6

* together with subjects listed in Schedules 2 to 4 of the Master of Public Health Schedule and approved by the Head of Department to make up a total of 48 credit points of coursework or, approved subjects from other departments.

* Not on offer in 1994.
3. **POSTGRADUATE PROGRAM IN OCCUPATIONAL HEALTH AND REHABILITATION**

leading to the degree of Master of Public Health (Occupational Health and Rehabilitation) or the Graduate Diploma in Science (Occupational Health and Rehabilitation).

<table>
<thead>
<tr>
<th>Number</th>
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<tbody>
<tr>
<td></td>
<td>(i) Master of Public Health (Occupational Health and Rehabilitation)</td>
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<tr>
<td></td>
<td><strong>Schedule 1: Core subjects</strong></td>
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<tr>
<td>GHMA914</td>
<td>Ergonomics</td>
<td>8</td>
</tr>
<tr>
<td>GHMD904</td>
<td>Epidemiology</td>
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<tr>
<td>GHMD905</td>
<td>Social Foundations of Public Health</td>
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<tr>
<td>GHMD906</td>
<td>Health Services Organisation and Management</td>
<td>6</td>
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<tr>
<td>GHMD940</td>
<td>The Principles and Practice of Occupational Health and Rehabilitation</td>
<td>6</td>
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<tr>
<td>GHMD941</td>
<td>Occupational Hygiene and Industrial Toxicology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>GHMD984</td>
<td>Health Research Methodology</td>
<td>6</td>
</tr>
<tr>
<td>LAW960</td>
<td>Legal Studies for Professionals</td>
<td>6</td>
</tr>
<tr>
<td>MGMT963</td>
<td>Management of Occupational Health and Safety</td>
<td>6</td>
</tr>
<tr>
<td>GHMD997</td>
<td>Major Project</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td><strong>Schedule 2: Electives</strong></td>
<td></td>
</tr>
<tr>
<td>ECON918</td>
<td>Economics of Health Care</td>
<td>6</td>
</tr>
<tr>
<td>GHMD908</td>
<td>Health Services Planning and Evaluation</td>
<td>6</td>
</tr>
<tr>
<td>GHMD909</td>
<td>The Australian Health System: Policies and Politics</td>
<td>6</td>
</tr>
<tr>
<td>MGMT906</td>
<td>Safety Concepts and Technology</td>
<td>6</td>
</tr>
</tbody>
</table>

A candidate for the MPH specialising in Occupational Health and Rehabilitation shall undertake a 96 credit point program which includes subjects listed in Schedule 1 of this degree, including a major project (GHMD997) of 24 credit points together with at least 12 credit points from subjects listed in Schedule 2 of this degree.

(ii) **Graduate Diploma in Science (Occupational Health and Rehabilitation)**

A candidate for the Graduate Diploma in Science (Occupational Health and Rehabilitation) shall complete a 48 credit point program comprising the subjects listed below.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Schedule 1: Core subjects</strong></td>
<td></td>
</tr>
<tr>
<td>GHMD904</td>
<td>Epidemiology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD905</td>
<td>Social Foundations of Public Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD906</td>
<td>Health Services Organisation and Management</td>
<td>6</td>
</tr>
<tr>
<td>GHMD940</td>
<td>The Principles and Practice of Occupational Health and Rehabilitation</td>
<td>6</td>
</tr>
<tr>
<td>GHMD941</td>
<td>Occupational Hygiene and Industrial Toxicology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>LAW960</td>
<td>Legal Studies for Professionals</td>
<td>6</td>
</tr>
<tr>
<td>MGMT963</td>
<td>Management of Occupational Health and Safety</td>
<td>6</td>
</tr>
</tbody>
</table>

4. **POSTGRADUATE PROGRAM IN HEALTH POLICY AND MANAGEMENT**

leading to the degree of Master of Science (Health Policy and Management) or the Graduate Diploma in Science (Health Policy and Management) or the Graduate Certificate in Health Policy and Management.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(i) Master of Science (Health Policy and Management)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Part-time Course</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>First Year</strong></td>
<td></td>
</tr>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>GHMD905</td>
<td>Social Foundations of Public Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD906</td>
<td>Health Services Organisation and Management</td>
<td>6</td>
</tr>
<tr>
<td>GHMD904</td>
<td>Epidemiology</td>
<td>6</td>
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</table>
### 4. POSTGRADUATE PROGRAM IN HEALTH POLICY AND MANAGEMENT (Cont’d)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Second Year</strong>&lt;br&gt;GHMD909</td>
<td>The Australian Health System: Policies and Politics</td>
<td>6</td>
</tr>
<tr>
<td>ECON918</td>
<td>Economics of Health Care</td>
<td>6</td>
</tr>
<tr>
<td>GHMD950</td>
<td>Financial Management for Health Services</td>
<td>6</td>
</tr>
<tr>
<td>GHMD924</td>
<td>Health Information Systems</td>
<td>6</td>
</tr>
</tbody>
</table>

| **Third Year**<br>GHMD908 | Health Services Planning and Evaluation           | 6             |
| GHMD984 | Health Research Methodology                       | 6             |
| LAW960  | Legal Studies for Professionals                   | 6             |

| **Fourth Year**<br>GHMD997 | Major Project                                    | 24            |

**(ii) Graduate Diploma in Science (Health Policy and Management)**

**Part-Time Course**

| **First Year**<br>GHMD983 | Statistics in Health Research                     | 6             |
| GHMD905 | Social Foundations of Public Health               | 6             |
| GHMD906 | Health Services Organisation and Management       | 6             |
| GHMD904 | Epidemiology                                      | 6             |

| **Second Year**<br>GHMD909 | Australian Health System: Policies and Politics   | 6             |
| GHMD950 | Financial Management for Health Services          | 6             |
| Elective# |                                               | 6             |

**(iii) Graduate Certificate in Health Policy and Management**

The Graduate Certificate requires the completion of 4 subjects selected from the following:

| GHMD909 | Australian Health System: Policies and Politics | 6             |
| GHMD906 | Health Services Organisation and Management     | 6             |
| GHMD924 | Health Information Systems                      | 6             |
| GHMD905 | Social Foundations of Public Health             | 6             |
| ECON918 | Economics of Health Care                        | 6             |
| GHMD950 | Financial Management for Health Services        | 6             |

#Electives

The elective for the Master degree and electives for the Graduate Diploma may be chosen from the subjects listed below. However, candidates can substitute other subjects offered at postgraduate level at the University with the agreement of the Head of Department.

| MGMT911 | Organisational Behaviour                        | 6             |
| MGMT928 | Public Policy and Administration                | 6             |
| MGMT931 | Strategic Planning and Policy                   | 6             |
| MGMT953 | Human Resource Management                       | 6             |
| MGMT915 | Management of Change                            | 6             |
| GHMB902 | Nursing Management                              | 6             |
| ACCY901 | Accounting for Managers                         | 6             |
Candidates who seek membership of the Australian College of Health Service Executives will need to complete two of the following subjects as electives: LAW960 Legal Studies for Professionals; MGMT953 Human Resource Management; ECON918 Economics of Health Care.

Candidates who have specific credit given for any of the above compulsory subjects are required to undertake elective study to make up the total credit points. The additional subjects can be selected from subjects in the Master program (core or elective) in consultation with the Program Coordinator.

5. POSTGRADUATE PROGRAM IN MENTAL HEALTH
leading to the degree of Master of Science (Mental Health) or the Graduate Diploma in Science (Mental Health)†.

(i) Master of Science (Mental Health)

<table>
<thead>
<tr>
<th>Schedule 1# Core Subjects</th>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMD970</td>
<td></td>
<td>Comprehensive Systems of Mental Health Care</td>
<td>6</td>
</tr>
<tr>
<td>GHMD971</td>
<td></td>
<td>Diagnosis and Description in Mental Health</td>
<td>6</td>
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<tr>
<td>GHMD972</td>
<td></td>
<td>Interviewing and Assessment Techniques</td>
<td>6</td>
</tr>
<tr>
<td>GHMD973</td>
<td></td>
<td>Methods of Intervention and Treatment 1</td>
<td>6</td>
</tr>
<tr>
<td>GHMD966</td>
<td></td>
<td>Family and Systems Interventions for Mental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD905</td>
<td></td>
<td>Social Foundations of Public Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD983</td>
<td></td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>GHMD997</td>
<td></td>
<td>Major Project</td>
<td>24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Schedule 2* Elective Subjects</th>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMD913</td>
<td></td>
<td>Drug Problems and Issues</td>
<td>6</td>
</tr>
<tr>
<td>GHMD961</td>
<td></td>
<td>Emotional and Behavioural Disorders of Childhood</td>
<td>6</td>
</tr>
<tr>
<td>GHMD962</td>
<td></td>
<td>Adolescent Mental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD963</td>
<td></td>
<td>Adult Mental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD964</td>
<td></td>
<td>Mental Health Problems of the Aged</td>
<td>6</td>
</tr>
<tr>
<td>GHMD965</td>
<td></td>
<td>Principles and Practice of Psychosocial Rehabilitation</td>
<td>6</td>
</tr>
<tr>
<td>GHMD968</td>
<td></td>
<td>Legal and Ethical Issues</td>
<td>6</td>
</tr>
<tr>
<td>GHMD969</td>
<td></td>
<td>Special Topic in Mental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD974</td>
<td></td>
<td>Methods of Intervention and Treatment 2</td>
<td>6</td>
</tr>
<tr>
<td>GHMD975</td>
<td></td>
<td>Socio-cultural Issues in Mental Health</td>
<td>6</td>
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<tr>
<td>GHMD976</td>
<td></td>
<td>Supervised Clinical Practice</td>
<td>6</td>
</tr>
<tr>
<td>GHMD984</td>
<td></td>
<td>Health Research Methodology</td>
<td>6</td>
</tr>
</tbody>
</table>

A candidate for the Master of Science specialising in Mental Health shall undertake a 72 credit point program. This includes all core subjects listed in Schedule 1 (ie 42 credit points) including the Major Project (GHMD997) of 24 credit points, together with at least 6 credit points from subjects listed in Schedule 2 of this program.

Subject to approval relevant subjects from other programs may also be taken as electives. For example, to add a component of Management to their program, students may choose from the following subjects:

GHMD906 Health Services Organisation and Management 6
GHMD908 Health Services Planning and Evaluation 6
GHMD909 The Australian Health System: Policies and Politics 6
ECON918 Economics of Health Care 6

† These programs of study are also offered as a Rural Strand, through Goulburn, Orange, Broken Hill and Lismore, using a multimedia format including interactive television. A further intake is expected in 1994. An additional external outlet for this program is expected to open in Sydney in 1994.

# Please note that in the Rural Strand of both the Graduate Diploma and Master of Science, GHMD969 Special Topic in Mental Health, replaces GHMD905 as a core subject.

* Not all of these subjects will be offered in 1994 - contact the Department for further information.
### POSTGRADUATE PROGRAM IN MENTAL HEALTH (Cont’d)

**Number Subject Credit Points**

#### (ii) Graduate Diploma in Science (Mental Health)

**Schedule 1 Core Subjects**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMD970 Comprehensive Systems of Mental Health Care</td>
<td>6</td>
</tr>
<tr>
<td>GHMD971 Diagnosis and Description in Mental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD972 Interviewing and Assessment Techniques</td>
<td>6</td>
</tr>
<tr>
<td>GHMD973 Methods of Intervention and Treatment 1</td>
<td>6</td>
</tr>
<tr>
<td>GHMD966 Family and Systems Interventions for Mental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD905 Social Foundations of Public Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD976 Supervised Clinical Practice</td>
<td>6</td>
</tr>
</tbody>
</table>

#### Schedule 2 Elective Subjects

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMD913 Drug Problems and Issues</td>
<td>6</td>
</tr>
<tr>
<td>GHMD961 Emotional and Behavioural Disorders of Childhood</td>
<td>6</td>
</tr>
<tr>
<td>GHMD962 Adolescent Mental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD963 Adult Mental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD964 Mental Health Problems of the Aged</td>
<td>6</td>
</tr>
<tr>
<td>GHMD965 Principles and Practice of Psychosocial Rehabilitation</td>
<td>6</td>
</tr>
<tr>
<td>GHMD968 Legal and Ethical Issues</td>
<td>6</td>
</tr>
<tr>
<td>GHMD969 Special Topic in Mental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD974 Methods of Intervention and Treatment 2</td>
<td>6</td>
</tr>
<tr>
<td>GHMD975 Socio-cultural Issues in Mental Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD983 Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>GHMD984 Health Research Methodology</td>
<td>6</td>
</tr>
</tbody>
</table>

A candidate for the Graduate Diploma in Science specialising in Mental Health shall undertake a 54 credit point program. This includes all subjects listed in Schedule 1 of this Diploma (ie 42 credit points) with at least 12 credit points chosen from Schedule 2 of this Diploma.

Subject to approval relevant subjects from other programs may also be taken as electives. See note on electives below.

* Please note that in the Rural Strand of both the Graduate Diploma and Master of Science, GHMD969 Special Topic in Mental Health, replaces GHMD905 as a core subject.

* Not all of these subjects will be offered in 1994 - contact the Department for further information.

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### 6. POSTGRADUATE PROGRAM IN NUTRITION AND DIETETICS

leading to the degree of Master of Science (Nutrition and Dietetics)

Students who have not completed an undergraduate program with a major in nutrition will be required to undertake a number of specific nutrition subjects during the course. This will limit their opportunity to take elective subjects.

**Number Subject Credit Points**

#### (i) Master of Science (Nutrition and Dietetics)

Students should note that CHEM215, Food Chemistry, is a prerequisite to GHMD934 Dietetics 2: Secondary and Tertiary Health Care. Students who have not passed CHEM215 should take this subject in Autumn session.

**Session 1 All students**

**Introductory session**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMD931 Dietetics 1: Primary Health Care</td>
<td>6</td>
</tr>
<tr>
<td>GHMD932 Community Nutrition</td>
<td>6</td>
</tr>
<tr>
<td>GHMD983 Statistics in Health Research</td>
<td>6</td>
</tr>
</tbody>
</table>

**Students without nutrition major**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHN301 Nutrients and Metabolism</td>
<td>8</td>
</tr>
</tbody>
</table>

**Students with nutrition major**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMD902 Communication and Education</td>
<td>6</td>
</tr>
</tbody>
</table>
6. POSTGRADUATE PROGRAM IN NUTRITION AND DIETETICS (Cont’d)
leading to the degree of Master of Science (Nutrition and Dietetics)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 2</td>
<td><strong>All students</strong></td>
<td></td>
</tr>
<tr>
<td>GHMD933</td>
<td>Nutrition Counselling</td>
<td>6</td>
</tr>
<tr>
<td>GHMD934</td>
<td>Dietetics 2: Secondary and Tertiary Health Care</td>
<td>6</td>
</tr>
<tr>
<td>GHMD935</td>
<td>Nutrition and Food Services</td>
<td>8</td>
</tr>
<tr>
<td>GHMD984</td>
<td>Health Research Methodology</td>
<td>6</td>
</tr>
<tr>
<td>Session 3</td>
<td>Practical Studies in Nutrition and Dietetics</td>
<td>24</td>
</tr>
<tr>
<td>Session 4</td>
<td>Major Project</td>
<td>24</td>
</tr>
</tbody>
</table>

7. POSTGRADUATE PROGRAM IN PRIMARY HEALTH CARE
leading to the degree of Master of Science (Primary Health Care) or the Graduate Diploma in Science (Primary Health Care).

(i) Master of Science (Primary Health Care)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule 1: Core Subjects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHMD902</td>
<td>Communication and Education</td>
<td>6</td>
</tr>
<tr>
<td>GHMD905</td>
<td>Social Foundations of Public Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD906</td>
<td>Health Services Organisation and Management</td>
<td>6</td>
</tr>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
<tr>
<td>GHMD984</td>
<td>Health Research Methodology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD997</td>
<td>Major Project</td>
<td>24</td>
</tr>
<tr>
<td>Schedule 2: Elective Subjects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHMB922</td>
<td>Psychosocial Development of the Family</td>
<td>8</td>
</tr>
<tr>
<td>GHMB923</td>
<td>Legal and Professional Issues</td>
<td>6</td>
</tr>
<tr>
<td>GHMC951</td>
<td>Health Psychology</td>
<td>8</td>
</tr>
<tr>
<td>GHMD901</td>
<td>Community Health Services</td>
<td>6</td>
</tr>
<tr>
<td>GHMD908</td>
<td>Health Services Planning and Evaluation</td>
<td>6</td>
</tr>
<tr>
<td>GHMD909</td>
<td>Australian Health System: Policies &amp; Politics</td>
<td>6</td>
</tr>
<tr>
<td>GHMD912*</td>
<td>Health Promotion a Practical Approach</td>
<td>6</td>
</tr>
<tr>
<td>GHMD925</td>
<td>Aboriginal Health Issues</td>
<td>6</td>
</tr>
<tr>
<td>GHMD950</td>
<td>Financial Management for Health Services</td>
<td>6</td>
</tr>
<tr>
<td>GHMD975</td>
<td>Socio Cultural Issues in Mental Health</td>
<td>6</td>
</tr>
</tbody>
</table>

A candidate for the degree of Master of Science (Primary Health Care) shall undertake a program consisting of 72 credit points which includes all subjects included in the core (30 credit points) and 18 credit points of electives. In addition a major project of 24 credit points will be undertaken in relation to an issue of importance in primary health care.

(ii) Graduate Diploma in Science (Primary Health Care)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule 1: Core Subjects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHMD902</td>
<td>Communication and Education</td>
<td>6</td>
</tr>
<tr>
<td>GHMD905</td>
<td>Social Foundations of Public Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD906</td>
<td>Health Services Organisation and Management</td>
<td>6</td>
</tr>
<tr>
<td>GHMD983</td>
<td>Statistics in Health Research</td>
<td>6</td>
</tr>
</tbody>
</table>

* Not on offer in 1994.
7. POSTGRADUATE PROGRAM IN PRIMARY HEALTH CARE (Cont'd)

Schedule 2: Elective Subjects
The electives may be chosen from the subjects listed in Schedule 1 or 2 of the Master of Science (Primary Health Care) with the addition of PHN203 Current Issues in Food and Nutrition (6 credit points). However a candidate may with the agreement of the Head of Department, substitute other subjects offered at the post-graduate level by the University. A candidate for the degree of Graduate Diploma (Primary Health Care) shall undertake a program of at least 48 credit points (24 credit points core and 24 credit points elective).

8. POSTGRADUATE PROGRAM: GRADUATE DIPLOMA IN GENERAL PRACTICE*

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMD914</td>
<td>Supervised Clinical Practice in Acute Care</td>
<td>6</td>
</tr>
<tr>
<td>GHMD915</td>
<td>Supervised Clinical Practice in Obstetrics and Gynaecology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD916</td>
<td>Supervised Clinical Practice in General Medicine</td>
<td>6</td>
</tr>
<tr>
<td>GHMD917</td>
<td>Supervised Clinical Practice in General Surgery</td>
<td>6</td>
</tr>
<tr>
<td>GHMD918</td>
<td>Supervised Clinical Practice in Accident and Emergency</td>
<td>6</td>
</tr>
<tr>
<td>GHMD919</td>
<td>Supervised Clinical Practice in General Practice</td>
<td>6</td>
</tr>
<tr>
<td>GHMD920</td>
<td>Supervised Clinical Practice in Psychiatry</td>
<td>6</td>
</tr>
<tr>
<td>GHMD921</td>
<td>Supervised Clinical Practice in Rehabilitation</td>
<td>6</td>
</tr>
<tr>
<td>GHMD922</td>
<td>Supervised Clinical Practice in Paediatrics</td>
<td>6</td>
</tr>
</tbody>
</table>

Schedule 2
<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHMD901</td>
<td>Community Health Services</td>
<td>6</td>
</tr>
<tr>
<td>GHMD902</td>
<td>Communication and Education</td>
<td>6</td>
</tr>
<tr>
<td>GHMD903</td>
<td>Health Services Research and Evaluation</td>
<td>6</td>
</tr>
<tr>
<td>GHMD904</td>
<td>Epidemiology</td>
<td>6</td>
</tr>
<tr>
<td>GHMD905</td>
<td>Social Foundations of Public Health</td>
<td>6</td>
</tr>
<tr>
<td>GHMD906</td>
<td>Health Service Organisation and Management</td>
<td>6</td>
</tr>
<tr>
<td>GHMD907</td>
<td>Specific Topic in Public Health</td>
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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.

* Not on offer in 1994.

COURSE REQUIREMENTS

1. RESEARCH DEGREES

1.1 DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy (PhD) is available to candidates in the major research areas of the Department of Public Health and Nutrition for which supervision is available, namely, Public Health, Primary Health Care, Health Policy and Management, Mental Health, Nutrition, Health Information Systems, International Health, Epidemiology, Medical Anthropology. The PhD is designed to provide supervised research training of excellence in a program of not less than three years duration (full-time).

Admission details and regulations governing the award are set out in the General Information: Postgraduate Admission section of the Calendar.

Applicants should discuss their research plan with the Head of Department at which time the supervision arrangements of the Department will be outlined. Research seminars are held in Autumn and Spring sessions to assist research students structure their program and, in particular, make rapid progress with proposal design and construction. Opportunities exist for suitably
qualified candidates to gain scholarship support by application to the University. For information regarding the award refer to the Calendar, General Information: Postgraduate Scholarships section. Details of Research Scholarships are also listed under General Information.

Leaders are required to conduct research into clinical and population-based issues concerned with protecting, promoting, maintaining and restoring the health of individuals and groups.

The Doctor of Philosophy degree is a widely recognised pathway to excellence in Public Health research.

1.2 DOCTOR OF PUBLIC HEALTH

The purpose of the degree of Doctor of Public Health is to prepare professional leaders in Public Health.

The Doctor of Public Health program requires the completion of 72 credit points of research leading to the presentation of a thesis together with 72 credit points of coursework. The coursework is selected to meet the individual requirements of the candidate. Coursework will either broaden the education in Public Health of a candidate who has a strong disciplinary background (e.g., health economist or epidemiologist) or will provide a more specialised focus to a candidate who has a general background, e.g., Master of Public Health. Admission to the thesis component is consequent upon acceptance of a formal proposal, presented after at least 48 credit points of coursework have been completed.

Entry Requirements
To qualify for entry candidates must have an Honours Bachelor degree of at least Class 1, Division 1 standard or have completed the coursework requirements in the Master of Public Health degree or equivalent.

Course Structure
The minimum period for the completion of the degree of Doctor of Public Health will be 6 academic sessions of full-time study. Full-time students are required to present for examination not later than 8 academic sessions from the date of registration.

The program for Doctor of Public Health candidates includes successful completion of:

(i) at least 72 credit points from the Schedules of Graduate subjects of the Department or from approved subjects of other Departments of the University.
(ii) a supervised research project on a topic in the field of Public Health. The research project will be submitted as a thesis and its evaluation will contribute fifty percent toward the requirements for the award of the Degree.

Through an agreement with the School of Public Health, University of California (Berkeley), it is expected that DPH students will be able to spend one session at University of California (Berkeley) advancing research and/or coursework interests which are part of their approved program of study.

1.3 HONOURS MASTER OF SCIENCE

The Master of Science (Honours) degree is available in each of the Public Health domains of the Department for which supervision is available, namely, Public Health, Primary Health Care, Health Policy and Management, Mental Health, Nutrition, Nutrition and Dietetics, Health Information Systems, International Health, Epidemiology, Medical Anthropology.

The degree of Master of Science (Honours) is designed to provide supervised training in independent research. For candidates who are admitted with an Honours Bachelor Degree, the program will consist of 48 credit points of research leading to the submission of a thesis. For candidates who are admitted with a Bachelor Degree the program will consist of 96 credit points of research leading to the submission of a thesis, and may involve directed coursework in research design, methodology and skills.

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. A supervisor will be nominated and the candidate will undertake an approved course recommended by the Departmental Head, together with such examinations and other work as may be prescribed by Council. Otherwise requirements shall be the same as requirements specified in the Honours Masters Degree Rules.

2. MASTERS DEGREES BY COURSEWORK AND RESEARCH

2.1 MASTER OF PUBLIC HEALTH

General, Health Promotion, Nutrition, International Health
Occupational Health and Rehabilitation

a) Master of Public Health (General, Health Promotion, Nutrition, International Health)

A candidate for the Master of Public Health shall undertake at least a 72 credit
point program comprising 48 credit points of coursework together with 24 credit points of major research project. A candidate for the Master of Public Health (International Health) shall undertake subjects in Schedule 5 in this program designed especially for students wishing to practise in developing countries.

Public Health is the discipline area associated with the efforts made by society to protect, promote and restore the people’s health. Health is defined as a state of well-being, not just the absence of disease; the goals of public health include the promotion of health as well as prevention of disease, premature death, and disease-produced discomfort and disability in the population.

The Master of Public Health degree structure includes a number of core subjects common to all Master of Public Health specialisations. Each specialisation includes a number of mandatory subjects and may include a choice of electives. Some specialisations may be accredited by professional organisations. Intending students are advised to obtain further course information from the Department of Public Health and Nutrition, and to seek an interview with the program coordinator.

Candidates successfully completing the Graduate Diploma in Public Health may seek admission to the Master of Public Health degree program.

b) Master of Public Health (Occupational Health and Rehabilitation)

The aim of this degree is to provide advanced study which develops knowledge and professional skills for practice in Occupational Health and/or Rehabilitation Services. The degree is intended for graduates in a health-related discipline who wish to advance their career by working in an Occupational Health or Rehabilitation setting.

Course Design
This program provides core studies in Public Health and specialist subjects in Occupational Health and Rehabilitation, including research skill training in relation to a current issue in Occupational Health or Rehabilitation.

The Department has developed close relationships with BHP Port Kembla, and The Institute of Rehabilitation and Geriatrics of the Illawarra Area Health Service which support this program. Industry-relevant teaching and research opportunities are available to students through participation from senior professionals in Occupational Health and Rehabilitation.

Course Structure
The degree of Master of Public Health (Occupational Health and Rehabilitation) requires the satisfactory completion of 96 credit points, including 72 credit points of coursework and 24 credit points of major research project. The course can be undertaken full-time over two years or part-time over four years. In some sessions, subjects are timetabled to ensure that the part-time load (2 subjects per session) can be undertaken in one half-day of attendance on campus.

Entry Requirements
Students admitted to the Masters Degree normally hold a Bachelor Degree, plus at least one year of relevant work experience. In special circumstances an applicant who holds other acceptable academic qualifications and with relevant work experience may be admitted as a candidate.

2.2 MASTER OF SCIENCE

Health Policy and Management, Mental Health, Nutrition and Dietetics, Primary Health Care

a) Master of Science (Health Policy and Management)

Also available externally (UW574) through The Wollongong Graduate Consortium.

The aim of this degree is to provide advanced study which develops professional health service managers and enhances their competence for senior management roles in the health industry. The degree is intended for graduates in health service management and other related health professions wishing to pursue a management career.

Professional Recognition
The degree has been accredited by the Australian College of Health Service Executives and the Royal Australian College of Medical Administrators.

Course Design
The course develops the candidate's ability to cope with health service management problems and challenges in a logical and analytical manner. It emphasises the social and environmental factors impacting on the manager's task and the dynamic and pluralistic nature of health service management. The candidate acquires concepts and knowledge relevant to the
work of senior health service managers. The Major Project provides the opportunity to undertake advanced individual research with the support of an academic supervisor and an industry-based supervisor.

Course Structure
The course can be undertaken full-time over two years or part-time over four years. There are approximately six hours of contact per week for the part-time candidate and wherever possible, classes are scheduled on one afternoon per week beginning at 1.30pm. The course requires the completion of 96 credit points: ten core subjects (60 credit points); two elective subjects (12 credit points); and the Major Project (24 credit points).

Entry Requirements
Entrants to the course normally hold a degree together with a minimum of one year of relevant work experience. In special circumstances an applicant holding other acceptable academic qualifications and with relevant work experience of not less than one year may be admitted as a candidate.

b) Master of Science (Mental Health)
Also available externally through the Rural Strand of the Mental Health program.
The Mental Health specialisation places emphasis on quality clinical and practical training both at the individual and population level in the Public Health arena. It further emphasises the development of essential skills and conceptual knowledge needed for mental health research. A variety of electives offer the possibility for education and training in the management of comprehensive, community-based mental health services.

Course Requirements
A candidate for the Master of Science (Mental Health) will successfully complete a 72 credit point program. This would include 36 credit points of coursework from the core schedule, 24 credit points for the research component (i.e. Major Project), and 12 credit points chosen from the elective schedule.

The course is multidisciplinary and is open to appropriately qualified health professionals interested in further education and training in the specialisation of mental health.

Entry requirements include:
(i) a relevant 3 year undergraduate degree or equivalent from an approved tertiary institution;
(ii) two years (minimum) of relevant experience in the field.

Candidates successfully completing the Graduate Diploma in Science (Mental Health) may seek admission to the Master of Science program.

c) Master of Science (Nutrition and Dietetics)
Graduates holding the Master of Science (Nutrition and Dietetics) are eligible for membership of the Dietitians Association of Australia and thus may be employed as nutritionists/dietitians in Australia and selected overseas countries.

The Master of Science (Nutrition and Dietetics) program of coursework and placements will develop the knowledge and skills required by nutritionists/dietitians working in a variety of community settings and in public health, as well as in hospital and other tertiary health care facilities. It will also provide students with the opportunity to undertake a supervised research project on a subject related to nutrition and dietetics.

Course design
The course is designed to equip graduates with knowledge and skills to address the major nutritional problems in Australia today. The curriculum is based on the national competency standards for professional dietitian-nutritionists and has a focus on community nutrition and the principles of primary health care.

The course commences with an overview of the role nutrition plays in health and disease in the Australian community. Following this, studies are included to develop the knowledge and skills required by a nutritionist/dietitian working in particular environments, for example hospitals, community locations, public health. The theme which is pursued is that, in any of these capacities, the nutritionist/dietitian is working towards the goal of addressing major causes of ill-health through supportive nutritional practices, whether it is through professional practice at the primary, secondary or tertiary level.

Course Requirements
A candidate for the Master of Science (Nutrition and Dietetics) will undertake a program of study, student placements and a research project. The program is designed to cover those areas essential for the professional practice of dietitians in Australia, with an emphasis on community
aspects of dietetics and nutrition. Some of the subjects are taken in common with other postgraduate programs and there is limited flexibility of subject choice to allow students to pursue individual interests.

The minor placements provide students with the opportunity of experiencing aspects of nutritionist/dietitian work in a variety of community health settings. The major placement involves supervised training for the candidate in nutrition and dietetics in major and community-based hospitals, community health organisations and other units involved in aspects of nutrition care or health promotion.

The major project provides an opportunity for students to learn research skills in a particular area of dietetics and/or nutrition.

**Duration**
The Master of Science (Nutrition and Dietetics) is a two year, full-time course of 96 credit points. An opportunity exists to undertake part-time study, with the approval of the Departmental Head.

**Entry Requirements**
Entry will be based on selection by a panel. The panel will include at least the Departmental Head and course coordinator, together with members of the program's External Advisory Committee.

Students should have completed a Bachelor of Science or equivalent degree. The University of Wollongong Bachelor of Science majoring in nutrition is an appropriate qualification for entry. This includes studies in food chemistry, nutrition through the human lifecycle, social/behavioural aspects of nutrition and metabolic nutrition. These studies are in addition to full year studies in both metabolic biochemistry and human systems physiology at second year BSc level which is a requirement of the profession.

An average assessment of not less than credit level (65 per cent) in the major study of the previous two sessions of equivalent full-time study should normally be achieved 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 admitted as candidates for the Master of Science (Nutrition and Dietetics) provided their undergraduate performance is deemed equivalent to those entering with the University of Wollongong Bachelor of Science (Nutrition). Bridging courses are available where students do not have the required subjects in their undergraduate degree and potential candidates should seek advice on this matter from the course coordinator.

d) Master of Science (Primary Health Care)
Primary Health Care refers to the provision of high quality multidisciplinary health services within a local community. By taking a social view of the development of illness, and its prevention, the maintenance of health and the reduction of disability, primary health care implies that health professionals will be knowledgeable about response to acute illness and trauma, skilful in community negotiations and practice and resourceful in assisting individuals and groups, to grow increasingly self-reliant in maintaining and improving physical, psychological and community health.

The National Reference Centre for Continuing Education in Primary Health Care is located at the University and staff of the National Centre participate in teaching of this program. The presence of the National Centre provides an opportunity for students to widen their postgraduate education in local and national primary health care issues as well as participating in research associated with primary health care. The aim of this program is to foster the equipping of a skilled and experienced workforce for primary health care practice.

A candidate for the degree of Master of Science (Primary Health Care) shall undertake a program consisting of 72 credit points which includes 48 credit points of coursework (30 credit points of core studies and 18 credit points of electives). In addition a major project of 24 credit points will be undertaken in relation to an issue of importance in primary health care.

Students who complete the Graduate Diploma in Science (Primary Health Care) may, on application, be granted advanced standing totalling 48 credit points towards the award of Master of Science (Primary Health Care). On completion of requirements for the Master of Science degree, and prior to graduation any such student who has received the Graduate Diploma in Science (Primary Health Care) will be required to surrender their testamur in order to receive the Master of Science degree.
3. GRADUATE DIPLOMAS

3.1 GRADUATE DIPLOMA IN PUBLIC HEALTH

The Graduate Diploma in Public Health is designed for health professionals working in Public Health. It caters for health professionals who do not wish to undertake a research component in their studies. Those who do wish to undertake such a component may apply for enrolment in the Master of Public Health degree.

3.2 GRADUATE DIPLOMA IN SCIENCE

Health Policy and Management, Mental Health, Occupational Health and Rehabilitation, Primary Health Care

a) Graduate Diploma in Science (Health Policy and Management)

Also available externally (UW650) through The Wollongong Graduate Consortium. The aim of this course is to provide essential skills and conceptual knowledge needed to function effectively as a health service manager. The course is intended to cater for a variety of health and health related professionals wishing to pursue a management career within the health industry who may not wish to undertake a longer, more rigorous, Master of Science program.

Professional Recognition

This course has been accredited by the Australian College of Health Service Executives as an appropriate qualification for membership.

Course Design

The course develops the candidate's ability to manage proactively and to address problems in a logical and analytical manner. It emphasises the social and environmental factors impacting on the manager's task and the dynamic and pluralistic nature of health service management.

Course Structure

The course can be undertaken full-time over one year or part-time over two years. There are approximately six hours of contact per week for the part-time candidate. As with the Master of Science (Health Policy and Management) degree the course is designed with the part-timer in mind. The course requires a total of at least 48 credit points by satisfactory completion of subjects outlined in the accompanying schedule. A brief description of each subject appears in this calendar.

Articulation with the Master of Science (Health Policy and Management)

Candidates who successfully complete the Graduate Diploma may apply for admission to the Master of Science (Health Policy and Management). Candidates who undertake the Master of Science degree following completion of the Graduate Diploma in Science (Health Policy and Management) must surrender the testamur prior to the conferring of the Master degree. The six core subjects of the Graduate Diploma also form part of the core subject requirements of the Master program. The Master of Science (Health Policy and Management) degree requires the completion of a further four subjects (24 credit points) plus the completion of the Major Project (24 credit points).

Entry Requirements

Entrants to the course normally hold a degree together with a minimum of one year of relevant work experience. In special circumstances an applicant holding other acceptable academic or professional qualifications and with relevant work experience of not less than one year may be admitted to studies.

b) Graduate Diploma in Science (Mental Health)

Also available externally through the Rural Strand of the Mental Health program. The Graduate Diploma in Science (Mental Health) is designed to develop the careers of mental health staff and to provide training for the multidisciplinary group of health professionals who will provide services for mental health clients in comprehensive area-based settings. It aims to produce graduates with the clinical and professional competence to work across the full range of mental health services. Entry requirements will be as for Graduate Diploma Rules paragraphs 5(1), 5(2a), 5(2c) and 5(3) in this Calendar including at least 1 year of appropriate experience in the field.

Course Requirements

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 be 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 or relevant subjects chosen from other programs subject to approval of Departmental Head.

Not all subjects in Schedule 2 will be offered each year. Elective courses will be offered subject to demand and according to availability of teachers.
A Rural Strand in Mental Health was first offered in 1992. It is expected to be offered in 1994. Currently students are enrolled in Goulburn, Orange, Lismore and Broken Hill and are taught using a multimedia format including interactive television and workplace skill development workshops.

Assessment: Assessment of coursework is the responsibility of the subject coordinator and the School Assessment Committee. Satisfactory completion of the supervised clinical practice is 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 Rules shall be as for the Graduate Diploma in this Calendar.

c) Graduate Diploma in Science (Occupational Health and Rehabilitation)
The aim of this course is to provide the knowledge and industry experiences necessary to successfully work as a practitioner in Occupational Health or Rehabilitation services. The course is intended to cater for a multidisciplinary group of students who have gained their primary qualifications in a health-related discipline and who seek a career in Occupational Health or Rehabilitation services.

The Graduate Diploma articulates with The Master of Public Health (Occupational Health/Rehabilitation) in that students who successfully complete the Diploma may apply for advanced standing in 48 credit points of coursework in the Master of Public Health degree.

Course Design
The course is designed to provide a broadening education in core Public Health knowledge and skill of relevance to Occupational Health and Rehabilitation (24 credit points) and specialised knowledge in the conceptual, legal, and professional foundations of Occupational Health and Rehabilitation practice (24 credit points).

Course Structure
The course can be undertaken full-time over one year or part-time over two years. As with the Master of Public Health degree, the Diploma is designed with the part-time student in mind, in that wherever possible, the two subjects of the part-time load can be undertaken by attendance at the campus for one half-day per week.

Satisfactory completion of the Graduate Diploma requires that at least 48 credit points of coursework in the relevant schedules will have been undertaken.

Entry Requirements
Admission to the course is normally by applicants who hold a relevant degree together with a minimum of one year of work in the health or human service setting. In special circumstances an applicant holding other acceptable academic or professional qualifications may be admitted to studies.

d) Graduate Diploma in Science (Primary Health Care)
The Graduate Diploma in Science (Primary Health Care) is designed to provide advanced professional education for a multidisciplinary group in the concepts, approaches and practices of primary health care. Students and graduates will contribute to a growing national debate by being informed on the literature and community practice skills of primary health care. The Graduate Diploma in Science (Primary Health Care) includes of 48 credit points of coursework in the schedules for the course.

Course Design
Primary Health Care practice involves a particular approach and particular setting for work which seeks to advance the Public Health. Accordingly many core studies in primary health care are confluent with studies in Public Health. The Graduate Diploma recognises this by requiring core studies (24 credit points) in social foundations, data management (statistical) skills, health service management and health education skills. As is appropriate for primary health care, which varies widely in emphasis depending on the work location the Diploma provides for student selection of relevant elective subjects for the remainder of the course (24 credit points).

Course Structure
The course can be taken full-time over one year or part-time across two years. The timetable seeks wherever possible to be sympathetic to the part-timer and the two subjects in each session, which is the part-time load, can be taken in most sessions by attendance at the University on one half-day per week.

Entry Requirements
Applicants who are admitted to studies will normally possess a Bachelor Degree, or equivalent in a relevant discipline. However, under special circumstances,
applicants who possess other appropriate academic or professional qualifications may be admitted to the course.

3.3 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.

4. GRADUATE CERTIFICATE IN HEALTH POLICY AND MANAGEMENT

Also available externally (UW693) through The Wollongong Graduate Consortium.

The aim of this course is to provide an introduction to advanced professional education for health service managers in the concepts, theories, approaches and practices of health policy and management.

Course Design
The course provides students with the opportunity to gain a qualification in health service management in a flexible manner, including a wide choice of subjects and a manageable investment of time and money.

Articulation with the Graduate Diploma in Science (Health Policy and Management)
Students who complete the Graduate Certificate may, on application, be granted advanced standing totalling 24 credit points towards the award of the Graduate Diploma in Science (Health Policy and Management). On completion of the requirements for the Graduate Diploma and prior to graduation, a student who has received the Graduate Certificate will be required to surrender the testamur in order to receive the Graduate Diploma.

Entry Requirements
Entrants to the course normally hold a degree together with a minimum of one year of relevant work experience. In special circumstances, an applicant holding other acceptable academic or professional qualifications and with relevant work experience of not less than one year may be admitted to studies.

Course Structure
The Graduate Certificate will be awarded on successful completion of 24 credit points of course work, selected from subjects of the Graduate Diploma in Science (Health Policy and Management).

Professional Recognition
For members of the Australian College of Health Service Executives, successful completion of individual subjects attracts Continuing Professional Development (CPD) credit.

EXTERNAL COURSES

Currently, two programs of study are available externally: Health Policy and Management and Mental Health. Health Policy and Management courses are available through The Wollongong Graduate Consortium. Mental Health is available through cooperating Rural Health Authorities.

SUBJECT DESCRIPTIONS

GHMD901 Community Health Services
Spring session; 6 credit points (2 hrs)
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.

* Not on offer in 1994.
GHMD902 Communication and Education

Autumn session; 6 credit points (2 hrs)
Assessment: two major assignments 50% each incorporating small group studies and seminar presentations.

This subject introduces the student to the theories of education, with a focus on adult education within the health care setting. Topics include theories of education, learning in the healthcare context, in the community, planning educational experiences, and principles of communication. The course is organised using small group learning strategies whereby students participate in, observe and analyse the processes of learning in groups. Communication processes and the theory of group dynamics are studied within this experiential context. In the second half of the session students will be required to conduct sessions within their small groups, and to cooperatively present a final report to the class.

Textbooks:


Co-ordinator: Ms L Tapsell.

GHMD904 Epidemiology

Spring session; 6 credit points (2 hrs)
Pre-Requisite: GHMD983 or permission from the Co-ordinator
Assessment: two minor assignments on study design and critical appraisal; end of session written examination.

Principles and methods of epidemiological investigation including analytic and experimental epidemiology. Topics to be covered are: measurement in epidemiology, descriptive epidemiology, screening, design of case-control and cohort studies, analysis of studies, critical appraisal, clinical trial design, biological inference and causality.

Textbooks: To be advised.
Co-ordinator: Dr R Jayasuriya.

GHMD905 Social Foundations of Public Health

Autumn session; 6 credit points (2 hrs)
Assessment: two written assignments 60%, final exam 40%.

This subject introduces students to theories and concepts from the social sciences necessary for the understanding and analysis of public health issues. Topics include; trends in public health, socioeconomic and environmental influences on health and health inequities, biomedical and anthropological models of health and illness, the role of culture in health and health behaviour and the political economy of health.

Textbook: To be advised.
Co-ordinator: Dr P Mowbray.

GHMD906 Health Services Organisation and Management

Spring session; 6 credit points (3 hrs)
Autumn session; externally
Assessment: satisfactory completion of two assignments and an examination.

This subject aims to further develop knowledge and skills relevant to the management of health care services through the application of management theories and concepts to practice.

The subject examines the complex and multiple tasks which challenge the health service manager and provides options for issue analysis and action based on management theory and the literature of health service management.

Textbook:
Co-ordinator: Ms M G Harris.

GHMD907 Special Topic in Public 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. 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: No set text.
Co-ordinator: Associate Professor R D Harris.

GHMD908 Health Services Planning and Evaluation

Autumn session; 6 credit points (2 hrs seminar per wk)

Practical and theoretical aspects of health service planning and evaluation will be covered in this subject. Topics include: planning, its scope and theory; planning approaches and methods; corporate planning; strategic planning; strategy formulation and analysis; operational planning; and facility planning. Principles of evaluation will be illustrated through design and implementation.
of health program evaluation. Topics include: process evaluation; impact and outcome evaluations; monitoring and outcome management.

Textbooks: References will be provided.
Co-ordinator: Dr R Jayasuriya.

**GHMD909 The Australian Health System: Policies and Politics**

*Autumn session; 6 credit points (1 hr lecture, 2 hrs seminar)*

Assessment: satisfactory completion of 2 essays and an examination.

This subject aims to develop: an understanding of how ideologies and political processes influence health and health services and the ways in which health policies are developed; skills in analysing health policies; and individual potential for influencing health policies by political and other processes.

Textbooks:

Co-ordinator: Ms M G Harris.

**GHMD910 Communication in Community Health**

*Summer session; 6 credit points (5 full days and one 2 hour seminar)*

Assessment: satisfactory completion of individual assignments involving both skill acquisition and analysis of group dynamics. Review of literature on a specific aspect of group process or management. Participation in experiential group exercises will be necessary for satisfactory completion of the course.

Minimum number for enrolment - 8.

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.

Textbooks:

Co-ordinator: Dr P Mowbray.

**GHMD911 Health Promotion in the Health Care System**

*Autumn session; 6 credit points (2 hrs seminar per wk)*

Assessment: seminar presentations and discussion. A 2,500 word final assignment. Passes in all components are necessary for satisfactory completion of the course.


Textbooks:

Co-ordinator: Ms H Yeatman.

**GHMD912 Health Promotion: A Practical Approach to Health Care Delivery**

*Spring session; 6 credit points (2 hrs seminar per wk)*

Pre-requisite: GHMD902

Assessment: seminar presentation and discussion. Assignments will examine the assessment of need for health promotion programs and will evaluate the relative cost - effectiveness of different health promotion strategies. Passes in all components are necessary for satisfactory completion of the course.

Topics to be covered: Historical perspectives in Health Promotion. The history of various projects locally and nationally. Relating practical strategies to objectives. A framework for project development. Political processes in 'Health Promotion'. Evaluation strategies.

Textbooks:

Co-ordinator: Ms H Yeatman.

**GHMD913 Drug Problems and Issues**

*Spring session; 6 credit points (2 hrs seminar per wk)*

Assessment: seminar presentation and discussion. Satisfactory completion of individual assignments related to literature review and analysis of a specific problem or issue within the field of alcohol or drug misuse. Passes in all components are necessary for satisfactory completion of the course.

* Not on offer in 1994.
This course will provide an understanding of the pharmacological, psychological, and sociological basis of drug dependence; methods of treatment and prevention of drug abuse; an analysis of government policies to combat drug related problems; the development and management of drug and alcohol services; contemporary issues and controversies.

Textbooks: To be advised.
Co-ordinator: Mr G Lake, Lecturer, Team Leader, Kembla House, Drug and Alcohol Service, Illawarra Area Health Service.

‡GHMD914 Supervised Clinical Practice in Acute Care
‡GHMD915 Supervised Clinical Practice in Obstetrics and Gynaecology
‡GHMD916 Supervised Clinical Practice in General Medicine
‡GHMD917 Supervised Clinical Practice in General Surgery
‡GHMD918 Supervised Clinical Practice in Accident and Emergency
‡GHMD919 Supervised Clinical Practice in General Practice
‡GHMD920 Supervised Clinical Practice in Psychiatry
‡GHMD921 Clinical Practice in Rehabilitation
‡GHMD922 Supervised Clinical Practice in Paediatrics

‡Autumn, Spring or Summer sessions; 6 credit points each subject (each subject will be undertaken over 10 wks with minimum supervision contact of 3 hrs per wk)

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 NSW
Assessment: each subject will be an independent study over 10 wks directly co-ordinated by an appropriately qualified clinical co-ordinator, a medical practitioner, who will supervise individual students. A member of the University staff will be overall subject co-ordinator. 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 Co-ordinator of the General Practice Training Unit, the clinical co-ordinators 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 co-ordinator. 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 at 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-wk 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.
Co-ordinators: Professor C Ewan and Professor D Calvert.

GHMD924 Health Information Systems
Spring session; 6 credit points (4 hrs per wk lecture/seminars and practical sessions).
This subject examines issues of managing information systems in health services. It is designed to provide health service managers with an understanding of the principles of: data and data storage, classification and coding, casemix, data communication and networking, decision support and knowledge based systems. These principles will be applied to information systems in Hospitals, Nursing and Primary Health Care. Issues in managing information systems in health services will be covered.
Textbook: To be advised.
Co-ordinator: Dr R Jayasuriya.
GHMD925 Aboriginal Health Issues
Spring session; 6 credit points (2 hrs seminar).
Assessment: written assignments 65%, seminar presentation 25% and seminar participation 10%.
This subject examines the current health status of Aboriginal people from a social and historical perspective. Issues to be explored include the interaction between culture and health, the experience of ill-health, and the political and economic context of health. It also focuses on access to and use of health services and problems of cross-cultural communication within the health sector. Emphasis will be placed on communities in settled rather than remote Australia and comparisons will be made, where appropriate, with the health experience of similar populations, such as Native Americans.
Textbook:
Co-ordinator: Dr L Harrison.

GHMD926 Qualitative Research: Methods and Issues*
Spring session; 6 credit points (3 hrs per wk)
Assessment: class participation 25%; practical interview 35%; review and analysis of interview data 40%.
Students enrolling in this subject will explore a variety of qualitative research methodologies and issues within this particular research paradigm. Philosophical and epistemological issues will be addressed. Field research, interview techniques, sampling strategies, the use of content analysis and other forms of data analysis will be discussed. Issues of reliability, validity and triangulation will also be examined.
Textbook:
Co-ordinator: Dr L Harrison.

GHMD927 Client-Provider Consultation
Spring session; 6 credit points (4 hrs per wk)
Assessment: written assignment 40%; seminar presentation 20%; 2 x VTR interviews 40%.
This subject considers the biopsychosocial bases to health provider/client consultations. The impact of illness on client and provider. The variety of practice and practice management for consultation. A problem oriented approach to consultation. Problems in consultation including (i) communicating through a third party; (ii) language problems; (iii) psychological presentations; (iv) gatekeeping roles of the provider; (v) the difficult patient; (vi) family dislocation, disorder and distress and consultation; (vii) community consultation; (viii) the limits of provider resource and management ways.

Textbooks:
Co-ordinator: Associate Professor R Harris.

GHMD931 Dietetics 1: Primary Health Care
Autumn session; 6 credit points (4 hrs lectures, 1 hr tutorial, wks 1-7; 7 hrs seminars/practicals, 1 hr tutorial, wks 8-14)
Pre-requisite: admission to MSc (Nutrition and Dietetics)
Assessment: assignments completed during the session 60%; one 3 hour examination at the end of Autumn session 40%. Mastery of practical food skills (wks 8-14) will be necessary for a pass in this subject.
The first component of this subject is designed to cover the principles of community dietetic practice, with an emphasis on the skills required to collect and manipulate dietary data obtained from individuals in the community. Computer laboratory classes are included for data entry and analysis using the DIET 1 program. Students will be required to undertake studies of their own dietary intakes and to critically analyse the methodology. Topics include nutrition problems in the community, nutritional assessment, diet intake methodology, analysing dietary data, cultural food habits, dietary requirements during the lifecycle, dietetics of prevalent diet-related disorders, food intolerance, alternative eating patterns and nutrition and sport. Students will be introduced to the principles of dietetic requirements using a case study approach. Students will be required to undertake diet histories with individuals from the community and to discuss their results in tutorials. Specific professional tools, such as the ready reckoner and SOAP documentation of case studies will be developed and utilised. The second component focuses on the development of basic cooking skills and manipulation of standard recipes in keeping with dietetic modifications. Basic food groups are considered in relation to food principles, food skills and food science. Students will continue to present and discuss their case studies in tutorials during this second component, and links will be drawn between the principles covered in the two components.
Textbooks:

* Not on offer in 1994.


Department of Nutrition and Dietetics, School of Community Health, *Dietitian’s Pocketbook*, Curtin University of Technology, Perth, WA, 1990.

Co-ordinator: Ms L Tapsell.

**GHMD932 Community Nutrition**

*Autumn session; 6 credit points (4 hrs lectures/seminars per wk, wks 1 - 10; placements one day per wk, wks 11 - 14; one 2-wk placement during session break).*

Assessment: a major report (2500 words) to be submitted after community placement block 40%; written and verbal assignments 60%. A satisfactory report in community placement (detailed requirements given in the subject overview). The student will be introduced to the principles of community health and the history of 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-wk placement during session break, which may or may not be with the same organisation or unit.

*Textbook:*


Co-ordinator: Ms H Yeatman.

**GHMD933 Nutrition Counselling**

*Spring session; 6 credit points (2 hrs lectures, 2 hrs seminar, 1 hr tutorial per wk).*

Pre-requisite: admission to MSc (Nutrition and Dietetics).

Assessment: mastery of skills: individual diet counselling skills 30%; small group education skills 20%; written assignment 20%; mid-session examination 30%.

This subject aims to develop skills in dietary counselling and nutrition education for the student dietitian. The subject comprises two components. The nutrition strand applies counselling and education skills to the professional environment, and includes supervised counselling experience in dietetics outpatient clinics within the IAHS and small group presentations demonstrating basic teaching skills. The counselling strand is part of GHMA962 Counselling Strategies which covers counselling microskills and cognitive strategies. Topics include interviewing skills, problem solving, development of a nutritional care plan, working with interpreters, the roles of behaviour modification and family therapy in nutrition counselling, planning and evaluating educational sessions and nutrition education resources.

*Textbook:*


Co-ordinator: Ms L Tapsell.

**GHMD934 Dietetics 2: Secondary and Tertiary Health Care**

*Spring session; 6 credit points (2 hrs lectures, 2 hr seminar, 1 hr tutorial per wk).*

Pre-requisite: CHEM215, GHMD931

Pre-requisite: admission to MSc (Nutrition and Dietetics).

Assessment: one three hr examination at the end of Spring session 50%; written assignments during the session 50%. It is necessary to pass all assignments and the examination in order to pass this subject.

This subject is designed to build on the knowledge and skills studied in GHMD931 through the study of nutritional management of individuals with acute illness. Students will be required to undertake a case study for presentation. Topics are introduced through the study of case management and supported by lectures provided by specialist clinicians from the medical and dietetic professions. Topics include enteral and parenteral nutrition, the pathophysiology of disease states of the gastrointestinal, endocrine, cardiovascular and renal systems, stroke, hypermetabolic conditions, AIDS, clinical paediatrics and the rationale and protocol for the associated diet therapy.

*Textbooks:*

As required for GHMD931, plus:

Medical Dictionary


Co-ordinator: Ms J McArthur.

**GHMD935 Nutrition and Food Services**

*Autumn and Spring sessions: 8 credit points (2 hr management seminars per wk; sessions with TAFE Food School timetable to be advised).*

Assessment: written assignments on food services 50%, and a nutrition services journal 50%.

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.

Textbooks:

Co-ordinator: Ms H Yeatman.

**GHMD936 Public Health Nutrition**

*Autumn session; 6 credit points (6 hrs seminars, wks 1 and 2; 2 hrs seminars, wks 3-14).*

Assessment: small group report and presentation 35%; seminar presentation and report 55%; participation 10%.

This subject provides students with an overview of basic skills required to deal with nutrition problems of population groups. Issues covered include individual nutrition assessment; program development, including the principles of community nutrition needs assessment; and nutrition programs for specific populations.

Textbook:
Kaufman M, Nutrition in public health.

Other readings recommended by the lecturer.

Co-ordinator: Ms H Yeatman.

**GHMD937 Practical Studies in Nutrition and Dietetics**

*Over three sessions; 24 credit points (21 wk placements; 35 hrs of seminars).*

Pre-requisite: GHMD931, GHMD934

Assessment: mastery of skills and satisfactory achievement of objectives and completion of assignments (as outlined in the subject handbook) will be necessary for a pass in this subject. Specific tasks or assignments will be allocated to each student, negotiated between the field supervisor and subject co-ordinator prior to the commencement of each placement component. Assignments will include seminar and workshop presentations. Where a student does not pass this subject, a second opportunity is not normally provided. This decision is made after consideration of both the professional and resource implications.

This subject comprises a practicum of 21 wks which is spent in hospitals, community health centres and other food-related organisations/units under the supervision of experienced dietitians or nutritionists. The placements are designed to develop the student's skills in areas such as specialised therapeutic diets, food service management, provision of community nutrition programs etc. Placements will be arranged to suit individual student needs, at the same time as meeting the minimum standards as set down by the Dietitians Association of Australia. A minimum of 8 wks of the practicum will be spent at a major teaching hospital. Students will also be able to spend periods of time (2 wks minimum) in various other locations including country hospitals, community health units programs, food industries, non-government organisations, nutrition research units, departments of public health, 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. A series of therapeutic diet workshops will be held to update students on the latest information and therapeutic principles in a number of specialised dietary/nutrition areas.

Textbooks:
As required for GHMD931 and GHMD934

Co-ordinator: Ms J McArthur.

**GHMD938 Behavioural Aspects of Nutrition**

*Spring session; 6 credit points (2 hrs seminars, 1 hr tutorial)*

Pre-requisite: normally some undergraduate study of Psychology or Sociology.

Assessment: assignments 50% and seminar presentation and reports 50%.

This subject outlines and discusses the social, cultural and psychological determinants of health-related behaviour. Basic concepts of sociology and anthropology are illustrated by health-related examples. Models of individual behaviour and behaviour change are discussed, together with theories of social change, including community development, legislative action, and healthy public policy.

Textbooks:

Co-ordinator: Ms J McArthur.

**GHMD939 Human Nutrition in Health and Disease**

*Spring session; 6 credit points (2 hrs lecture, 1 hr tutorial)*

Pre-requisite: entry into Masters program.

Assessment: assignments 50% and seminar presentation and reports 50%.

Nutrition needs through the life cycle – foetus, childhood, pregnancy, middle and old age. Clinical conditions and their nutritional implications eg metabolic disease, renal disease, diseases of the digestive tract, coronary heart disease, trauma, burns, eating disorders (bulimia, anorexia nervosa), AIDS, alcoholism, drugs, basic principles of pharmacology.

* Not on offer in 1994.
Co-ordinator: Ms J McArthur.

**GHMD940** The Principles and Practices of Occupational Health and Rehabilitation
*Autumn session; 6 credit points (3 hrs seminar)*
Pre-requisite: admission to MPH (Occupational Health and Rehabilitation)
Assessment: seminar presentation 50%; written examination 50%.
Topics include history and development of occupational health, occupational health services and programs, health development in industry, management of occupational industry and disease, public and community health in the workplace, health promotion in the workplace, including stress management and the principles of a healthy lifestyle, ethics of occupational medicine practice, management of occupational health and safety programs.
Co-ordinator: Associate Professor R D Harris.

**GHMD941** Occupational Hygiene and Industrial Toxicology
*Spring session; 6 credit points (2 hrs seminar)*
Pre-requisite: admission to MPH (Occupational Health and Rehabilitation)
Assessment: end of session written examination plus major written assignment 70%; written assignment during session 30%.
Topics include recognition, evaluation and control of chemical, physical and biological occupational hazards, occupational hygiene standards, principles of industrial toxicology, toxicological evaluation and toxicology testing; asbestosis associated disease, pneumoconiosis, silicosis, byssinosis, occupational chronic bronchitis, pulmonary responses to organic materials; diseases associated with metal; diseases associated with exposure to chemical substances, eg polychlorinated dibenzo-P-dioxins, polychlorinated biphenyls, polybrominated biphenyls, pesticides, toxic and irritant gases, and organic compounds; diseases associated with the physical environment, eg noise, thermal extremes, non-ionizing and ionizing radiation, traumatic injuries and repetition strains.
Co-ordinator: Dr G Stone.

**GHMD950** Financial Management for Health Services
*Spring session; 6 credit points (1 hr lecture, 3 hrs tutorials per wk)*
Assessment: written report and discussion paper.

Sources of health system and health services organisation finance: public and private; hospital, community and long-term care. Accounting systems and processes used in health services. Financial reports and audits and the analysis and interpretation of statements. Identification of relevant costs for decision-making, the control of budgets and the use of information systems including casemix. Special topics include: the politics and ethics of resource management in health service organisations and the preparation of contracts.
Textbooks: To be advised.
Co-ordinator: Professor D Hindle.

**GHMD961** Emotional and Behavioural Disorders of Childhood*
*Session: To be advised; 6 credit points (2 hrs per wk)*
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.
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.
Textbooks: To be advised.
Co-ordinator: Mr P O’Halloran.

**GHMD962** Adolescent Mental Health*
*Session: To be advised; 6 credit points (2 hrs per wk)*
Assessment: a variety of methods including literature review, case reports, seminar presentation, research proposals.
This subject presents a sociocultural overview of the concept of adolescence and introduces major theories of adolescent psychological development. It examines family, social, cultural, and political influences upon the developing adolescent. It provides the student with a comprehensive description of adolescent mental health disorders, 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.
Textbooks: To be advised.
Co-ordinator: Mr P O’Halloran.

**GHMD963** Adult Mental Health*
*Session: To be advised; 6 credit points (2 hrs per wk)*
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.

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* Not on offer in 1994.
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.

Textbooks: To be advised.
Coordinator: Mr P O'Halloran.

**GHMD964 Mental Health Problems of the Aged**
Session: To be advised; 6 credit points (2 hrs per wk)
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.
This subject presents an overview of the aging process, including physical, social, cultural, and psychological factors. It provides a comprehensive examination of common psychiatric and behavioural disorders, assessment, diagnosis, psychopharmacology and therapeutic and management approaches. Special topics include death and bereavement, alcohol and drug abuse, legal and ethical issues.
Textbooks: To be advised.
Co-ordinator: Mr P O'Halloran.

**GHMD965 Principles and Practices of Psychosocial Rehabilitation**
Also available externally through the Rural Strand of the Mental Health program.
Spring session; 6 credit points (2 hrs per wk)
#Session of offering varies. Please contact Department for details.
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.
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.
Co-ordinator: Associate Professor R Harris.

**GHMD966 Family and Systems Interventions for Mental Health**
Also available externally through the Rural Strand of the Mental Health program.
#Session of offering varies. Please contact Department for details.
Spring Session: 6 credit points (2 hrs per wk)
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.
This subject examines the current research of the effects of social and emotional milieu on mental illness. It also examines various interventions and support strategies, particularly for families in dealing with the burden and distress of mental illness.
Textbooks:
Co-ordinator: Mr P O'Halloran.

**GHMD967 Service Planning and Evaluation**
Session: To be advised; 6 credit points (2 hrs per wk)
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.
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 and focuses on establishing services through the allocation of human and financial resources, development of service philosophies, goals, objectives and policies. It provides a framework for monitoring service through the use of standards and evaluating the service in terms of process and outcome.
Textbooks: To be advised.
Co-ordinator: Mr P O'Halloran.

**GHMD968 Legal and Ethical Issues**
Session: To be advised; 6 credit points (2 hrs per wk)
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.
It 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. It 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

* Not on offer in 1994.
# Rural strand only in 1994.
such as confidentiality, objectivity, professional-client relationships, relationships between professionals, and so on.

Textbooks: To be advised.

Co-ordinator: Mr P O'Halloran.

GHMD969 Special Topic in Mental Health
Also available externally through the Rural Strand of the Mental Health program.
Autumn session; 6 credit points (4 hrs per mth plus independent study)
#Session of offering varies. Please contact Department for details.
Assessment: individual assignment. The assignment will include a literature review, a study proposal, and an analysis of the issues covered by the study proposal. The candidate, in conjunction with a supervisor appointed on the recommendation of the course co-ordinator, will present an assignment which will include a proposal for an independent study related to a specific problem or issue within mental health services. The assignment will include a literature review and analysis of the relevant issue chosen, and will incorporate objectives, methods and criteria for assessment of the study. The subject of the assignment and assignment outline must be approved by the co-ordinator before the assignment is written. Candidates will be expected to liaise with their supervisors on a regular basis and to conduct independent library research and complete directed readings.

This subject examines the theoretical perspectives and practical problems of rural mental health services both in Australia and overseas. It identifies issues specific to service provision in the rural sector such as shortages of resources and support mechanisms and the consequent need for innovation and improvisation on the part of the service provider. Practical issues are examined concerning the mental health of Australian Aborigines and country communities and the role of the mental health worker in meeting their needs.

Textbook: To be advised.

Co-ordinator: Mr P O'Halloran.

GHMD970 Comprehensive Systems of Mental Health Care
Also available externally through the Rural Strand of the Mental Health program.
Autumn session; 6 credit points (2 hrs per wk)
Assessment: a variety of methods including review, case reports, seminar presentations, research proposals.

This subject provides an overview of basic theoretical models used to explain psychiatric disorder and presents a historical overview of mental health services. It 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.

Textbook:

Co-ordinator: Mr P O'Halloran.

GHMD971 Diagnosis and Description in Mental Health
Also available externally through the Rural Strand of the Mental Health program.
Autumn session; 6 credit points (2 hrs per wk)
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.

This subject examines the definition, classification, assessment, diagnosis, therapeutic approaches and management of mental health problems at major stages of human development, with particular emphasis on serious psychiatric disorders. The formulation of management plans and the therapeutic and pharmacological considerations are addressed.

Textbook:

Co-ordinator: Mr P O'Halloran.

GHMD972 Interviewing and Assessment Techniques
Also available externally through the Rural Strand of the Mental Health program.
Spring session; 6 credit points (2 hrs per wk)
#Session of offering varies. Please contact Department for details.
Assessment: a range of assessment approaches is examined including observational methods, self report methods and behavioural assessment methods. Emphasis will be placed on developing skills of report writing based on interview and/or assessment measures. The ethics of assessment and incrementing will be discussed.

This subject provides an overview of interpersonal 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.

Textbooks:
Co-ordinator: Associate Professor R Harris.

GHMD973 Methods of Intervention and Treatment 1
Also available externally through the Rural Strand of the Mental Health program.
Spring session; 6 credit points (2 hrs per wk)
#Session of offering varies. Please contact Department for details.
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.
This subject provides an overview of intervention and treatment options for people presenting with acute psychiatric disorders as well as those requiring more intensive rehabilitation. Principles and strategies for crisis intervention, including pharmacological management and family and social network interventions are examined in detail. The principles and practices of case management are examined and utilised as the basis of current and subsequent service delivery.

Textbooks: To be advised.
Co-ordinator: Mr P O'Halloran.

GHMD974 Methods of Intervention and Treatment 2
Autumn session; 6 credit points (2 hrs per wk)
#Session of offering varies. Please contact Department for details.
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.
This subject further examines therapeutic interventions that can be utilised by those working with people with serious psychiatric disorders. The principles and practices of counselling and other engagement skills are addressed. Cognitive behavioural interventions are also examined with an aim to integrate skills, theory and practice. The subject will consider the application of these methods to the treatment and rehabilitation of persons with a serious mental illness. It will further address specific problem areas such as suicide, depression, grief and aggression.

Textbooks: To be advised.
Co-ordinator: Mr P O'Halloran.

GHMD975 Socio-Cultural Issues in Mental Health*
Autumn session; 6 credit points (2 hrs per wk)
Assessment: a variety of methods including literature review, case reports, seminar presentations, research proposals.
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 cauasion, expression, treatment options, and outcomes.

Textbooks: To be advised.
Co-ordinator: Mr P O'Halloran.

GHMD976 Supervised Clinical Practice
Available in sessions 1, 2 or 3; 6 credit points
Assessment: upon commencement of the placement, students must present a written report detailing goals and objectives of the placement as contracted with the field supervisor. Upon conclusion of the practicum, students must submit an evaluative report indicating clinical activity, competencies developed, difficulties encountered and positive outcomes for self, client and service agency. The student must also present a daily log of clinical activities during the course of the placement. The clinical supervisor must support this report and submit a report to the student's academic adviser.

Students must complete a supervised clinical practicum. A range of placements exist in both the local Area Health Service and in Metropolitan Areas. Students are to negotiate details in conjunction with the academic advisers and nominated clinical supervisors before they begin and must develop and submit an outline including a description of the nature of the clinical work, specific competencies to be developed, and how the development of competencies will be monitored and evaluated by the clinical supervisor.

Co-ordinator: Mr P O'Halloran.

GHMD980 International Health: Health Care Delivery in Developing Countries
Autumn session; 6 credit points (2 hrs per wk)
Assessment: students will submit two papers. The first (approximately 2000 words) will describe health and the health care delivery system in a developing country, identifying major issues for health development. The second paper (approximately 2500 words) will be a detailed analysis of one such issue and a plan for strengthening management of the program.

This subject provides an orientation to health care systems in developing countries. Issues of socio-economic development and health,
decentralisation and health financing will be addressed. The relationships of the environment and nutrition to morbidity and mortality, and of population dynamics to service delivery will be covered. Health Program Management issues such as resource management, logistics, information systems in this context will be illustrated.

**Textbooks:** Special reading lists will be provided.

**Co-ordinator:** Dr R Jayasuriya.

**GHMD981 Maternal and Child Health in Developing Countries**

**Spring Session; 6 credit points (2 hrs per wk)**

Assessment: two written papers. The first paper of about 1500 words will review the literature on a selected aspect of Maternal and Child Health in Developing Countries. The second of about 2500 words will be a proposal for strengthening the selected program in the context of a selected developing country.

Students taking this subject will examine the components of the “safe motherhood” intervention and “child survival” strategies in developing countries. The subject will give emphasis to the delivery of care in a primary health care approach and the use of appropriate technology. Issues of integration of maternal community health and family planning services and the organisation of services in decentralised settings will be discussed.

**Textbook:**

**Co-ordinator:** Dr R Jayasuriya.

**GHMD982 Special Topic in International Health**

**Spring Session; 6 credit points**

Pre-requisite: GHMD984 or equivalent research subject.

**Co-requisite:** GHMD980

Assessment: a research proposal with substantial review of the literature on a topic chosen for research in a developing country (about 5000 words).

This subject will enable students to further their knowledge in a special topic of interest relevant to health in developing countries. The student will also obtain skills in developing and writing a research proposal for Health Systems Research. Topics for study currently include Aspects of Maternity Services, Injury Control, Nutritional Issues, Training of Health Care Workers, Health Information Systems. The topic chosen may assist the student by providing background for the choice of topic for their major project. The subject will be taught in tutorials rather than formal lectures.

**Textbook:** Special reading list will be supplied.

**Co-ordinator:** Dr R Jayasuriya.

**GHMD983 Statistics in Health Research**

**Autumn session; 6 credit points (3 hrs)**

Assessment: five written assignments 50%, final exam 50%.

Students will be introduced to statistical concepts and techniques in the course of responding to descriptions of real-world problems. Topics include descriptive statistics, samples and populations, probability, concepts of statistical inference, normal and Poisson distributions, measuring differences and association and regression.

**Textbooks:**


**Coordinator:** Professor D Hindle.

**GHMD984 Health Research Methodology**

**Autumn or Spring session; 6 credit points (3 hrs)**

Prerequisites: GHMD983 or equivalent

Assessment: research proposal 30%, semi-structured interview 35%, design of survey 35%.

This subject introduces students to health research methodology. Topics include formulating a research question, conducting a literature review and writing a research proposal. Students will acquire skills in interviewing, survey design and appropriate methods of qualitative and quantitative analysis. Ethical issues such as informed consent and confidentiality will be addressed.

**Textbook:** To be advised.

**Co-ordinator:** Dr L Harrison.

**GHMD997 Major Project**

24 credit points

The major project forms the main problem-oriented component of the course. It is an individual endeavour under supervision. The candidate is encouraged to research a contemporary issue in their area of specialisation. It is expected that there be both a substantive theoretical and empirical content to the project. A series of seminars provides a structured and supervised setting for the development of the project proposal.

**Textbook:**

**Co-ordinators:** Ms M G Harris and Associate Professor R D Harris.

**GHMD998 Thesis**

36 credit points

**Co-ordinator:** Associate Professor R D Harris.

**GHMD999 Major Thesis**

48 credit points

**Co-ordinator:** Associate Professor R D Harris.
FACULTY OF INFORMATICS

PRINCIPAL OFFICERS

Dean: Professor Sidney A Morris
Sub Dean: Dr Grahame Morris
Faculty Officer: Mr David McDonald

MEMBERSHIP

The Faculty of Informatics is made up of the following departments:

- Applied Statistics
- Computer Science
- Electrical and Computer Engineering
- Information and Communication Technology
- Mathematics

RESEARCH COURSES AVAILABLE

The Faculty offers Honours Master of Information Technology and Communication, Honours Master of Engineering, Honours Master of Science and Doctor of Philosophy degrees by research.

POSTGRADUATE PROGRAMS

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

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<td>Computer/Telecommunications Engineering</td>
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<td>Engineering and Industrial Mathematics</td>
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<td>Intelligent Systems</td>
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<td>Software Engineering</td>
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<td>Telecommunications Engineering</td>
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</table>
FULL TIME STAFF

Dean
Professor Sidney A Morris, BSc Qld, PhD Flin
FIMA, CMath, ComplEAust

Sub-Dean
Dr Grahame Morris, BSc N’cle (NSW), PhD
UNSW

Faculty Officer
David McDonald, BA Macq

DEPARTMENT OF APPLIED STATISTICS

Departmental Head and Professor of Applied Statistics
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Lecturer
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Associate Lecturer
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DEPARTMENT OF COMPUTER SCIENCE

Departmental Head and Professor of Software Engineering
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Professor of Computer Science
Jennifer Seberry, BSc UNSW, MSc PhD Lat
FIMA, FAACS, FTICA, MACM, MIEEE, MIACR

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David E A Wilson, BMath

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Xian-mo Zhang, BSc MSc Nankai, PhD UNSW

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Murray D J Hayward
Phillip Herring, BMath
Stein I Krav
Michael J Milway, BE Monash, DipCompSci
David Raymond, BMath

Senior Technical Officer
Les Ohlbach

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Departmental Head and Professor of Electrical Engineering
Christopher D Cook, BSc BE Adel, PhD UNSW, FIEAust, CEng

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

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Frank Mikk
Ronald B Parker, BA
Brian C Webb
John F Willis

Technical Officers
Stephen Petrou
Joe Tizianco

Administrative Officer
Maree J Fryer, BA

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Joan Ann Cooper, BMath PhD N'cle (NSW), FTICA

Senior Lecturer
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Lecturers
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Anthony Dean, BEd CSU
Richard A Joseph, BSc Griffith, MSc Manc, PhD

Associate Lecturer
Robyn Lindley, BSc DipEd MInfoTech

DEPARTMENT OF MATHEMATICS

Departmental Head and Professor of Applied Mathematics
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Desmond J Clarke, BSc WA, MSc Adel, PhD UNSW, MAGU
James M Hill, BSc PhD DSc Q'ld
Rodney V Nillsen, BSc Tas, MSc PhD Flin

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Grahame Morris, BSc N'cle (NSW), PhD UNSW
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Graham H Williams, BSc PhD Adel, DipCompStud Melb

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Tim Marchant, BSc PhD Adel
Annette L Worthy, BSc UNSW, PhD
Song Ping Zhu, BS Huazhong (China), MSE PhD MS Michigan

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Carolyn E McPhail, BMath
Robyn K Mooney, BMath
Anne Nealon, BSc DipEd
Judy Trotter, BSc UNSW, DipEd Syd

Research Fellows
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Yan-Hui Yang, MEng Beijing, PhD
VISITING COMMITTEE

Dr D Cooper, Chief, CSIRO Division of Radiophysics

Mr R F Evans, Chief Engineer, Engineering Technology, BHP Slab and Plate Products Division

Dr J Gray, Manager, Quantitative Research, AMP Investments Australia Ltd

Mr J Mann, Regional Manager, BHP Information Technology (Chair)

Mr J Park, General Manager - Switched Networks, Telecom Research Laboratories

Dr P Pentony, Assistant Statistician, Australian Bureau of Statistics

Mr I Robinson, Engineering Operations Manager, Illawarra Electricity

Dr R Sandland, Chief, CSIRO Division of Mathematics and Statistics

Professor A Street, Professor of Mathematics, University of Queensland

Mr A Whitworth, Legal Aid Commission of NSW

Ms J Wright, Director of Public Libraries and Extension Services, State Library of NSW
CURRENT RESEARCH AREAS

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

- Epidemiology
- Experimental design
- Goodness of fit
- Image analysis
- Multivariate analysis
- Population dynamics and plant growth
- Quasi-likelihood
- Sample survey design and methodology
- Statistical decision theory
- Statistical quality control

POSTGRADUATE PROGRAM

Applied Statistics

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN APPLIED STATISTICS leading to the degree of Honours Master of Science or Master of Statistics or the Graduate Diploma in Statistics

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<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>Core</td>
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<tr>
<td>STAT990</td>
<td>Minor Project</td>
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<td>or</td>
<td>Project</td>
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<td>or</td>
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<tr>
<td>Electives</td>
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<tr>
<td>STAT901</td>
<td>Modern Inference</td>
<td>6</td>
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<tr>
<td>STAT902</td>
<td>Advanced Data Analysis</td>
<td>6</td>
</tr>
<tr>
<td>STAT903</td>
<td>Survey Design and Analysis</td>
<td>6</td>
</tr>
<tr>
<td>STAT904</td>
<td>Statistical Design</td>
<td>6</td>
</tr>
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<td>STAT905</td>
<td>Time Series</td>
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<tr>
<td>STAT906</td>
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<td>STAT941</td>
<td>Statistical Quality Control 1</td>
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<tr>
<td>STAT942</td>
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<tr>
<td>STAT943</td>
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<tr>
<td>STAT944</td>
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</tr>
<tr>
<td>STAT971</td>
<td>Preliminary Topics in Statistics A</td>
<td>6</td>
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<tr>
<td>STAT972</td>
<td>Preliminary Topics in Statistics B</td>
<td>6</td>
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<tr>
<td>STAT981</td>
<td>Advanced Topics in Statistics A</td>
<td>6</td>
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<tr>
<td>STAT982</td>
<td>Advanced Topics in Statistics B</td>
<td>6</td>
</tr>
<tr>
<td>STAT983</td>
<td>Advanced Topics in Statistics C</td>
<td>6</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.

COURSE REQUIREMENTS

1. **DOCTOR OF PHILOSOPHY**

Candidates for this degree enrol in STAT993.

2. **HONOURS MASTER OF SCIENCE (in STATISTICS)**

The degree of Honours Master of Science shall be subject to the University Course
(2) Entry to the Honours Master of Science will normally be from an Honours bachelor degree in Statistics at a standard of Class II, Division 2 or higher. Entry may also be approved for candidates with the qualification of Master of Statistics on the recommendation of the Head of the Department of Applied Statistics.

(3) The Honours Master of Science will normally occupy two sessions of full-time study or four sessions of part-time study, and requires satisfactory completion of 900 level subjects to the value of at least 48 credit points chosen from one of the postgraduate programs offered by the Department of Applied Statistics including either:

(a) the subject STAT993 (48 credit points), or

(b) the subject STAT992 (24 credit points) and other 900 level subjects to the value of at least 24 credit points approved by the Head of Department. In exceptional circumstances, and subject to approval of the Head of the Department, subjects with the value of at most 6 credit points from the program may be replaced by any other 900 level subjects with value of at least 6 credit points.

(4) The registration of a candidate will be subject to termination if that candidate fails subjects to the total value of 18 or more credit points.

(5) Each candidate shall have a supervisor appointed on the recommendation of the Head of the Department of Applied Statistics.

(6) Before the award of Honours Master of Science is conferred on a candidate who holds a testamur of the University of Wollongong for the degree of Master of Statistics, the candidate shall surrender the testamur and the corresponding rights to the degree of Master of Statistics.

3. MASTER OF STATISTICS

The degree of Master of Statistics shall be subject to the University Course Rules for the award of the degree of Master together with the following conditions.

(1) A candidate shall undertake a course of graduate studies, normally chosen from the graduate Statistics subjects offered by the Department of Applied Statistics.

(2) Entry to the Master of Statistics will normally be from a pass degree with an appropriate 3 year sequence in Statistics, or an appropriate Graduate Diploma, or, subject to the approval of Council on the recommendation of the Head of Department, from a degree or diploma containing substantial study in an appropriate discipline.

(3) The Master of Statistics will normally occupy two sessions of full-time study or four sessions of part-time study, and requires satisfactory completion of 900 level Statistics subjects to the value of at least 48 credit points approved by the Head of Department. The subject STAT990 must be included, except that with the approval of the Head of the Department the subject STAT991 may replace STAT990. In some circumstances, and subject to approval of the Head of the Department, Statistics subjects with the value of at most 12 credit points may be replaced by other 900 level subjects with the same or greater credit point value.

(4) The registration of a candidate will be subject to termination if that candidate fails subjects to the total value of 18 or more credit points.

(5) Each candidate shall have a supervisor appointed on the recommendation of the Head of the Department of Applied Statistics.

Satisfactory completion of the Master of Statistics permits registration for HONOURS MASTER OF SCIENCE (in the Department of Applied Statistics).

4. GRADUATE DIPLOMA IN STATISTICS

In addition to the University's Rules for Graduate Diplomas, candidates for the Graduate Diploma in Statistics shall:

(a) complete Statistics subjects to a value not less than 36 credit points from those listed in the schedule of the BMath and MStat, at least 24 credit points being for subjects at the 300-level or 900-level. With approval of the Departmental Head STAT949 may be included instead of a 100 or 200 level subject;
(b) not include in the diploma program subjects which, in the opinion of the Departmental Head, are equivalent in contents to those for which credit has already been obtained towards some other degree or diploma;

(c) have their programs approved by the Departmental Head before enrolling.

Satisfactory completion of the Graduate Diploma in Statistics permits registration for MASTER OF STATISTICS

SUBJECT DESCRIPTIONS

Subjects
For further details, see the 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 STAT991, STAT992 and STAT993, have a credit point value of 6.

Contact Hours
All subjects listed below involve at least one contact hour per week for both sessions, or its equivalent.

Method of Assessment
All 900-level subjects will be assessed by final examinations, or final examinations and limited assignments.

STAT901 Modern Inference
Assessment: examination 75%, assignments 25%.
Replication, jackknife, bootstrapping; Cross-validation; Non-parametric confidence intervals; Permutation tests; Monte Carlo tests; Robust estimation.
Co-ordinator: Dr P Davy.

STAT902 Advanced Data Analysis
Assessment: examination 75%, assignments 25%.
A selection of topics from; Regression model building and checking; Causal modelling; Cluster Analysis; Multi-dimensional scaling; Log-linear models; Generalized linear models; Time series methods; Principal components; Factor Analysis; Canonical correlations; Statistical computer packages.
Co-ordinator: Professor D A Griffiths.

STAT903 Survey Design and Analysis
Assessment: examination 75%, assignments 25%.
Survey methods - survey development;
Evolutionary processes.
Co-ordinator: Dr K Russell.

STAT943 Statistical Quality Control 2
Assessment: examination 75%, assignments 25%.
Co-ordinator: Dr C Gulati.

STAT944 Regression and Observational Studies
Assessment: examination 75%, assignments 25%.
Co-ordinator: Dr C Gulati.

STAT949 Statistical Thinking
6 credit points
Assessment: assignments and examinations.
Co-ordinator: Professor D Griffiths.

STAT971 Preliminary Topics in Statistics A
Assessment: examination 75%, assignments 25%.
A selection of topics will be available from time to time to serve as preliminary material in the Master of Statistics.
Co-ordinator: Head of Department.

STAT972 Preliminary Topics in Statistics B
Assessment: examination 75%, assignments 25%.
A selection of topics will be available from time to time to serve as preliminary material in the Master of Statistics.
Co-ordinator: Head of Department.

STAT981 Advanced Topics in Statistics A
Assessment: examination 75%, assignments 25%.
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.
Co-ordinator: Head of Department.

STAT982 Advanced Topics in Statistics B
Assessment: examination 75%, assignments 25%.
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.
Co-ordinator: Head of Department.

STAT983 Advanced Topics in Statistics C
Assessment: examination 75%, assignments 25%.
Selection of topics from one or more of the following areas: Advanced Probability Theory, Branching Processes, Queueing Theory, Inventory Control, Dynamic and Stochastic Programming.
Co-ordinator: Head of Department.

STAT990 Minor Project
6 credit points

STAT991 Project
12 credit points

STAT992 Minor Thesis
24 credit points

STAT993 Thesis
48 credit points
## COMPUTER SCIENCE

### COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Science by Research or Coursework
3. Master of Computer Science

### POSTGRADUATE PROGRAMS

Computer Security
Software Engineering
Intelligent Systems

### CURRENT RESEARCH AREAS

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

### SCHEDULE OF PROGRAMS

#### POSTGRADUATE PROGRAM IN COMPUTER SECURITY

leading to the Honours Master of Science

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<thead>
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<td>Advanced Topics in Computer Science C</td>
<td>6</td>
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<tr>
<td>CSCI965</td>
<td>Design and Analysis of Algorithms</td>
<td>6</td>
</tr>
<tr>
<td>CSCI966</td>
<td>Information Theory and Coding</td>
<td>6</td>
</tr>
<tr>
<td>CSCI967</td>
<td>Complexity Theory</td>
<td>6</td>
</tr>
<tr>
<td>CSCI971</td>
<td>Computer Security</td>
<td>6</td>
</tr>
</tbody>
</table>

plus subjects from the other Programs

For further details, see Course Requirements below.

#### POSTGRADUATE PROGRAM IN SOFTWARE ENGINEERING

leading to the Honours Master of Science

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<td>Advanced Topics in Computer Science A</td>
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</tr>
<tr>
<td>CSCI945</td>
<td>Parallel Architectures and Algorithms</td>
<td>6</td>
</tr>
<tr>
<td>CSCI955</td>
<td>Computer Networks</td>
<td>6</td>
</tr>
<tr>
<td>CSCI957</td>
<td>Advanced Topics in Database Management</td>
<td>6</td>
</tr>
<tr>
<td>CSCI963</td>
<td>Advanced Computer Graphics</td>
<td>6</td>
</tr>
<tr>
<td>CSCI973</td>
<td>Computer Assisted Learning</td>
<td>6</td>
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<tr>
<td>CSCI974</td>
<td>Systems Analysis</td>
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</tbody>
</table>

plus subjects from the other Programs.

For further details, see Course Requirements below.
POSTGRADUATE PROGRAM IN INTELLIGENT SYSTEMS
leading to the Honours Master of Science

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<th>Subject</th>
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</thead>
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<td>CSCI942</td>
<td>Advanced Topics in Computer Science B</td>
<td>6</td>
</tr>
<tr>
<td>CSCI944</td>
<td>Robot Perception and Planning</td>
<td>6</td>
</tr>
<tr>
<td>CSCI954</td>
<td>Artificial Intelligence</td>
<td>6</td>
</tr>
<tr>
<td>CSCI956</td>
<td>Robot Modelling</td>
<td>6</td>
</tr>
<tr>
<td>CSCI962</td>
<td>Logic Programming</td>
<td>6</td>
</tr>
<tr>
<td>CSCI964</td>
<td>Neural Computing</td>
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</tr>
</tbody>
</table>

plus subjects from the other Programs

For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECTS

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<tr>
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<th>Credit Points</th>
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<tbody>
<tr>
<td>CSCI980</td>
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<tr>
<td>CSCI981</td>
<td>Preliminary Topics in Computer Science B</td>
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<tr>
<td>CSCI982</td>
<td>Preliminary Topics in Computer Science C</td>
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</tr>
<tr>
<td>CSCI983</td>
<td>Preliminary Topics in Computer Science D</td>
<td>6</td>
</tr>
<tr>
<td>CSCI991</td>
<td>Project</td>
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<tr>
<td>CSCI992</td>
<td>Minor Thesis</td>
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</tr>
<tr>
<td>CSCI993</td>
<td>Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in CSCI993.

2. HONOURS MASTER OF SCIENCE

The degree of Honours Master of Science shall be subject to the University Course Rules for the award of the degree of Honours Master, together with the following conditions.

(1) A candidate shall undertake research, or a course of graduate studies and research, normally chosen from the graduate subjects offered by the Department of Computer Science.

(2) Entry to the Honours Master of Science will normally be from an Honours bachelor degree in Computer Science at a standard of Class II, Division 2 or higher. Entry may also be approved for candidates with the qualification of Master of Computer Science on the recommendation of the Head of the Department of Computer Science.

(3) The Honours Master of Science will normally occupy two sessions of full-time study or four sessions of part-time study, and requires satisfactory completion of 900 level subjects to the value of at least 48 credit points, including either:

(a) the subject CSCI993 (48 credit points), or

(b) the subject CSCI992 (24 credit points) and other 900 level subjects (except subjects from the CSCI980 suite of subjects) to the value of at least 24 credit points approved by the Head of Department. In exceptional circumstances, and subject to approval of the Head of the Department, subjects with the value of at most 6 credit points may be replaced by 900 level subjects with value of at least 6 credit points offered by Departments other than the Department of Computer Science.

(4) The registration of a candidate will be subject to termination if that candidate fails subjects to the total value of 18 or more credit points.

(5) Each candidate shall have a supervisor appointed on the recommendation of the Head of the Department of Computer Science.

(6) Before the award of Honours Master of Science is conferred on a candidate who holds a testamur of the University of Wollongong for the degree of Master of
Computer Science, the candidate shall surrender the testamur and the corresponding rights to the degree of Master of Computer Science.

3. MASTER OF COMPUTER SCIENCE

The Master of Computer Science is designed to provide advanced studies in Computer Science at a professional level to graduates of this or another university who have some background in Computer Science.

The Master of Computer Science shall be subject to the University Course Rules for the award of the degree of Master, together with the following conditions:

(1) A candidate shall undertake a course of graduate studies and research, normally chosen from the graduate subjects offered by the Department of Computer Science.

(2) Entry to the Master of Computer Science will normally be from a pass degree with an appropriate sequence in Computer Science, or, subject to the approval of Council on the recommendation of the Head of Department, from a degree or diploma containing substantial study in an appropriate discipline. The expected level of Computer Science background will be equivalent to at least CSCI203 Computer Science IIB.

(3) The Master of Computer Science will normally occupy two sessions of full-time study or four sessions of part-time study, and requires satisfactory completion of 900 level subjects to the value of at least 48 credit points, including the subject CSCI991 (12 credit points) and other 900 level subjects to the value of at least 36 credit points approved by the Head of Department. In exceptional circumstances, and subject to approval of the Head of the Department, subjects with the value of at most 12 credit points, other than CSCI991, may be replaced by 900 level subjects with value of at least 12 credit points offered by Departments other than the Department of Computer Science.

(4) The registration of a candidate will be subject to termination if that candidate fails subjects to the total value of 18 or more credit points.

(5) Each candidate shall have a supervisor appointed on the recommendation of the Head of the Department of Computer Science.

4. GRADUATE DIPLOMA IN SCIENCE (IN COMPUTING)

This course is intended for graduates in disciplines with no Computer Science background. The course consists of a fixed program of first and second year undergraduate subjects from the Department of Computer Science, and can only be taken part-time, because of the pre-requisite relationships between the subjects.

Prospective candidates who have already satisfactorily completed more than one of the prescribed subjects, or equivalent, will not be permitted to register for this course. Such applicants should register for the Bachelor of Computer Science or the Master of Computer Science. However, substitution of one of these subjects by another subject offered by the Department of Computer Science may be permitted, with the approval of the Head of Department.

The Graduate Diploma in Science (in Computing) shall be subject to the University Rules for the award of Graduate Diplomas together with the following conditions:

(1) The Graduate Diploma in Science (in Computing) is a coherent program of study with the value of at least 48 credit points which requires the satisfactory completion of each of the subjects:

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Subject Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI100</td>
<td>Computing Studies</td>
</tr>
<tr>
<td>CSCI111</td>
<td>Computer Science 1A</td>
</tr>
<tr>
<td>CSCI121</td>
<td>Computer Science 1B</td>
</tr>
<tr>
<td>CSCI131</td>
<td>Introduction to Computer Systems</td>
</tr>
<tr>
<td>CSCI202</td>
<td>Computer Science 1IA</td>
</tr>
<tr>
<td>CSCI203</td>
<td>Computer Science 1IB</td>
</tr>
<tr>
<td>CSCI212</td>
<td>Operating Systems</td>
</tr>
<tr>
<td>CSCI235</td>
<td>Databases</td>
</tr>
</tbody>
</table>

with the exception that an alternative Computer Science subject from the General Schedule may replace one of the above with the approval of the Head of Department.

(2) A candidate who accumulates failures in subjects to the value of 18 or more credit points shall be required to show cause why enrolment should be allowed to continue.

SUBJECT DESCRIPTIONS

Assessment

Where not otherwise specifically stated, assessment will be by a combination of assignments, seminar presentations, and final examination. Precise details will be announced in the first lecture for each subject.
CSCI941 Advanced Topics in Computer Science A
*Autumn or Spring session; 6 credit points (2 hrs per wk)*
Topics will be selected from those areas of computing science in which visiting staff members of the Department are engaged in active research.
Co-ordinator: To be advised.

CSCI942 Advanced Topics in Computer Science B
*Autumn or Spring session; 6 credit points (2 hrs per wk)*
Topics will be selected from those areas of computing science in which visiting staff members of the Department are engaged in active research.
Co-ordinator: To be advised.

CSCI943 Advanced Topics in Computer Science C
*Autumn or Spring session; 6 credit points (2 hrs per wk)*
Topics will be selected from those areas of computing science in which visiting staff members of the Department are engaged in active research.
Co-ordinator: To be advised.

CSCI944 Perception and Planning
*Autumn or Spring session; 6 credit points (2 hrs per wk)*
Perception involves the organisation of data to achieve understanding of the environment. It facilitates planning, which involves: developing a model of the problem and inferring from that model the consequences of current or proposed actions. In robotics, we collect the data with sensors and external sensors. Internal sensors are the sensors used to measure robot parameters relative to the reference frame of the robot. Robot parameters include: joint angle, joint motion, linkage deflection, grip force and joint torque. External sensors are used to measure the environment. External sensing includes touch, range finding and vision. Once the parameters have been measured, the data must be fused into a coherent model of the environment which can be used for planning.
Co-ordinator: Dr P McKerrow.

CSCI945 Parallel Architectures and Algorithms
*Autumn or Spring session; 6 credit points (2 hrs per wk)*
The immense computational power required for many modern applications has led to the development of both hardware and software techniques to harness the capabilities of complex multi-processor machines. The subject concentrates on defining the many different approaches adopted to the construction of parallel algorithms and architectures. Emphasis is placed on the suitability of each paradigm to potential and actual application areas. This is developed both in theory and practice, with practical work based on a network of transputers running ocaml.
Co-ordinator: Dr J Gray.

CSCI954 Artificial Intelligence Programming
*Autumn or Spring session; 6 credit points (2 hrs per wk)*
Co-ordinator: To be advised.

CSCI955 Computer Networks
*Autumn or Spring session; 6 credit points (2 hrs per wk)*
Co-ordinator: Professor G Anido.

CSCI956 Robot Modelling
*Autumn or Spring session; 6 credit points (2 hrs per wk)*
Co-ordinator: Dr P McKerrow.

CSCI957 Advanced Topics in Database Management
*Autumn or Spring session; 6 credit points (2 hrs per wk)*
The objective of this course is to study the implementation aspects of a Database Management System DBMS, i.e. the software that handles all access to the database. A DBMS runs on top of an operating system and complements and/or duplicates many operating system functions. The functional components discussed in the course include the file manager, the buffer manager, the query optimizer, the recovery manager, and the concurrency controller.
Co-ordinator: Dr J Getta.

CSCI962 Logic Programming
*Autumn or Spring session; 6 credit points (2 hrs per wk)*
The guiding ideal of logic programming is that a program should be a logical theory and that the processing of a query by a logic programming system should be an attempt to prove a theorem in that theory. If the ideal were realised, logic programs would have the clear and precise semantics available for logical theories, and the imposition of control over the
execution of queries would be managed entirely by the implementation. Actual logic programming languages, the most widely known of which is Prolog, fall well short of the ideal, in that it is typically necessary for programs to contain both non-logical code and control information.

This subject covers the theoretical and practical issues raised by the above description, and includes most or all of the following topics: propositional calculus; predicate calculus; model-theoretic semantics; resolution; logic programming and Prolog (theory, applications, extensions, integration with other programming paradigms and implementation).

References:
Amble, T, Logic Programming and Knowledge Engineering, Addison-Wesley, 1987
Sterling, L and Shapiro, E, The Art of Prolog, MIT Press, 1986
Co-ordinator: Dr P Nickolas.

CSCI963 Advanced Computer Graphics
Autumn or Spring session; 6 credit points (2 hrs per wk)
The representation of three-dimensional scenes by continuous tone images has advanced significantly over the last 20 years. One of the major advances in imaging has been the use of ray tracing to produce highly realistic pictures containing such features as shadows, reflection, refraction, texturing, penumbras and motion blur. These techniques can be implemented in an object-oriented fashion using a constructive solid geometry approach. The purpose of this course is to acquaint the student with the current status of ray tracing techniques and their subsequent implementation into a CSG ray tracer.
Co-ordinator: Mr J Fulcher.

CSCI964 Neural Computing
Autumn or Spring session; 6 credit points (2 hrs per wk)
Students will become familiar with the structures, algorithms and capabilities of neural networks. Topics covered will include: The biological neuron - cell, synapses, dendrites, axon, threshold, firing rate; Origins of neural computing: Hebbian learning, McCulloh & Pitts simple threshold model, perceptron, adaline; Multi-layer feedforward networks (multi-layer perceptron) & error backpropagation, gradient descent in weight space, escape from local minima, convergence; Supervised learning/training; Later refinements - counterpropagation, Boltzmann machines; Hopfield networks, symmetrical weights, training, convergence, Hamming nets; Characteristics of neural nets - long-term memory (connections), short-term memory (input firing pattern), adaptive weights, learning ability, generalisation, noise- and fault-tolerance; Hardware realisation - massively parallel architectures, VLSI (digital & analog), optical. Comparison/contrast of neural networks versus digital computers; Connectionism versus traditional (rule-based, heuristic) artificial intelligence; Applications of neural nets - pattern recognition (handwriting, speech, image). Laboratory exercises and assignments will be conducted using public domain neural network simulators on the IBM PC, Apple Macintosh and Unix.
References:
Byte (special issue on Neural Networks) Vol 14, No 8, August 1989.
Co-ordinator: Dr J Fulcher.

CSCI965 Design and Analysis of Algorithms
Autumn or Spring session; 6 credit points (2 hrs per wk)
Pre-requisite: CSCI202, CSCI203, Discrete Math or equivalent.
Assessment 5 assignments each worth 6%, final examination 70%.
An algorithm is "any special method of solving a certain kind of problem" (Webster's Dictionary). The study of algorithms is the heart of computer science, and it gives answers to the following two fundamental questions: (a) how to find an efficient algorithm for solving a given problem, and (b) once the algorithm is found, how to compare its efficiency with other existing algorithms.
The objective of this subject is to develop the knowledge, skills and techniques for designing and analysing computer algorithms. Topics to be studied include:
(1) design of algorithms, which includes divide and conquer, the greedy method, dynamic programming, backtracking, randomised algorithms, hill climbing, simulated annealing.
(2) analysis and comparison of algorithms, which includes models of computation, time complexity and space cost.
(3) applications of the techniques which include the FFT, polynomials, matrix
operation, computational geometry, number theoretical algorithms.

References:

CSCI966 Information Theory and Coding
Autumn or Spring session; 6 credit points (2 hrs per wk)
Pre-requisite: CSCI202, CSCI203, Discrete Maths (including probability).
Assessment: 3 assignments, each worth 10%, final examination 70%.

CSCI967 - Complexity Theory
Autumn or Spring session; 6 credit points (2 hrs per wk)
Pre-requisite: CSCI203, Knowledge of Discrete Math.
Assessment: 3 assignments, each worth 10%, final examination 70%.

References:
Pre-ordinator: Associate Professor J Pieprzyk.
information protection;
- mathematical methods used in cryptography, overview of selected aspects of complexity theory, information theory versus cryptography;
- review of classical ciphers;
- symmetric encryption algorithms, information access control mechanisms, secure communication protocols, public-key cryptography, authentication methods;
- applications of cryptography in computer networks and databases.

Textbooks:

References:
Co-ordinator: Associate Professor J Pieprzyk.

CSCI973 Computer Assisted Learning
Autumn or Spring session; 6 credit points (2 hrs per wk)
Assessment: literature review 20%, written report 20%, seminar presentation 30%, practical project 30%.

"Whenever a computer and a human interact and one of them learns something then computer assisted learning has taken place", Professor Dan Bitzer. Many claims are made for the advantages provided by computer-assisted learning. There appears to be, however, a shortfall between "dreams" and "reality". In this course students will research the current state of CAL developments, the technology available, the software tools used and the general "styles" of CAL applications. We will discuss the current state of CAL from the point of view of the inter-relationship between pedagogical theory and technological developments. Students will display their understanding of CAL by producing a short CAL sequence. Topics covered will include: What is CAL? Where is CAL used? Types of CAL material - e.g. drill and practice, tutorial, programmed instruction; Teaching a course sequence; Teaching a course; Managing a CAL environment; Features of "good" CAL; Current trends and future possibilities. Technology available eg CD ROM, videodisk, multi-media, etc. Technological feasibility and educational/social acceptance. "Authoring systems". Practical work will use Apple Macintosh and Hypercard and other available systems. Written assignments are to be word processed.
References:
Co-ordinator: Dr I Pirie.

CSCI974 Systems Analysis
Autumn or Spring session; 6 credit points (2 hrs per wk)
Pre-requisite: CSCI311 Software Engineering Assessment: three assignments each 10%, seminar presentation 10%, final examination 60%.
This course is intended to follow CSCI311 Software Engineering that introduces topics related to the development of large scale systems.
Objectives
The course concentrates on the analysis and design stages of the software implementation process, both for initial implementation, and for long term maintenance. The aim is to present an integrated view of a number of software engineering models.
Topics
Basic tools including dataflow models, entity-relationship and access and object-relationship data models, control flow and access diagrams, and event tables. Combination of basic tools into software engineering environments such as IPSEs and Quality Function Deployment (QFD) environments, together with additional process modelling and process control support tools. Case studies are based on representation large scale projects in the real time arena.
Textbooks:
Co-ordinator: Professor F O'Brien.

CSCI980 Preliminary Topics in Computer Science A
Autumn or Spring session; 6 credit points (2 hrs per wk)
A selection of topics will be available from time to time to serve as preliminary material in the Master of Computer Science.
Co-ordinator: To be advised.

CSCI981 Preliminary Topics in Computer Science B
Autumn or Spring session; 6 credit points (2 hrs per wk)
A selection of topics will be available from time to time to serve as preliminary material in the Master of Computer Science.
Co-ordinator: To be advised.
CSCI982 Preliminary Topics in Computer Science C

Autumn or Spring session; 6 credit points (2 hrs per wk)
A selection of topics will be available from time to time to serve as preliminary material in the Master of Computer Science.
Co-ordinator: To be advised.

CSCI983 Preliminary Topics in Computer Science D

Autumn or Spring session; 6 credit points (2 hrs per wk)
A selection of topics will be available from time to time to serve as preliminary material in the Master of Computer Science.
Co-ordinator: To be advised.

CSCI991 Project
12 credit points

CSCI992 Minor Thesis
24 credit points

CSCI993 Thesis
48 credit points
COURSES OFFERED

The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Engineering by Research
3. Honours Master of Engineering in Telecommunications Engineering by Coursework/Research
4. Master of Engineering Studies
5. Graduate Certificate in Engineering (Telecommunications)

POSTGRADUATE PROGRAMS

Computer/Telecommunications Engineering
Control Engineering
Power Engineering
Telecommunications Engineering

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN COMPUTER/TELECOMMUNICATIONS ENGINEERING
leading to the Master of Engineering Studies

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELEC953</td>
<td>Report</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Electives* (a total of 36 credit points to be chosen from the following):</td>
<td></td>
</tr>
<tr>
<td>ELEC932</td>
<td>Computer Hardware Architecture</td>
<td>6</td>
</tr>
<tr>
<td>ELEC933</td>
<td>Real-time Computing</td>
<td>6</td>
</tr>
<tr>
<td>ELEC935</td>
<td>Electronics and Computers</td>
<td>6</td>
</tr>
<tr>
<td>ELEC961</td>
<td>Telecommunication Systems</td>
<td>6</td>
</tr>
<tr>
<td>ELEC962</td>
<td>Analysis and Transmission of Signals</td>
<td>6</td>
</tr>
<tr>
<td>ELEC963</td>
<td>Digital Signal Processing</td>
<td>6</td>
</tr>
<tr>
<td>ELEC969</td>
<td>Computer Communications</td>
<td>6</td>
</tr>
</tbody>
</table>

*Only a limited number of subjects will be available in any one year. Subject to the approval of the Head of Department relevant subjects from other programs may also be taken as electives.

For further details, see Course Requirements below.
### POSTGRADUATE PROGRAM IN CONTROL ENGINEERING
leading to the Master of Engineering Studies

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Core: ELEC953 Report</td>
<td>12</td>
</tr>
<tr>
<td>Electives* (a total of 36 credit points to be chosen from the following):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELEC924</td>
<td>Power Systems</td>
<td>6</td>
</tr>
<tr>
<td>ELEC925</td>
<td>Computer Applications in Power Systems</td>
<td>6</td>
</tr>
<tr>
<td>ELEC926</td>
<td>Machine Transients</td>
<td>6</td>
</tr>
<tr>
<td>ELEC928</td>
<td>Variable Speed Drives</td>
<td>6</td>
</tr>
<tr>
<td>ELEC943</td>
<td>Computer Controlled Systems</td>
<td>6</td>
</tr>
<tr>
<td>ELEC944</td>
<td>Identification and Optimal Control</td>
<td>6</td>
</tr>
<tr>
<td>ELEC963</td>
<td>Digital Signal Processing</td>
<td>6</td>
</tr>
<tr>
<td>ELEC973</td>
<td>Advanced Robotics and Sensory Systems</td>
<td>6</td>
</tr>
</tbody>
</table>

*Only a limited number of subjects will be available in any one year. Subject to the approval of the Head of Department relevant subjects from other programs may also be taken as electives.

For further details, see Course Requirements below.

### POSTGRADUATE PROGRAM IN POWER ENGINEERING
leading to the Master of Engineering Studies

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Core: ELEC953 Report</td>
<td>12</td>
</tr>
<tr>
<td>Electives* (a total of 36 credit points to be chosen from the following):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELEC922</td>
<td>AC Converters</td>
<td>6</td>
</tr>
<tr>
<td>ELEC923</td>
<td>Choppers and Inverters</td>
<td>6</td>
</tr>
<tr>
<td>ELEC924</td>
<td>Power Systems</td>
<td>6</td>
</tr>
<tr>
<td>ELEC925</td>
<td>Computer Applications in Power Systems</td>
<td>6</td>
</tr>
<tr>
<td>ELEC926</td>
<td>Machine Transients</td>
<td>6</td>
</tr>
<tr>
<td>ELEC927</td>
<td>Industrial Design</td>
<td>6</td>
</tr>
<tr>
<td>ELEC928</td>
<td>Variable Speed Drives</td>
<td>6</td>
</tr>
<tr>
<td>ELEC943</td>
<td>Computer Controlled Systems</td>
<td>6</td>
</tr>
</tbody>
</table>

*Only a limited number of subjects will be available in any one year. Subject to the approval of the Head of Department relevant subjects from other programs may also be taken as electives.

For further details, see Course Requirements below.

### POSTGRADUATE PROGRAM IN TELECOMMUNICATIONS ENGINEERING
leading to the Honours Master of Engineering in Telecommunications Engineering

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Core: ELEC952 Thesis</td>
<td>24</td>
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<tr>
<td></td>
<td>ELEC964 Integrated Service Networks</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ELEC965 Communication Protocols</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ELEC966 Telecommunications Signal Processing</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ELEC967 Teletraffic Engineering</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ELEC968 Transmission Systems</td>
<td>4</td>
</tr>
<tr>
<td>Electives (choice of not less than four credit points from the following):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSCI945</td>
<td>Parallel Architecture and Algorithms</td>
<td>6</td>
</tr>
<tr>
<td>CSCI956</td>
<td>Robot Modelling</td>
<td>6</td>
</tr>
<tr>
<td>IACT918</td>
<td>Telecommunications Management</td>
<td>6</td>
</tr>
</tbody>
</table>

This program is jointly offered with the University of Technology, Sydney and candidates are required to undertake equivalent subjects in lieu of some of those listed above at that Institution. This program will only be offered if enrolments in any one year exceed nine.

For further details, see Course Requirements below.
**SCHEDULE OF POSTGRADUATE SUBJECTS**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Certificate in Engineering (Telecommunications)</td>
<td></td>
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</tr>
<tr>
<td>ELEC861</td>
<td>Telecommunications Systems</td>
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<tr>
<td>ELEC862</td>
<td>Transmission Systems</td>
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<td>ELEC863</td>
<td>Telecommunication Signal Processing</td>
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<td>ELEC864</td>
<td>Telecommunication System Management</td>
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<tr>
<td>Master of Engineering Studies</td>
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<td>ELEC922</td>
<td>AC Converters</td>
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<td>Choppers and Inverters</td>
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<td>Computer Applications in Power Systems</td>
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<td>Report</td>
<td>12</td>
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<td>ELEC961</td>
<td>Telecommunication Systems</td>
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<tr>
<td>ELEC962</td>
<td>Analysis and Transmission of Signals</td>
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<tr>
<td>ELEC963</td>
<td>Digital Signal Processing</td>
<td>6</td>
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<tr>
<td>ELEC969</td>
<td>Computer Communications</td>
<td>6</td>
</tr>
<tr>
<td>ELEC973</td>
<td>Advanced Robotics and Sensory Systems</td>
<td>6</td>
</tr>
<tr>
<td>Master of Engineering in Telecommunications Engineering (Honours)</td>
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</tr>
<tr>
<td>ELEC952</td>
<td>Thesis</td>
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<td>ELEC964</td>
<td>Integrated Service Networks</td>
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<tr>
<td>ELEC965</td>
<td>Communication Protocols</td>
<td>4</td>
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<tr>
<td>ELEC966</td>
<td>Telecommunications Signal Processing</td>
<td>4</td>
</tr>
<tr>
<td>ELEC967</td>
<td>Teletraffic Engineering</td>
<td>4</td>
</tr>
<tr>
<td>ELEC968</td>
<td>Transmission Systems</td>
<td>4</td>
</tr>
<tr>
<td>Master of Engineering (Honours) and Doctor of Philosophy</td>
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</tr>
<tr>
<td>ELEC951</td>
<td>Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

For the Master of Engineering Studies, unless demand warrants, only seven (7) subjects will be available in any one year.

**COURSE REQUIREMENTS**

1. **DOCTOR OF PHILOSOPHY**

Candidates for this degree enrol in ELEC951.

2. **HONOURS MASTER OF ENGINEERING**

Under the Rules for the degree of Honours Master of Engineering, candidates may meet the major requirements by satisfactorily completing a thesis embodying the results of an investigation.

Entry for graduates with an Honours Degree at a standard of Class II, Division 2 or higher or approved equivalent qualification.

Under the Honours Masters Rules, candidates must accumulate a total of not less than 48 credit points by the successful completion of subjects from the Schedule of Graduate Subjects, which are described below.

Entry for graduates with a Degree below a standard of Class II, Division 2 or higher or approved equivalent qualification.

Under the Honours Masters Rules, candidates are required to accumulate 96 credit points of which at least 48 points shall be from subjects included in the Schedule of Graduate Subjects; the remaining 48 credit points however, need not be for subjects at the Postgraduate level.

The Department, however, requires that candidates who qualify for entry under these provisions enrol in the Master of Engineering Studies and gain a weighted average mark of 67.5% or higher to be admitted to the Honours Master of Engineering program.
3. HONOURS MASTER OF ENGINEERING IN TELECOMMUNICATIONS ENGINEERING

Introduction
This course 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 for graduates with an Honours Degree at a Standard of Class II, Division 2 or higher or approved equivalent qualification.
Under the Honours Masters Rules, candidates must accumulate a total of not less than 48 credit points by the satisfactory completion of subjects as indicated below:

(a) 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 for graduates with a degree below a standard of Class II, Division 2.
The Department requires that candidates who qualify for entry under these provisions enrol in the Master of Engineering Studies and gain a weighted average mark of 67.5% or higher to be admitted to the Honours Master of Engineering in Telecommunications Engineering program. Having satisfied these requirements, the program of study is as set out above.

4. MASTER OF ENGINEERING STUDIES

The Rules governing the Master of Engineering Studies are detailed in the section called General Information within this Calendar.

Under the Masters Rules, candidates must accumulate a total of not less than 48 credit points by the satisfactory completion of subjects, approved by the Head of Department, as indicated below:

(a) six subjects, worth six credit points each, from the Schedule of Graduate Subjects, listed below and for which details appear under Subject Descriptions in the following pages:
- ELEC922 AC Converters
- ELEC923 Choppers and Inverters
- ELEC924 Power Systems
- ELEC925 Computer Applications in Power Systems
- ELEC926 Machine Transients
- ELEC927 Industrial Design
- ELEC928 Variable Speed Drives
- ELEC932 Computer Hardware Architecture
- ELEC933 Real-time Computing
- ELEC935 Electronics and Computers
- ELEC943 Computer Controlled Systems
- ELEC944 Identification and Optimal Control
- ELEC961 Telecommunication Systems
- ELEC962 Analysis and Transmission of Signals
- ELEC963 Digital Signal Processing
- ELEC969 Computer Communications
- ELEC973 Advanced Robotics and Sensory Systems; and

(b) ELEC953 Report.
With the approval of the Head of Department, up to three of the above six credit point subjects listed in (a) may be replaced by suitable equivalent subjects offered by other Departments.

5. GRADUATE CERTIFICATE IN ENGINEERING (TELECOMMUNICATIONS)

The Rules governing the Graduate Certificate in Engineering are detailed in the section called General Information within this Calendar.

For the Graduate Certificate in Engineering (Telecommunications), candidates enrol in the following subjects:

ELEC861 Telecommunications Systems
ELEC862 Transmission Systems
ELEC863 Telecommunication Signal Processing
ELEC864 Telecommunication System Management.

Details of these subjects are presented in the Subject Descriptions below. It should be noted that these subjects are to be delivered by mixed mode techniques, including television broadcasts as the Graduate Certificate in Engineering (Telecommunications) is offered as a distance learning course.

SUBJECT DESCRIPTIONS

Assessment
All subjects offered by the Department of Electrical and Computer Engineering are normally assessed by means of a final examination. In addition, set project work, library assignments, seminar presentations, laboratory reports and tutorial problems undertaken by the student throughout the session may also be taken into account.

Lecturers in the individual subjects will provide details at the beginning of each session. As a general rule, the assessment for a subject is such that not less than 80% of the assessable material is identifiably the student's own work.

Subject Co-ordinators
Whilst a Subject Co-ordinator has been given for each subject, it should be noted that the Co-ordinator this year may not be as printed. For all subjects, students will be given Subject Information Sheets in the first week of lectures with details of the Subject Co-ordinators, Lecturers, Demonstrators, Assessment, etc.

ELEC861 Telecommunications Systems
Autumn or Spring session; 6 credit points (42 hrs of lectures and tutorials, delivered by mixed mode techniques, including television broadcasts).

Assessment: see statement at beginning of Subject Descriptions.

Introduction to communications systems, including analogue and digital transmission systems, ISDN, cellular mobile radios and satellite communications. Time and frequency domain analysis of linear systems and deterministic signals (Fourier Transform; convolution and correlation; continuous and discrete time linear systems). Analogue modulation systems and spectra (amplitude, frequency and phase modulation).

Co-ordinator: Professor G J Anido.

ELEC862 Transmission Systems
Autumn or Spring session; 6 credit points (42 hrs of lectures and tutorials, delivered by mixed mode techniques, including television broadcasts).

Assessment: see statement at beginning of Subject Descriptions.

Wave propagation in cables, waveguides and atmosphere, radiation and antennas.

Co-ordinator: Professor G J Anido.

ELEC863 Telecommunication Signal Processing
Autumn or Spring session; 6 credit points (42 hrs of lectures and tutorials, delivered by mixed mode techniques, including television broadcasts).

Assessment: see statement at beginning of Subject Descriptions.

Band-limited signals, sampling theorem, aliasing. Finite and infinite impulse response digital filter structures and frequency response, design methods for digital filters. The discrete Fourier Transform; Fast Fourier Transform algorithms. Linear prediction and its application to reduced bandwidth transmission of signals.

Co-ordinator: Professor G J Anido.

ELEC864 Telecommunication System Management
Autumn or Spring session; 6 credit points (42 hrs of lectures and tutorials, delivered by mixed mode techniques, including television broadcasts).

Assessment: see statement at beginning of Subject Descriptions.

Aims of private and public communications systems. Local Area Networks (LANs) and Simple Network Management Protocol (SNMP). Narrowband versus broadband communications. Integration of voice, data and video in national and global networks. General management issues, such as cost control and business development, in telecommunications systems, both public and private. International standards. Dimensioning telecommunications systems. Regulatory structure and international networking.

Co-ordinator: Professor G J Anido.
ELEC922 AC Converters  
*Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)*  
Assessment: see statement at beginning of Subject Descriptions.  
Diode, SCR, Triac; their characteristics and protection. AC to DC conversion; single-phase and three-phase, single-quadrant, two-quadrant and four-quadrant phase controlled converters, applications. AC to AC conversion; AC voltage controllers, single-phase and three-phase cycloconverters, applications. Harmonics in phase controlled systems. Current research developments.  
Co-ordinator: Associate Professor V J Gosbell.

ELEC923 Choppers and Inverters  
*Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)*  
Assessment: see statement at beginning of Subject Descriptions.  
Power transistors, MOSFETS and diodes; commutation, snubbing, drive and protection; waveform control and filtering; choppers, inverters, switched mode power supplies. Current research developments.  
Co-ordinator: Associate Professor V J Gosbell.

ELEC924 Power Systems  
*Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)*  
Assessment: see statement at beginning of Subject Descriptions.  
Power system components, layout, frequency control, voltage control, fault analysis, stability, protection. Current research developments.  
Co-ordinator: Associate Professor V J Gosbell.

ELEC925 Computer Applications in Power Systems  
*Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)*  
Assessment: see statement at beginning of Subject Descriptions.  
On-line and off-line applications of computers to the following areas: power system analysis, digital protection, centralised and distributed control of active and reactive power. Current research developments.  
Co-ordinator: Associate Professor V J Gosbell.

ELEC926 Machine Transients  
*Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)*  
Assessment: see statement at beginning of Subject Descriptions.  
Co-ordinator: Associate Professor V J Gosbell.

ELEC927 Industrial Design  
*Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)*  
Assessment: see statement at beginning of Subject Descriptions.  
This subject will cover selected topics from design techniques for electrical equipment, such as electric motors, transformers, reactors, contactors, insulators, busbars, etc. Topics to be covered will include magnetic and electric circuits, electric fields in insulators, thermal systems, mechanical constraints, audible noise and skin effect. Current research developments.  
Co-ordinator: Associate Professor V J Gosbell.

ELEC928 Variable Speed Drives  
*Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)*  
Assessment: see statement at beginning of Subject Descriptions.  
Co-ordinator: Associate Professor V J Gosbell.

ELEC932 Computer Hardware Architecture  
*Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)*  
Assessment: see statement at beginning of Subject Descriptions.  
Memory organisation and management, including cache memory; input/output systems; DMA and interrupts; I/O processors; pipeline processors, multiprocessors, complex instruction set processors; and reduced instruction set processors. Micro-programming; micro-processors; and micro-computer hardware (bus system, multiplex bus system organisation); and interface design. Programming of micro-computers with reference to appropriate micro-computers. Micro-computer applications. Current research developments.  
Reference Books:  
Co-ordinator: Professor G J Anido.

ELEC933 Real-time Computing  
*Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)*  
Assessment: see statement at beginning of Subject Descriptions.  
Real-time issues, including time handling, objects and adding time to objects. Real-time system life cycle, structured design approach, Petri-net models, verification and validation of real-time software, real-time operating systems, operating system implementation. Current research developments.  
Textbook:  
Co-ordinator: Professor G J Anido.
ELEC935 Electronics and Computers
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)
Assessment: see statement at beginning of Subject Descriptions.
Co-ordinator: Professor G J Anido.

ELEC943 Computer Controlled Systems
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)
Assessment: see statement at beginning of Subject Descriptions.
Discrete-time observations; control and feedback; digital regulator design; and digital tracking system design. Digital control of continuous-time systems; and step varying systems. Current research developments.
Reference Book:
Co-ordinator: Professor C D Cook.

ELEC944 Identification and Optimal Control
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)
Co-requisite: ELEC943
Assessment: see statement at beginning of Subject Descriptions.
Fundamentals of system identification. Parameter estimation algorithms, including least squares and stochastic least squares; maximum likelihood; and recursive least squares algorithm. Introduction to optimal control; linear quadratic optimal control; linear quadratic Gaussian control and Kalman filtering. Current research developments.
Co-ordinator: Professor C D Cook.

ELEC951 Thesis
Autumn or Spring or Double session; 48 credit points

ELEC952 Thesis
Autumn or Spring or Double session; 24 credit points

ELEC953 Report
Autumn or Spring or Double session; 12 credit points
Co-requisite: 36 credit points at 900-level.
Assessment: see statement at beginning of Subject Descriptions.
Projects may involve a hardware project, including the design and construction of experimental apparatus; a software project, including the development of software; or an extensive literature survey; or a combination of any of these. Where possible the projects are related to the research programs of the Department and are chosen to develop the student's initiative. Each student is required to deliver an oral seminar and to prepare a final thesis on the result of the work undertaken.
Textbooks:
Blico, Technically - Write!, Prentice-Hall.
Reference Book:
Co-ordinator: Professor C D Cook.

ELEC961 Telecommunication Systems
Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)
Assessment: see statement at beginning of Subject Descriptions.
Co-ordinator: Professor G J Anido.

ELEC962 Analysis and Transmission of Signals
Autumn session; 6 credit points (56 hrs of lectures and tutorials/seminars)
Assessment: see statement at beginning of Subject Descriptions.
High frequency signal propagation in transmission lines, waveguides and atmosphere, radiation and antennas, fibre optics, filters. Current research developments.
Textbook:
Co-ordinator: Professor G J Anido.

ELEC963 Digital Signal Processing
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)
Assessment: see statement at beginning of Subject Descriptions.
theory; least-squares estimation, minimum variance estimation, maximum likelihood estimation. Current research developments.

Co-ordinator: Professor G J Anido.

**ELEC964 Integrated Service Networks**

*Autumn or Spring session; 4 credit points (42 hrs lectures and tutorials)*

Pre-requisite: ELEC965 (or UTS subject number 41865)

Co-requisite: ELEC966 (or UTS subject number 41868)

Assessment: see statement at beginning of Subject Descriptions.


Textbooks:

For the ISDN part of the subject:


For the LAN and MAN part of the subject:


For additional reference:


Halsall, F, Data Communications, Computer Networks and OSI, Reading, MA, Addison-Wesley, 1988.


Co-ordinator: Professor G J Anido.

**ELEC965 Communication Protocols**

*Autumn or Spring session; 4 credit points (42 hrs lectures, tutorials and practical work)*

Co-requisite: ELEC967 (or UTS subject number 41867)

Assessment: see statement at beginning of Subject Descriptions.


Textbook:


Reference Books:


Halsall, F, Data Communications, Computer Networks and OSI, 2nd ed, Addison-Wesley 1987.

**ELEC966 Telecommunications Signal Processing**

*Autumn or Spring session; 4 credit points (42 hrs lectures and tutorials)*

Assessment: see statement at beginning of Subject Descriptions.


Textbooks:


Co-ordinator: Professor G J Anido.

**ELEC967 Teletraffic Engineering**

*Autumn or Spring session; 4 credit points (42 hrs lectures and tutorials)*

Co-requisite: ELEC965 (or UTS subject number 41865)

Assessment: see statement at beginning of Subject Descriptions.

The subject is designed to give students the fundamental and advanced knowledge of teletraffic analysis, monitoring and measurements in voice and data systems and networks. It provides clear insight into the analytical and practical aspects of traffic behaviour of links and switches. The case examples, based on the real traffic data collected on national and international links, allow students to practice analysis of systems performance and to compare the results with those obtained from theoretical models. The students after the completion of this subject will be able to use traffic theory for provisioning of systems/networks, for performance analysis of existing and planned systems and for more advanced traffic studies.

Textbooks:

Reference Books:

Co-ordinator: Professor G J Anido.

ELEC968 Transmission Systems
Autumn or Spring session; 4 credit points (42 hrs lectures and tutorials)
Pre-requisite: ELEC966 (or UTS subject number 41866)
Assessment: see statement at beginning of Subject Descriptions.
Textbooks:

Co-ordinator: Professor G J Anido.

ELEC969 Computer Communications
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)
Not to count with CSC1955
Assessment: see statement at beginning of Subject Descriptions.
Co-ordinator: Professor G J Anido.

ELEC973 Advanced Robotics and Sensory Systems
Autumn or Spring session; 6 credit points (56 hrs of lectures and tutorials/seminars)
Not to count with CSCI956
Assessment: see statement at beginning of Subject Descriptions.
Robotic manipulation, direct kinematics, inverse kinematics, workspace analysis and trajectory planning, differential motion and statics, manipulator dynamics, robot control. Robotic sensors, including tactile and vision, task planning, robotics in automated manufacturing. Current research developments.
Textbook:
Co-ordinator: Professor C D Cook.
CURRENT RESEARCH AREAS

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

- Telecommunication policy and regulation
- Information industry strategy
- International communication
- Management of telecommunications
- Security and integrity of data communications
- Information market
- Privacy and intellectual property
- Technology and distance education
- Impact of technology in the workplace

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* These subjects have pre-requisites.
All subjects may not be available every year.
No candidate may select more than 18 credit points from Part B.
COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in IACT970.

2. HONOURS MASTER OF INFORMATION TECHNOLOGY AND COMMUNICATION

Candidates who have completed the Bachelor of Information Technology and Communication (Hons), or equivalent, may qualify for the award of the Master of Information Technology and Communication (Hons) degree by successfully completing one of the following options:

(a) IACT970, or
(b) IACT960 and 900 level subjects with the value of at least 24 credit points selected from the Schedule of Graduate Subjects, Department of Information and Communication Technology. Candidates in this option may not enrol in more than 6 credit points from Part B of the Schedule.

Candidates who have a degree with a major in either Computer Science, Computer Engineering or Business Systems, approved by the Head of the Department, and who have completed at least one year of relevant professional experience in information technology or telecommunications may be permitted to register as candidates for the Master of Information Technology and Communication (Hons) degree. Such candidates may qualify for the award of the degree by satisfactorily completing subjects to the value of at least 96 credit points by one of the following options:

(a) IACT970 and 900 level subjects with the value of at least 48 credit points selected from the Schedule of Graduate Subjects, Department of Information and Communication Technology, or
(b) IACT960 and 900 level subjects with the value of at least 72 credit points selected from the Schedule of Graduate Subjects, Department of Information and Communication Technology.

3. MASTER OF INFORMATION TECHNOLOGY AND COMMUNICATION

The purpose of this degree is to provide graduates working in the area of information technology and telecommunications with a deeper understanding of the organisational, economic and policy issues essential to the effective management of information technology.

The course requires satisfactory completion of 900 level subjects to the value of at least 48 credit points (excluding the subjects IACT960 and IACT970), selected from the Schedule of Graduate Subjects, Department of Information and Communication Technology. It may be studied full-time over one year, enrolments permitting, or part-time.

Entry Requirements:
Candidates should have a degree with a major in Computer Science, Computer Engineering, Business Systems or equivalent. In addition, candidates must have at least one year of relevant professional experience in information technology or telecommunications.

SUBJECT DESCRIPTIONS

Not all 900 level subjects will be offered every year. Intending candidates should consult with academic advisers in the Department (or the University Timetable) for further advice.

Textbooks
Textbooks will be advised where appropriate otherwise comprehensive reading lists will be provided in the first lecture of each subject.

IACT911 Telecommunication in Australia
Autumn or Spring session; 6 credit points (3 contact hrs)
Assessment: 2 essays x 3,000 words 60%, tutorial assignments 40%.
In recent years there has been a period of rapid technological innovation, industry restructuring and regulatory change in Australian telecommunications. This subject analyses the emergence of political, economic and technological change in telecommunications over the last decade. The development of government policy towards the telecommunications carriers from the Davidson Report to the present is examined. The role of large user organisations in pressing for change and their use of overseas models of deregulation and privatisation will be studied. The combined effect of these forces on the future structure, ownership and use of the Australian network will be scrutinised.
Co-ordinator: Ms R Lindley.

IACT912 International Communications
Autumn or Spring session; 6 credit points (3 contact hrs)
Assessment: 2 essays x 3,000 words 60% tutorial assignments 40%.
The growth in international information flows has brought conflict between global marketplaces and national economic and political priorities. This subject will examine the forces pressing for the removal of national policies that inhibit the flow of information across geographical borders. The attempts of nation states to maintain technological
autonomy and political sovereignty will also be studied. In particular, the issues of trans-border data flows and the imbalance between the North and South will be critically reviewed. The implications for international bodies such as Intelsat and the International Telecommunication Union will be analysed.

Co-ordinator: Dr R Joseph.

IACT913 Policy Issues in Information Technology
Autumn or Spring session; 6 credit points (3 contact hrs)
Assessment: 2 essays x 3,000 words 60%, tutorial assignments 40%.
The emergence of information in electronic form as a key source of value in highly developed economies has prompted governments to develop national policies that establish a framework for the growth of services in this area. Approaches taken by governments to this question in Australia, the USA, UK and Japan will be contrasted. Issues that will be analysed include national information technology policies, information technology and the organisation of work and legal aspects of information technology.

Co-ordinator: Dr R Joseph.

IACT914 Technical Issues in Information Technology
Autumn or Spring session; 6 credit points (3 contact hrs)
Assessment: 2 essays x 1,500 words 70%, tutorial assignments 30%.
The availability of new techniques and systems has been a major catalyst for change in the adoption and use of information technologies. As new technologies emerge their proponents seek to advance standards, regulatory systems and government policies that promote their interests. The debate over the adoption of new information technologies may be formulated in technical terms that disguise the political and economic realities at stake. A series of case studies will be examined to illustrate this theme, including international data network standards; the impact on satellites of fibre optics and the effect of optical disc retrieval systems on on-line information services.

Co-ordinator: To be advised.

IACT915 Carrier Regulation in Telecommunications*
Autumn or Spring session; 6 credit points (3 contact hrs)
Assessment: 2 essays x 1,500 words 70%, tutorial assignments 30%.

Historical emergence of the role of governments in the regulation of telecommunications; the European and the North American experience. Public ownership of communications infrastructure versus private. Monopoly versus competitive carriage: global pressures toward re-regulation. Separation of basic and value-added services and the third-party traffic issue.

Co-ordinator: To be advised.

IACT916 Organisational Issues in Information Technology
Autumn or Spring session; 6 credit points (3 contact hrs)
Assessment: 3 essays 75%, seminars 15%, tutorials 10%.
Effect on organisational information flows of growth in size and complexity: the management and technological response. Information technology as a catalyst in codifying work procedures and creating new organisational structures. Hierarchical versus horizontal approaches to information management. Implications of broadband networks for traffic integration.

Co-ordinator: Mr A Dean.

IACT917 The Information Market
Autumn or Spring session; 6 credit points (3 contact hrs).
Assessment: 2 x 3,000 word essays 60%, seminars/tutorials 40%.
In its investigation of the information market, this subject examines the ownership and exploitation of information as a source of social, political and economic power. Legal protection for information as an economic good (for example as patents, copyright and other forms of intellectual property) is also explored. The development of an information infrastructure with the spread of computer networks is facilitating the emergence of a global information marketplace. An important focus in this subject is the effect of information and communication technologies on the economics of information delivery.

Co-ordinator: Ms C Alcock.

IACT918 Telecommunications Management
Autumn or Spring session; 6 credit points (3 contact hrs)
Assessment: 1 examination 50%, 2 x 1,500 word essays 30%, seminars 20%.

Co-ordinator: Dr P Beadle.

*Not on offer in 1994.
IACT919 Online Information Services
Autumn or Spring session; 6 credit points (3 contact hrs).
Assessment: 1x3000 word essay 30%, 1 report 30%, seminars/tutorials 40%.
This subject examines the emergence of online information supermarkets and the
changes in ownership that have taken place within the online information industry as mass
media conglomerates have entered the field. Other aspects covered include: the role of
government in the development of online databases and networks; the creation of
"value-added" products through re-formatting, marketing and electronic delivery of
information; the future of public information information services such as libraries and
government data collection and publication agencies in a changing online environment;
and the potential of network developments such as AARNet, the Internet, and NREN in
the delivery of online information resources. Some practical experience in the use of
electronic information services is provided including Australian and international
databases and computer networks.
Co-ordinator: Ms C Alcock.

IACT920 Globalisation in Informatics
Autumn or Spring session; 6 credit points (3 contact hrs)
Assessment: 1 examination 40%, 1 report 40%,
Dominance of transnational suppliers in global
markets for computing and telecommunications. Geographic diversity and
division of labour in research and
development; cost structures and strategic
issues in choice of manufacturing locations.
Vertical versus horizontal integration. Cross-
ownership and the emergence of pre-
competitive strategic alliances.
Co-ordinator: Ms U Mansfield.

IACT921 Industry Policy in High
Technology
Autumn or Spring session; 6 credit points (3 contact hrs)
Assessment: 1 examination 40%, 1 report 30%,
group project 30%.
The role of computing and
telecommunications in generating national
and regional economic growth. Government
purchasing eg, in Defence, as a means of
fostering indigenous high technology. Policies
for technology transfer from transnational
to domestic enterprises. Interaction between
public and private sector research and
development in software and hardware.
Co-ordinator: Ms U Mansfield.

IACT922 Case Studies in Information
Technology Applications*
Autumn or Spring session; 6 credit points (3 hrs per wk)
Assessment: 2 written reports 70%, seminar
presentations 30%.
Innovative uses of information technology to
create new services and systems eg, electronic
banking, international currency trading. Centralised mainframe computing versus
distributed intelligence. Technology options
for high-speed data networks; video-
conferencing as a travel substitute. Public
information retrieval systems eg, videotex.
Co-ordinator: Associate Professor J Cooper.

IACT923 IT and Small Business
Autumn or Spring session, 6 credit points (3 contact hrs)
Assessment: written assignments 85%, seminar
15%
This subject will study the relationship
between small business and IT, the
management of IT in small business and the
impact of IT on small business with regard to a
number of critical areas such as productivity,
staff development, accessibility of technology,
business size and activity, change
management, research and development.
Co-ordinator: Mr A Dean.

IACT924 Advanced Telecommunications
Network Planning
Autumn or Spring session; 6 credit points (3 contact hrs)
Assessment: essay 20%, seminar presentation 20%,
tutorial paper 10%, and case study 50%.
The process of developing a
telecommunications network plan is becoming
a more difficult task with the rapid
diversification and advances in the
technological and design options available.
This subject investigates Telecommunications
Network Planning in greater depth, providing
details of the operation of a
telecommunications network as a complex,
interrelated set of operations. It examines the
scope of the network operations plan from the
user's perspective. Topics will include: (1) the
need for forward network planning; (2) traffic
flow control and forecasting; (3) network
security; (4) long range planning
considerations; (5) dimensioning; and, (6)
project management techniques that are
relevant to the telecommunications network
planning and implementation process.
Case Study
Students will be required to critically analyse
the telecommunications network plan for a
large corporation.
Co-ordinator: Ms R Lindley.

*Not on offer in 1994.
IACT930 Special Topics
*Autumn or Spring session; 6 credit points (3 hrs per wk)*
Assessment: assignments 80%, seminars 20%.
Topics will be selected from areas of interest of staff members or visiting staff members to the Unit. These will include topics in the application of information and communication technology. Noting that IT is a rapidly changing area, this subject will allow for the inclusion in the MInfoTech degree topics at the forefront of the discipline.
Co-ordinator: Associate Professor J A Cooper.

IACT950 Research Report
12 credit points

IACT960 Minor Thesis
24 credit points

IACT970 Major Thesis
48 credit points
MATHMATICS

COURSES OFFERED
The following postgraduate courses are available:

1. Doctor of Philosophy
2. Honours Master of Science by Research or Coursework
3. Master of Mathematics

POSTGRADUATE PROGRAMS

Engineering & Industrial Mathematics
Pure Mathematics

CURRENT RESEARCH AREAS

The following areas of research are available to candidates undertaking the Honours Master of

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN ENGINEERING & INDUSTRIAL
MATHEMATICS
leading to the degree of Honours Master of Science or Master of Mathematics

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td></td>
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<tr>
<td>Either</td>
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<tr>
<td>MATH991</td>
<td>Project</td>
<td>12</td>
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<tr>
<td>or</td>
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</tr>
<tr>
<td>MATH992</td>
<td>Minor Thesis</td>
<td>24</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
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</tr>
<tr>
<td>MATH901</td>
<td>Perturbation Methods</td>
<td>6</td>
</tr>
<tr>
<td>MATH902</td>
<td>Solution of Differential Equations by One-Parameter Groups</td>
<td>6</td>
</tr>
<tr>
<td>MATH911</td>
<td>Coastal Dynamics</td>
<td>6</td>
</tr>
<tr>
<td>MATH912</td>
<td>Mathematics of Microwave Heating</td>
<td>6</td>
</tr>
<tr>
<td>MATH913</td>
<td>Fluid Mechanics and Wave Theory</td>
<td>6</td>
</tr>
<tr>
<td>MATH914</td>
<td>Analytical Dynamics</td>
<td>6</td>
</tr>
<tr>
<td>MATH915</td>
<td>Applied Nonlinear Partial Differential Equations</td>
<td>6</td>
</tr>
<tr>
<td>MATH916</td>
<td>Heat Conduction and Moving Boundary Problems</td>
<td>6</td>
</tr>
<tr>
<td>MATH917</td>
<td>Advanced Numerical Analysis</td>
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</tr>
<tr>
<td>MATH918</td>
<td>Computational Fluid Mechanics</td>
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</tr>
<tr>
<td>MATH971</td>
<td>Advanced Topics in Applied Mathematics A</td>
<td>6</td>
</tr>
<tr>
<td>MATH972</td>
<td>Advanced Topics in Applied Mathematics B</td>
<td>6</td>
</tr>
<tr>
<td>MATH980</td>
<td>Preliminary Topics in Mathematics A</td>
<td>6</td>
</tr>
<tr>
<td>MATH981</td>
<td>Preliminary Topics in Mathematics B</td>
<td>6</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.
# Postgraduate Program in Pure Mathematics

Postgraduate Program in Pure Mathematics leading to the degree of Honours Master of Science or Master of Mathematics

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td><strong>Program A - Analysis</strong></td>
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<tr>
<td><strong>Core</strong></td>
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<td>or</td>
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<tr>
<td>MATH992</td>
<td>Minor Thesis</td>
<td>24</td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH921</td>
<td>Advanced Functional Analysis</td>
<td>6</td>
</tr>
<tr>
<td>MATH922</td>
<td>Harmonic Analysis</td>
<td>6</td>
</tr>
<tr>
<td>MATH924</td>
<td>Distributions</td>
<td>6</td>
</tr>
<tr>
<td>MATH928</td>
<td>Advanced Measure Theory</td>
<td>6</td>
</tr>
<tr>
<td>MATH929</td>
<td>Sobolev Spaces and Applications</td>
<td>6</td>
</tr>
<tr>
<td>MATH973</td>
<td>Advanced Topics in Pure Mathematics A</td>
<td>6</td>
</tr>
<tr>
<td>MATH974</td>
<td>Advanced Topics in Pure Mathematics B</td>
<td>6</td>
</tr>
<tr>
<td>MATH980</td>
<td>Preliminary Topics in Mathematics A</td>
<td>6</td>
</tr>
<tr>
<td>MATH981</td>
<td>Preliminary Topics in Mathematics B</td>
<td>6</td>
</tr>
</tbody>
</table>

| **Program B - Foundations of Mathematics** | | |
| **Core** | | |
| MATH991 | Project | 12 |
| or | | |
| MATH992 | Minor Thesis | 24 |
| **Electives** | | |
| MATH903 | Mean Periodic Functions | 6 |
| MATH925 | Topics in Algebra | 6 |
| MATH926 | Logic and Set Theory | 6 |
| MATH927 | Combinatory Logic | 6 |
| MATH973 | Advanced Topics in Pure Mathematics A | 6 |
| MATH974 | Advanced Topics in Pure Mathematics B | 6 |
| MATH980 | Preliminary Topics in Mathematics A | 6 |
| MATH981 | Preliminary Topics in Mathematics B | 6 |

For further details, see Course Requirements below.

## Course Requirements

1. **Doctor of Philosophy**

Candidates for this degree enrol in MATH993.

2. **Honours Master of Science**

The degree of Honours Master of Science shall be subject to the University Course Rules for the award of the degree of Honours Master together with the following conditions.

1. A candidate shall undertake research, or a course of graduate studies and research, normally chosen from one of the postgraduate programs offered by the Department of Mathematics.

2. Entry to the Honours Master of Science will normally be from an Honours bachelor degree in Mathematics at a standard of Class II, Division 2 or higher. Entry may also be approved for candidates with the qualification of Master of Mathematics on the recommendation of the Head of the Department of Mathematics.

3. The Honours Master of Science will normally occupy two sessions of full-time study or four sessions of part-time study, and requires satisfactory completion of 900 level subjects to the value of at least 48 credit points chosen from one of the postgraduate programs offered by the Department of Mathematics including either:

   (a) the subject MATH993 (48 credit points), or
   (b) the subject MATH992 (24 credit points) and other 900 level subjects to the value of at least 24 credit points approved by the Head of
Department. In exceptional circumstances, and subject to approval of the Head of the Department, subjects with the value of at most 6 credit points from the program may be replaced by any other 900 level subjects with value of at least 6 credit points.

(4) The registration of a candidate will be subject to termination if that candidate fails subjects to the total value of 18 or more credit points.

(5) Each candidate shall have a supervisor appointed on the recommendation of the Head of the Department of Mathematics.

SUBJECT DESCRIPTIONS

Subjects
For further details, see the postgraduate coursework co-ordinator: Professor J Hill.

Textbooks
Students will be advised on the appropriate texts for each subject in the first lecture of the subject. In all cases, the lecturer should be consulted before textbooks are purchased.

Credit Points
All subjects listed below, with the exception of MATH991, MATH992 and MATH993, have a credit point value of 6.

Contact Hours
All subjects listed below involve at least one contact hour per week for both sessions, or its equivalent.

Method of Assessment
All 900-level subjects will be assessed by final examinations, or final examinations and limited assignments.

MATH901 Perturbation Methods
Assessment: examination 75%, assignments 25%.
Dimensional analysis, order symbols, asymptotics, algebraic equations, differential equations, methods of renormalization, multiple scales, averaging, variation of parameters, strained parameters and matched asymptotic expansions.
Co-ordinator: Dr A Worthy.

MATH902 Solution of Differential Equations by One - Parameter Groups
Assessment: examination 75%, assignments 25%.
Co-ordinator: Associate Professor J Hill.

MATH903 Mean Periodic Functions
Assessment: examination 75%, assignments 25%.
An introduction to L. Schwartz’s theory of mean periodic functions using the transform of J P Kahane. Applications to differential equations.
Co-ordinator: Dr P Laird.
MATH911 Coastal Dynamics
Assessment: examination 75%, assignments 25%.
Generation and propagation of continental shelf waves of high and low frequency in homogeneous and non-homogeneous oceans, response of the ocean over a shelf to atmospheric disturbances, detection and measurement of shelf waves, dissipative influences, standing edge waves and their relation to beach geomorphology, modelling of physical marine systems.
Co-ordinator: Associate Professor D Clarke.

MATH912 Mathematics of Microwave Heating
Assessment: examination 75%, assignments 25%.
Electrostatics, Gauss' law, magnetic fields, induction, Maxwell's equations, the damped wave equation, the forced heat equation, solutions of microwave heating for constant conductivity, temperature dependent conductivity, hotspots.
Co-ordinator: Dr T Marchant.

MATH913 Fluid Mechanics and Wave Theory
Assessment: examination 75%, assignments 25%.
Hyperbolic partial differential equations, conservation laws, shallow water equations, dispersive waves, soliton theory, gas dynamics, shock waves, flow past bodies, conformal mapping, aerofoil theory.
Co-ordinator: Dr T Marchant.

MATH914 Analytical Dynamics
Assessment: examination 75%, assignments 25%.
Lagrangian and Hamiltonian formulations, symmetry and conservation laws. Regular and chaotic motion. Strange attractors.
Co-ordinator: Professor P Broadbridge.

MATH915 Applied Nonlinear Partial Differential Equations
Assessment: examination 75%, assignments 25%.
Co-ordinator: Professor P Broadbridge.

MATH916 Heat Conduction and Moving Boundary Problems
Assessment: examination 75%, assignments 25%.
Solutions of the heat equation, semi-infinite media, solution by Fourier series, solutions by heat-balance, classical moving boundary problems, large Stefan number expansions, integral formulation, bounds, integral equations, polynomial approximations, boundary fixing series solutions.
Co-ordinator: Associate Professor J Hill.

MATH917 Advanced Numerical Analysis
Assessment: examination 75%, assignments 25%.
Co-ordinator: To be advised.

MATH918 Computational Fluid Mechanics
Assessment: examination 75%, assignments 25%.
Finite-difference and finite element methods applied to incompressible inviscid flow problems and incompressible viscous flow problems. Introduction to Boundary-element technique and its application to potential flows. The relationship between these numerical approaches will also be discussed.
Co-ordinator: Dr S Zhu.

MATH921 Advanced Functional Analysis
Assessment: examination 75%, assignments 25%.
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.
Co-ordinator: Associate Professor R Nillsen.

MATH922 Harmonic Analysis
Assessment: examination 75%, assignments 25%.
The subject 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.
Co-ordinator: Dr P Laird.

MATH924 Distributions
Assessment: examination 75%, assignments 25%.
Mikusinski's theory of convolution quotients, and an introduction to L. Schwartz's theory of distributions. Properties of the space of continuous functions of a single real variable (equipped with a suitable topology) and its dual space.
Co-ordinator: Dr F Prokop.

MATH925 Topics in Algebra
Assessment: examination 75%, assignments 25%.
Partially ordered sets, lattices, modular lattices, Boolean Algebras and Boolean rings, orthomodular lattices.
Co-ordinator: Dr F Prokop.

MATH926 Logic and Set Theory
Assessment: examination 75%, assignments 25%.
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.
Co-ordinator: Associate Professor M Bunder.
MATH927 Combinatory Logic
Assessment: examination 75%, assignments 25%.
Introduction to Pure and Illlature combinatory logic, relation to lambda-conversion, functionality, application to propositional and predicate calculus.
Co-ordinator: Associate Professor M Bunder.

MATH928 Advanced Measure Theory
Assessment: examination 75%, assignments 25%.
Construction of outer, measures, Hausdorff measures, signed measures, Radon-Nikodym theorem, differentiation of measures.
Co-ordinator: Dr G Williams.

MATH929 Sobolev Spaces and Applications
Assessment: examination 75%, assignments 25%.
Definition and properties of Sobolev spaces, mollifiers, applications to partial differential equations and the calculus of variations.
Co-ordinator: Dr G Williams.

MATH971 Advanced Topics in Applied Mathematics A
Assessment: examination 75%, assignments 25%.
Topics will be selected from the areas of interest of staff members or visiting staff members of the department.
Co-ordinator: Head of Department.

MATH972 Advanced Topics in Applied Mathematics B
Assessment: examination 75%, assignments 25%.
Topics will be selected from the areas of interest of staff members or visiting staff members of the department.
Co-ordinator: Head of Department.

MATH973 Advanced Topics in Pure Mathematics A
Assessment: examination 75%, assignments 25%.
Topics will be selected from the areas of interest of staff members or visiting staff members of the department. These may include topics in Analysis, Algebra, Logic or Number Theory.
Co-ordinator: Head of Department.

MATH974 Advanced Topics in Pure Mathematics B
Assessment: examination 75%, assignments 25%.
Topics will be selected from the areas of interest of staff members or visiting staff members of the department. These may include topics in Analysis, Algebra, Logic or Number Theory.
Co-ordinator: Head of Department.

MATH981 Preliminary Topics in Mathematics B
A selection of topics will be available from time to time to serve as preliminary material in the Master of Mathematics.
Co-ordinator: Head of Department.

MATH991 Project
12 credit points

MATH992 Minor Thesis
24 credit points

MATH993 Thesis
48 credit points
FACULTY OF LAW
FACULTY OF LAW

PRINCIPAL OFFICERS

Dean: Professor John Goldring
Associate Dean: Professor David Farrier
Sub Dean: Associate Professor Ken Hale
Executive Officer: Ms Wendy Raikes

RESEARCH COURSES AVAILABLE

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

POSTGRADUATE PROGRAMS

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

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Court Policy and Administration</td>
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<tr>
<td>Law</td>
<td>371</td>
</tr>
<tr>
<td>Natural Resources Law</td>
<td>370</td>
</tr>
</tbody>
</table>
DEPARTMENT OF LAW

FULL TIME STAFF

Dean
Professor John Goldring, BA LLB Syd, LLM Col, Barrister NSW, Barrister and Solicitor ACT and PNG

Associate Dean
Professor M David Farrier, LLB Lond, LLM Col, DipCrim Camb, Barrister NSW

Sub-Dean
Patricia J Blazey, SRN Lon, BA LLB Macq, LLM Syd, Solicitor NSW

Professors
Helen E C Gamble, LLB LLM ANU, Barrister and Solicitor ACT, Barrister NSW
B Martin Tsamenyi, LLB Ghana, MIntL PhD ANU

Associate Professors
Kenneth W Hale, BA LLB Qld, LLM Syd, Barrister NSW and High Court
Colin J H Thomson, BA LLM Syd, Solicitor NSW, Barrister and Solicitor ACT

Honorary Professorial Fellows
G Leroy Certoma, BA LLB Syd, Dott in Giur Firenze, Solicitor NSW
Lindsay J Curtis, BSc LLB Melb, Barrister and Solicitor ACT and PNG

Senior Lecturers
Charles Y C Chew, MA Syd, DipEd NE, BLegS Macq, Barrister and Solicitor VIC, Solicitor NSW
Robin P Handley, LLB Warw, LLM ANU, Solicitor NSW, England and Wales, Barrister and Solicitor ACT and High Court

Lecturers
Alan Berman, BA JD Duke, LLM VUW, Attorney Calif
Margaret Bond, BSW LLB UNSW, Solicitor NSW
Judith M Bonner, BSocWk BA Qld, MA Syd, LLB UNSW, Solicitor NSW, Barrister and Solicitor NT and High Court
Damien Considine, BA LLB UNSW, LLM Syd, Solicitor and Attorney NSW and High Court
Andrew D Frazer, BA LLB Syd, PhD ANU
D Scott Grattan, BA LLB Macq, Solicitor NSW
Jane G Innes, BEC LLM Syd, Solicitor NSW, Barrister and Solicitor ACT and Vic
Andrew H H Kelly, BTP LLB, UNSW, Grad Dip Leg Prac UTS, Solicitor NSW
Luke McNamara, BA LLB UNSW, LLM Manit
Sandra Mercado, BA LLM Syd, Barrister NSW
Penelope Pether, BA LLB Syd, MLitt NE, Solicitor NSW
Natalie P Stoianoff, BSc LLB MAppSc UNSW, Solicitor NSW

Senior Fellow
Richard Mohr, BA PhD UNSW

Teaching Fellow
Phyllis Lee (Mei Sean Wong), LLB S'pore, Advocate and Solicitor S'pore

Honorary Fellows
Andrew Haesler, BA LLB UNSW, Barrister and Solicitor NSW and NT
Danny Lagopoulos, BLegS Macq, BCom MStudAcc, Solicitor NSW
William McKinnon Macquarie, Solicitor NSW

Executive Officer
Wendy Raikes, BA MMgt, MAITEA

VISITING COMMITTEE

The Honourable Justice Jane Mathews, Supreme Court of NSW (Chair)
Ms Patricia Bergin, Barrister, Sydney
Professor Leroy Certoma, Principal Member, Refugee Review Tribunal
The Honourable Justice B J K Cohen, Supreme Court of NSW
Ms Jane Diplock, Group Relations Manager, Westpac Banking Corporation
Ms Lisa Gazi, Managing Director, MAHLAB, Sydney
Mr Laurie Glanfield, Director-General, Attorney General's Department of NSW
Dr John Griffiths, Blake Dawson Waldron, Sydney
The Honourable Dr Robert M Hope QC, Chancellor, University of Wollongong (ex-officio)
Mr Greg James, QC, Sydney
His Honour Judge William H Knight, District Court of NSW
Mr Jonathan Lee, Managing Director, The INK Group Limited
Mr William M Macquarie, W M Macquarie & Associates, Wollongong
Mrs Joan McClintock, AO, Member, Purchasing Appeals Tribunal
Ms Nancy Milne, Phillips Fox, Sydney
The Honourable Michael Moore, Vice President, Industrial Relations Commission
Mr John Peedom, Peedom & Ward, Wollongong
Ms Hilary Penfold, First Parliamentary Counsel
Mr Ken Pritchett, Ken Pritchett Associates, Sydney
Mr Mark Richardson, Deputy Chief Executive Officer, Law Society of NSW
The Honourable Ms Helen Sham-Ho, MLC
Mr Terry Sheahan, Cowley Hearne, North Sydney
Mr Richard St John, Secretary and General Counsel, BHP
COURSES OFFERED

The Faculty offers the following postgraduate diplomas and degrees:

Graduate Diploma in Natural Resources Law
Master of Laws (Natural Resources Law) by Coursework
Master of Arts (Natural Resources Law) by Coursework
Graduate Diploma in Law (Court Policy and Administration)
Graduate Diploma in Law
Honours Master of Laws by Research
Honours Master of Arts by Research
Honours Master of Commerce by Research
Honours Master of Arts by Coursework
Honours Master of Commerce by Coursework
Doctor of Philosophy

CURRENT RESEARCH AREAS

Supervision in research in the following areas is likely to be available to candidates undertaking research degrees:

SCHEDULE OF PROGRAMS

POSTGRADUATE SUBJECTS

Graduate Diploma in Natural Resources Law

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLB910</td>
<td>Introduction to Law</td>
<td>8</td>
</tr>
<tr>
<td>LLB911</td>
<td>Introduction to Natural Resources Law</td>
<td>8</td>
</tr>
<tr>
<td>LLB913</td>
<td>Resources Decision Making</td>
<td>8</td>
</tr>
<tr>
<td>STS929*</td>
<td>Studies in Resources and Environmental Policy</td>
<td>8</td>
</tr>
<tr>
<td>Options - at least 2 chosen from those offered which may include:</td>
<td></td>
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</tr>
<tr>
<td>LLB914</td>
<td>Mining Law</td>
<td>8</td>
</tr>
<tr>
<td>LLB915</td>
<td>Commercial Aspects of Resources Development</td>
<td>8</td>
</tr>
<tr>
<td>LLB916</td>
<td>Energy Law I</td>
<td>8</td>
</tr>
<tr>
<td>LLB917</td>
<td>Energy Law II</td>
<td>8</td>
</tr>
<tr>
<td>LLB918</td>
<td>Law of Land &amp; Nature Conservation</td>
<td>8</td>
</tr>
<tr>
<td>LLB919</td>
<td>Water Resources Law</td>
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</tbody>
</table>

*STS929 is offered by the Department of Science and Technology Studies.

Master of Arts (Natural Resources Law)* and Master of Laws (Natural Resources Law)*

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
<tbody>
<tr>
<td>LLB930</td>
<td>Research Project in Natural Resources Law</td>
<td>24</td>
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</tbody>
</table>

*Candidates must complete the requirements for the Graduate Diploma in Natural Resources Law as well as the above subject.
**Graduate Diploma in Law (Court Policy and Administration)**

<table>
<thead>
<tr>
<th>Number</th>
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<tbody>
<tr>
<td>LAW801</td>
<td>Court Management I - Principles of Judicial Administration</td>
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<tr>
<td>LAW802</td>
<td>Court Management II - Processes of Dispute Resolution</td>
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</tr>
<tr>
<td>LAW803</td>
<td>Court Management III - Case Management</td>
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<tr>
<td>LAW804</td>
<td>Court Management IV - Current Issues in Judicial Administration</td>
<td>12</td>
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</tbody>
</table>

Candidates will also complete BUSS903; MGMT911; ACCY850 - refer to the Faculty of Commerce section.

**Graduate Diploma in Law**

<table>
<thead>
<tr>
<th>Number</th>
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<th>Credit Points</th>
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<tbody>
<tr>
<td>LAW810</td>
<td>Law in Society</td>
<td>8</td>
</tr>
<tr>
<td>LAW811</td>
<td>Law of Contracts</td>
<td>8</td>
</tr>
</tbody>
</table>

Candidates will also complete subjects to a value of at least 32 credit points selected from the Legal Studies Schedule set out in the Undergraduate Calendar.

**Honours Master of Arts by Coursework and Honours Master of Commerce by Coursework**

<table>
<thead>
<tr>
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<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW902</td>
<td>Research Project A</td>
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<tr>
<td>LAW903</td>
<td>Research Project B</td>
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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>
<td>8</td>
</tr>
<tr>
<td>LAW951</td>
<td>Taxation Policy and Practice</td>
<td>6</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>
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<tr>
<td>LAW964</td>
<td>Studies in Business Law</td>
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<tr>
<td>LAW965</td>
<td>Studies in Administrative Law</td>
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<td>LAW966</td>
<td>Studies in Industrial Law</td>
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<tr>
<td>LAW967</td>
<td>Studies in Trade Practices and Consumer Law</td>
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<tr>
<td>LAW968</td>
<td>Issues in the Philosophy of Law</td>
<td>6</td>
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<tr>
<td>LAW987</td>
<td>Special Topic in Law - A</td>
<td>6</td>
</tr>
<tr>
<td>LAW988</td>
<td>Special Topic in Law - B</td>
<td>6</td>
</tr>
<tr>
<td>LAW993</td>
<td>Research Essay</td>
<td>12</td>
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</tbody>
</table>

**Graduate Diploma in Commerce (Management) and Master of Business Administration**

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAW960</td>
<td>Legal Studies for Professionals</td>
<td>6</td>
</tr>
<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 REQUIREMENTSS

Session of Offer
Subjects for the Graduate Diplomas and Masters courses will be offered, subject to availability of staff, in a mode and session to be determined by the Dean. There may be special requirements in the courses leading to the Graduate Diploma in Law (Court Policy and Administration) and the Graduate Diploma in Natural Resources Law. Please consult the relevant sections below.

Seminars
Generally a three hour weekly seminar is held for each 800 or 900 level subject. Subjects for the Graduate Diploma in Law (Court Policy and Administration) and the Graduate Diploma in Natural Resources Law will be offered on a mixed mode basis with an intensive residential face to face teaching component. Students enrolled in the Graduate Diploma in Law may enrol in subjects at 100-300 level, which may require different patterns of attendance. These subjects are listed in the Undergraduate Calendar.

Assessment
The assessment for 800 or 900 level subjects may be based on seminar contribution, essays and examinations. The subject program for each subject will specify the seminar times and the method of assessment.

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

GRADUATE DIPLOMA IN NATURAL RESOURCES LAW

This course (available on both a full-time and part-time basis) is intended both for those who have no prior legal education but want a focused introduction to law through a study of natural resources law, and for those with a prior legal education who wish to specialise in the field of natural resources law. The course is made up of four compulsory subjects (Introduction to Law; Introduction to Natural Resources Law; Resources Decision-Making; and Studies in Resources and Environmental Policy) and two subjects chosen from a range of options (offered on the basis of demand and teaching resources). One of the compulsory subjects (STS929 Studies in Resources and Environmental Policy) is taught by the Department of Science and Technology Studies. Those who have studied law previously may be exempted from some compulsory subjects and allowed to study additional optional subjects.

Subjects will be offered on a mixed mode basis, combining intensive residential schools with directed reading and writing.

Assessment may be based on assignments, participation in class discussions, examinations and research essays.

MASTER OF LAWS (NATURAL RESOURCES LAW)

MASTER OF ARTS IN NATURAL RESOURCES LAW

These courses build on the course for the Graduate Diploma in Natural Resources Law (see above). The course leading to the degree of Master of Laws (Natural Resources Law) is open to candidates who hold a degree in law. Other candidates are eligible for the course leading to the degree of Master of Arts (Natural Resources Law). The courses allow further specialisation through the completion of a supervised research paper. To qualify for the degree, a candidate must complete the requirements for the Graduate Diploma in Natural Resources Law and a research paper valued at 24 credit points.

GRADUATE DIPLOMA IN LAW

(COURT POLICY AND ADMINISTRATION)

The course is designed for those working in court management, whether in a policy, administrative or judicial capacity. It is a part time course extending over 2 years and requiring 4 weeks residential attendance on the Wollongong Campus. There are 11 subjects in the course from four disciplines - law, accountancy, business systems and management. The 7 law subjects, including 3 skills subjects, are described below. Refer to the relevant section of the Faculty of Commerce section for information on ACCY850 Public Sector Financial Management and Controls, BUSS908 Business Data Processing Systems and MGMT911 Organisational Behaviour.

Seminars
Each session begins with a residential workshop of 4-5 days during which lectures, workshops and discussions are provided on the subjects to be completed that session. The subjects are completed off campus through reading and assignments.

Assessment
Assessment is based on workshop contribution, essays and other exercises.

Textbooks
Most of the required reading is prepared by the Faculty and made available to the students during the residential at the beginning of each session.
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 Faculty. These subjects are listed in the Legal Studies Schedule in the Undergraduate Calendar. A candidate must complete subjects to a value of at least 48 credit points including LAW810 and LAW811.

HONOURS MASTER OF LAWS BY RESEARCH

HONOURS MASTER OF ARTS BY RESEARCH

HONOURS MASTER OF COMMERCE BY RESEARCH

DOCTOR OF PHILOSOPHY

These courses are open to students with a degree with Honours Class II or equivalent (in the case of the Honours Master of Laws by Research, the first degree must be a degree in law). Students who do not possess such a degree may be permitted to demonstrate capacity for research by first completing LAW999 Special Research Paper in Law. The requirement of the degree is the satisfactory completion of a thesis to the value of 48 credit points (LAW998 Major Thesis) in accordance with Attachment C to the Course Rules.

HONOURS MASTER OF ARTS BY COURSEWORK

HONOURS MASTER OF COMMERCE BY COURSEWORK

These courses are open to persons who hold a degree including some studies in law or legal studies. The course requirements are: (a) where the candidate has completed a degree with Honours Class II, completion of law subjects at 900 level (other than LAW960, LAW 961 and LAW 969) to the value of 48 credit points; or (b) completion of law subjects at 900 level to the value of 96 credit points.

SUBJECT DESCRIPTIONS

LAW801 Court Management I - Principles of Judicial Administration

Autumn session; 6 credit points.
Fundamental principles of judicial administration - the role of courts and their relationship with the legislative and executive arms of government. The subject will cover the following matters: the historical development of courts in England and Australia; the nature of the judicial function of government; the distinctions between courts and tribunals; the relationships between the Parliament, the Executive and the Judiciary; accountability for the judicial system in responsible government. Taught in lectures and workshops during residential in February and through supervised research and analytical reading throughout Autumn session.

LAW802 Court Management II - Processes of Dispute Resolution

Spring session; 6 credit points.
Concepts of adjudication, arbitration, conciliation and mediation as dispute resolution procedures; the nature of the litigation process; relationship of arbitration, conciliation and mediation to litigation; involvement of courts in procedures other than litigation; evaluation of effectiveness of dispute resolution procedures. Taught during residential in July and through home exercises and assignments between July-November.

LAW803 Court Management III - Case Management

Autumn session; 6 credit points.
Taught during residential in February and through home exercises and assignments between March-June. Examines principles and practical applications of case flow management in reducing delay and providing efficient management of courts. Considers methods of undertaking and evaluating case flow management programs.

LAW804 Court Management IV - Current Issues in Judicial Administration

Double (A) session; 12 credit points.
Research project commenced in Skills II (see below) undertaken throughout the year (March-November) to produce a report of 10,000 words on original research into aspects of judicial administration in a court system with which the student is familiar. Topics might include: financing the courts; current relations between the executive and the judiciary in court management; the appointment, removal and conditions of service of judicial officers; the managerialist approach to court and tribunal administration; the effectiveness of case management systems; setting performance standards in a court system. Project supervised by a member of the Faculty or someone selected by the Faculty as suitably qualified to direct the research. The project is to use the techniques learnt in BUSS903.

Skills I Research Techniques and Critical Analysis

Autumn session.
Preparation for LAW 801, LAW 802 and LAW 803. Reading and analysis exercises to assist
understanding of legal materials used in other law subjects.

Skills II Research Methods
Spring and Autumn sessions.
Introduction to social research and evaluation techniques as preparation and support for the LAW804 project.

LAW810 Law in Society
Autumn session; 8 credit points.
Pre-requisite: none.
Remark: Not to count with LAW100 or LAW160 or LLB100.
Assessment: essays, class participation, assignments, examination.
An overall perspective on the Australian legal system and its role in the Australian Social order; and introduction to the sources of authority of legal rules, the nature of legal institutions and practices, legal materials, reasoning and terminology. Aspects of substantive law will be used to illustrate general principles.

LAW811 Law of Contracts
Spring session; 8 credit points.
Pre-requisite: LAW810 or LAW 160 or LAW100.
Remark: Not to count with LAW210 or LAW161 or LLB210.
Assessment: essays, class participation, assignments, examination.
The development of the modern law of contracts illustrating how scholars and lawyers have derived general principles of law from decisions about specific relationships; express and implied contracts; formation of contracts; the doctrine of privity of contract and statutory modifications; contractual terms and conditions; performance and breach; capacity to make contracts.

LAW902 Research Project A
Autumn, Spring or Summer session; 6 credit points.
Pre-requisite: LAW100 or LAW160 or LAW810 and LAW210 or LAW161 or LAW811 if specialising in Commercial Law.
Assessment: 8,000 word dissertation.
The student shall propose a research project for approval by the Dean.

LAW903 Research Project B
Autumn, Spring or Double (A) session; 12 credit points.
Pre-requisite: LAW100 or LAW160 or LAW810 and LAW210 or LAW161 or LAW811 if specialising in Commercial Law.
Assessment: 12,000 word dissertation.
The student shall propose a research project for approval by the Dean.

LAW904 Research Project C
Autumn or Spring session; 8 credit points.
Pre-requisite: LAW 100 or LAW160 or LAW810 and LAW210 or LAW161 or LAW811 if specialising in Commercial Law.
Assessment: 10,000 word dissertation.
The student shall propose a research project for approval by the Dean.

LAW905 Research Project D
Autumn, Spring or Double (A) session; 8 credit points.
Pre-requisite: LAW100 or LAW160 or LAW810 and LAW210 or LAW161 or LAW811 if specialising in Commercial Law.
Assessment: 10,000 word dissertation.
The student shall propose a research project for approval by the Dean.

LAW950 Taxation Policy and Practice
Session: To be advised; 6 credit points.
Remark: Not to count with LA W352.
An examination of the revenue laws including income tax, sales tax, property tax, stamp duty and payroll tax.

LAW953 Studies in Taxation
Session: To be advised; 6 credit points.
The statutory and common law foundations of the Federal Income tax system. Common law concepts of income and capital and statutory modifications and interpretations of these concepts. Legal and accounting approaches to taxable income. Tax and estate planning concepts. Tax avoidance and evasion. Tax incidence and equity. An examination of tax policies, provisions and problems relating to special entities - and special provision areas, such as primary producers, mining and petroleum industries, non-residence, foreign-controlled companies and royalty provisions. International aspects of Australian income tax including double tax agreements.

LAW960 Legal Studies for Professionals
Spring session; 6 credit points.
This subject is offered in a series of modules. The first module, lasting for approximately 8 weeks, and completed by all students, introduces the 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. Other modules have been designed for students enrolled in various postgraduate courses. The Management module 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. The Health Sciences module includes an introduction to the law relating to public health and the environment, occupational health and safety and professional liability. Other modules may be added to cater for the needs of particular courses.
LAW961 Selected Legal Topics in Management
Session: To be advised; 6 credit points.
Selected legal topics in management. The selection will be made by the Dean, taking into account the expertise of academic staff, including visiting staff and the interest of students.

LAW963 Jurisprudence
Session: To be advised; 6 credit points.
A study of theories on the nature and purpose of law.

LAW964 Studies in Business Law
Session: To be advised; 6 credit points.
A detailed examination of the law relating to selected aspects of business organisation, including the law relating to the nature and formation of partnership, mergers and takeovers, insider trading and securities.

LAW965 Studies in Administrative Law
Session: To be advised; 6 credit points.
A detailed examination of the legal problems raised for individual citizens in the exercise of Governmental or other public powers. Particular topics include delegated legislation, ministerial responsibility, statutory corporations and administrative tribunals. Crown proceedings; and the statutory and common law procedures which may be invoked to counter allegations of maladministration or illegality including the Administrative Appeals Tribunals, judicial review and ombudsmen.

LAW966 Studies in Industrial Law
Session: To be advised; 6 credit points.
A detailed examination of the law (including some comparative law) relating to selected aspects of employment relationships including industrial accidents, job security, registration and control of trade unions, picketing, the right to work and closed shop agreements, and conciliation and arbitration and collective bargaining.

LAW967 Studies in Trade Practices and Consumer Law
Session: To be advised; 6 credit points.
A detailed examination of restrictive practices and the development of the law to counter them including the role of the Commonwealth and New South Wales agencies which administer the relevant Acts.

LAW968 Issues in the Philosophy of Law
Spring session; 6 credit points.
Pre-requisite: LAW160 or LAW100.
A critical examination of a selection of the following topics: (i) The nature and purpose of law; (ii) The logic of legal reasoning; law and textual analysis; legal causation, probability, evidence and standards of proof; (iii) The defeasibility of practical reason; causal explanations and reasons explanations; action, intention and will; agency, control and responsibility; the nature of justification and excuse; (iv) The justification of punishment; the moral limits of the criminal law; conscience and the law; morality and defences to murder; contemporary moral issues of legal interest (eg informed consent, reproduction technology, euthanasia); concepts of property. Issues selected will be discussed in the context of particular areas of law. The emphasis will be on philosophical issues in Criminal Law.

LAW969 Occupational Health and Safety Law
Session: To be advised; 6 credit points.
The subject deals with the interpretation and application of the NSW O.H.S. Act.

LAW987 Special Topic in Law - A
Session: To be advised; 6 credit points.
A special topic to be selected from any area of commercial law. The selection will be made by the Sub-Dean taking into account the expertise of academic staff, including visiting staff, and the interest of students.

LAW993 Research Essay
Session: To be advised; 12 credit points.
Information may be obtained from the Sub-Dean regarding the research essay.

LAW998 Major Thesis
Double session (A); 48 credit points (contact as required).
Pre-requisite: Permission of the Dean.
Assessment: thesis.
Content as arranged.

LAW999 Special Research Paper in Law
Double session (A); 48 credit points (contact as required).
Pre-requisite: Permission of the Dean.
Assessment: research essay.
Content as arranged.

LLB910 Introduction to Law
Autumn session; 8 credit points.
This subject is offered on a mixed mode basis with a one wk residential face to face teaching component. Assessment: a selection from assignments, class participation, examination and research essay.
Introduction to the legal system; Commonwealth/State Division of powers; introduction to the law of contract, tort, criminal and administrative law; the distinction between contractual and proprietary interests.
Textbooks: Specially prepared course materials.
LLB911 Introduction to Natural Resources Law

Autumn session; 8 credit points.

This subject is offered on a mixed mode basis with a one wk residential face to face teaching component.

Co-requisite: LLB910.

Assessment: a selection from assignments, class participation, examination and research essay.

Ownership of natural resources; the implications of the Commonwealth/State division of legislative powers for natural resources regulation; the historical development and structure of natural resources law; overlaps between regulatory authorities; forward planning and development control; environmental impact assessment law; the law relating to pollution and waste disposal.

Textbooks:
Specially prepared course materials.

LLB913 Resources Decision-Making

Spring session or Double (A) session; 8 credit points.

This subject is offered on a mixed mode basis with a one wk residential face to face teaching component.

Co-requisite: LLB910 and LLB911.

Assessment: a selection from assignments, class participation, examination and research essay.

Bureaucratic decision making processes; cost-benefit analysis; risk assessment; environmental impact assessment; public participation in decision-making processes; the role of the courts and adversarial methods of dispute resolution; public inquiries and other alternative forms of dispute resolution; scientific and legal forms of proof.

Textbooks:
Specially prepared course materials.

LLB914 Mining Law

Spring session according to demand; 8 credit points.

This subject is offered on a mixed mode basis with a one wk residential face to face teaching component.

Pre-requisite: LLB910 and LLB911.

Assessment: a selection from assignments, class participation, examination and research essay.

Ownership of minerals; the distinction between mining and extractive industry; exploration and mining titles under the mining and coal mining legislation; the relationship between mining legislation and environmental planning and assessment legislation; industrial health and safety law and the mining industry.

Textbooks:
Specially prepared course materials.

LLB915 Commercial Aspects of Resources Development

Spring session according to demand; 8 credit points.

This subject is offered on a mixed mode basis with a one wk residential face to face teaching component.

Pre-requisite: LLB910 and LLB911.

Assessment: a selection from assignments, class participation, examination and research essay.

Legal structures for resources projects (joint ventures, etc.); financing resources projects (including investment regulation; taxation and stamp duty); legal aspects of resource marketing.

Textbooks:
Specially prepared course materials.

LLB916 Energy Law I

Spring session according to demand; 8 credit points.

This subject is offered on a mixed mode basis with a one wk residential face to face teaching component.

Pre-requisite: LLB910 and LLB911.

Assessment: a selection from assignments, class participation, examination and research essay.

The law relating to oil and gas exploration, production and transportation, including onshore and offshore exploration and production titles, royalties, pipelines and oil pollution. The law relating to the mining and use of uranium.

Textbooks:
Specially prepared course materials.

LLB917 Energy Law II

Spring session according to demand; 8 credit points.

This subject is offered on a mixed mode basis with a one wk residential face to face teaching component.

Pre-requisite: LLB910 and LLB911.

Assessment: a selection from assignments, class participation, examination and research essay.

The law relating to electricity generation and transmission, including monopolisation and privatisation, the relationship between transmission and supply authorities, pollution control, pricing arrangements and cogeneration. The law relating to renewable energy resources, including rights of access to wind and sun.

Textbooks:
Specially prepared course materials.

LLB918 Law of Land and Nature Conservation

Spring session according to demand; 8 credit points.

This subject is offered on a mixed mode basis with a one wk residential face to face teaching component.

Pre-requisite: LLB910 and LLB911.

Assessment: a selection from assignments, class participation, examination and research essay.

The law relating to the use and conservation of native vegetation, including special conservation areas, forestry in State forests and on privately owned land, agricultural land clearing, the law relating to the protection and exploitation of native fauna, including habitat conservation, regulation of commercial exploitation and endangered species legislation. The law relating to land degradation.

Textbooks:
Specially prepared course materials.
LLB919 Water Resources Law
Spring session according to demand; 8 credit points. This subject is offered on a mixed mode basis with a one wk residential face to face teaching component. Pre-requisite: LLB910 and LLB911. Assessment: a selection from assignments, class participation, examination and research essay. The law relating to the allocation of inland waters, including the licensing system and water rights, irrigation, domestic supply, regulation of activities on flood plains and extractive industries in watercourses, catchment management and the control of diffuse pollution. The law relating to marine living resources, including international aspects, the Commonwealth/State division of powers, marine reserves and the regulation of commercial exploitation. Textbooks: Specially prepared course materials.

LLB930 Research Project in Natural Resources Law
Summer, Autumn or Spring session; 24 credit points (contact as required). Pre-requisite: 24 credit points at 900 level. Assessment: research essay. Content as arranged.
FACULTY OF SCIENCE
FACULTY OF SCIENCE

PRINCIPAL OFFICERS

Dean: Professor Murray Wilson  
Sub Dean: Associate Professor Bill Zealey  
Faculty Officer: Ms Pat Macquarie

MEMBERSHIP

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

- Biological Sciences
- Chemistry
- Geography
- Geology
- Physics
- Environmental Science

RESEARCH COURSES AVAILABLE

The Faculty offers Honours Master of Science and Doctor of Philosophy degrees by research. In addition, the Honours Master of Arts is offered in the Department of Geography.

POSTGRADUATE PROGRAMS

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

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FULL TIME STAFF

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Professor Murray G A Wilson, MA NZ, MA Wis, PhD Melb

Sub-Dean
Associate Professor William J Zealey, BSc PhD Edin, FRAS, IAU

Faculty Officer
Patricia C Macquarie, BA

Resources Manager
Donna M Ashelford, BSc

Professional Officers
Frances A Martin, BSc
John T Reay, BE

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Mark Baker, BSc PhD Macq

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Professional Officer
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John W Pemberton, BSc PhD

Honorary Professor
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Honorary Principal Fellow
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Professional Officer
Aivars Depers, BSc Adel

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A David Martin, BSc PhD Wales, MAIP

Jagdish N Mathur, MSc Alig, DrRerNat Kiel, AAIIP, IMEPS, MDPG
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Paul E J Nulsen, BSc WA, PhD Camb
Phillip E Simmonds, BSc WA, DPhil Oxf, MAIP

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Chao Zhang, BA BS East China Normal University, MA MPhil PhD CUNY

Research Fellow
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Teaching Fellow
David S Ryan, BSc, GAIP, AAPT

Professional Officer
Peter Ihnat, BE BSc

VISITING COMMITTEE

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Professor Neil S Willetts, PhD, FTS, Director of Research & Development, Biotech Australia (Visiting Professor in Biological Sciences, Sydney University)
Dr Nicholas M Gough, BSc (Hons) Adel, PhD Melb, Research Director, AMRAD Corporation Limited
Mr John Wrigley, BSc(For) ANU, DipEnvStud Macq, Catchment Policy Co-ordinator, Water Board
Dr Peter Laut, BA(Hons) UNE, PhD ANU, Retired Senior Principal Scientist, CSIRO Division of Water Resources, Institute of Natural Resources and Environment
Dr Lynton Jaques, BSc(Hons) PhD, Chief, Minerals and Land Use Program, Australian Geological Survey Organisation
Dr Guy K White, BSc(Hons) MSc Syd, DPhil Oxf, FAAA, Honorary Fellow, CSIRO Division of Applied Physics
Dr Robert M Hobbs, BEng MEngSc Melb, PhD Manc, FIE(Aust), FASM, General Manager, Research and Technology, BHP Sheet & Coil Products Division
Mr Robert F Ryan, MSc, FRACI, FAIFST, Development Manager, Speciality Gases, CIG Ltd
The following postgraduate degrees and diplomas are available:

1. Doctor of Philosophy
2. Honours Master of Science by Research
3. Honours Master of Science in Biotechnology
4. Master of Science (Biotechnology)
5. Master of Science (Science Administration)
6. Graduate Diploma in Science (Biological Sciences)

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

**Animal physiology**
- Environmental physiology of higher vertebrates
- Metabolic physiology and thermoregulation
- Thyroid and adrenal function in higher vertebrates
- Ecological energetics
- Evolution of endothermy
- Physiological development in birds and marsupials
- Dietary fats and their effects on body function

**Plant biochemistry**
- Photosynthesis: studies on the carbon fixing enzyme rubisco, and its activation
- Turgor-volume regulation: regulation of glycerol synthesis by osmotic pressure in the salinity-resistant alga Dunaliella
- DNA amplification and analysis: application of molecular biology techniques to species identification in algae
- Bioluminescence: applications to enzyme mechanisms and analysis

**Cell and cancer biology**
- Tissue injury during inflammation
- Cellular responses to oxidative stress
- Monocyte migration into inflammatory foci
- Cancer invasion and metastasis
- Cell-surface and receptor-bound proteases
- Biological roles of plasminogen activator inhibitors

**Immunobiology and vaccine development**
- Mechanism of somatic hypermutation in antibody variable region genes
- Mechanisms of rapid 'directional' molecular evolution
- Mechanism of acquired paternal transmission in mice
- Mechanisms of adjuvant action
- Development of acellular and live oral recombinant vaccines against the whooping cough bacterium, Bordetella pertussis
- Molecular and genetic analysis of Bordetella bronchiseptica
- Development of recombinant oral and intranasal vaccine delivery systems for the stimulation of immunity against the porcine pathogens Erysipelothrix rhusiopathiae and Mycoplasma Hyopneumoniae

**Ecology and population genetics**
- Mating systems and population genetics of native plants
- Pollination systems of native plants
- Responses of plant and animal populations to bushfires
- Impact of herbivores on plant communities
- Plant succession and recolonization of disturbed land
- Seed and fruit dispersal by animals
- Avian ecology
- Invertebrate biodiversity
- Conservation biology

**Marine ecology and genetics**
- Evolutionary consequences of varying patterns of reproduction and dispersal, self-recognition and aggressive interactions in marine invertebrates
- Conservation of marine ecosystems
- Chemical ecology: the relative importance of natural products as mediators of interactions between organisms, particularly compounds that play a role in preventing fouling of marine invertebrates.
- Larval ecology: pelagic and early benthic stages as determinants of subsequent patterns of invertebrate distribution and abundance
### SCHEDULE OF PROGRAMS

#### POSTGRADUATE PROGRAMS IN BIOTECHNOLOGY

leading to the Graduate Diploma in Science, the Master of Science and the Honours Masters of Science.

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<td>BIOL320</td>
<td>Molecular Cell Biology</td>
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<tr>
<td>BIOL321</td>
<td>Immunology and Molecular Biology</td>
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<tr>
<td>CHEM320</td>
<td>Biological Chemistry</td>
<td>8</td>
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<tr>
<td>MATH252</td>
<td>Statistics for the Natural Sciences</td>
<td>6</td>
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<tr>
<td>BIOL332</td>
<td>Comparative Physiology: Adaptation &amp; Environment</td>
<td>8</td>
</tr>
<tr>
<td>BIOL360</td>
<td>Concepts and Techniques of Modern Biology</td>
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</tr>
<tr>
<td>MGMT308</td>
<td>Introduction to Management for Professionals A</td>
<td>6</td>
</tr>
</tbody>
</table>

(ii) Master of Science (Biotechnology)

- **Core subjects - Autumn Session**
  - BIOL920 Biotechnology - Cells, Proteins and Antibodies: 12
  - BIOL921 Biotechnology - Nucleic Acids: 12

- **Options# - Spring Session**
  - At least 24 credit points from the following - selected in consultation with the Co-ordinator of Biotechnology: Dr M Walker
  - BIOL910 Advanced Topics in Biology A: Literature Review: 16
  - BIOL916 Plant and Agricultural Biotechnology: 6
  - BIOL917 Aquatic/Environmental Biotechnology: 6
  - BIOL918 Diagnostic Biotechnology: 8
  - BIOL991 Biotechnology Research Project: 24

*Not all of these subjects will necessarily be offered in any one year.
# Other appropriate subjects from the graduate or 300 level schedule may be taken with the permission of the Departmental Head.

(iii) Honours Master of Science (Biotechnology)

The Honours Master of Science (Biotechnology) is a research-based degree, examined principally by thesis. For further information, contact the Co-ordinator of Biotechnology, Dr M Walker.

### OTHER POSTGRADUATE SUBJECTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL910</td>
<td>Advanced Topics in Biology A</td>
<td>16</td>
</tr>
<tr>
<td>BIOL911</td>
<td>Advanced Topics in Biology B</td>
<td>16</td>
</tr>
<tr>
<td>BIOL999</td>
<td>Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

### COURSE REQUIREMENTS

1. **DOCTOR OF PHILOSOPHY**

Candidates for this degree enrol in BIOL999 (Major Thesis) and undertake a research project in one of the areas listed above. Enrolment may be full-time or part-time. Intending students should first contact the Head of the Department of Biological Sciences.

2. **HONOURS MASTER OF SCIENCE**

The objective of this degree is to provide a grounding in experimental biological research. Graduates entering the degree who hold a 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.

3. 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. A specific research project in some aspect of Biotechnology is required. This degree is recommended for those students who wish to follow a career in research.

Entry into the course will normally be a Bachelors degree with Honours at a standard of Class II, Division 2 or above, in an appropriate discipline, or a Master of Science (Biotechnology) completed at an appropriate standard. For further information, consult research interests of particular staff members and contact the Co-ordinator of Biotechnology, Dr Mark Walker.

4. 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. This is a coursework program and does not involve a major thesis, although practical work is an integral part of several subjects comprising the course.

The Master of Science (Biotechnology) will produce graduates with up-to-date knowledge and technological expertise in specific areas of Cell and Molecular Biology, which are the basis for modern biotechnological research and development. Coursework to a value of at least 48 credit points is required.

Entry into the course will normally be a Bachelors degree with Honours at a standard of Class II, Division 2 or above in an appropriate discipline, or an appropriate Graduate Diploma in Science (Biological Sciences) completed at a satisfactory standard.

5. MASTER OF SCIENCE (SCIENCE ADMINISTRATION)

Refer to the “Science Administration” entry for further information.

6. GRADUATE DIPLOMA IN SCIENCE (BIOTECHNOLOGY)

The purpose of the Graduate Diploma (Biological Sciences) is to provide graduates who have insufficient background in parts of Biological Sciences with the skills and knowledge necessary to enable them to proceed with further study.

Successful completion of appropriate subjects with a value of at least 48 credit points is required, the subjects being chosen from the undergraduate schedules of subjects as set out in the Undergraduate Calendar. At least 24 credit points must be from 300-level or 400-level Biology subjects. The selection of subjects shall be approved by the Departmental Head. Approved subjects which lead to the Master of Science (Biotechnology) course are listed below.

SUBJECT DESCRIPTIONS

BIOL910 Advanced Topics in Biology A: Literature Research Project
Autumn and/or Spring session; 16 credit points (directed reading and analysis of published papers)
Assessment: substantial literature review report and seminar.

Under the supervision of staff nominated by the Head of Department, the student will survey the biological literature and present a written report and a seminar on a topic chosen by the supervisory staff.
Co-ordinator: To be advised.

BIOL911 Advanced Topics in Biology B: Laboratory Research Project
Autumn and/or Spring session; 16 credit points (directed reading and field or laboratory experimental work)
Assessment: substantial project report and seminar.

Under the supervision of staff nominated by the Departmental Head, the student will undertake a laboratory or field-based project and present a written report and a seminar on a topic chosen by the supervising staff.
Co-ordinator: To be advised.

BIOL916 Plant and Agricultural Biotechnology
Spring session; 6 credit points (20 hrs of lectures and tutorials plus practical work)
Pre-requisite: BIOL920, 921
Assessment: seminars, project, examination.
Plant tissue culture - protoplast induction and regeneration, callus culture, suspension culture. Clonal propagation. Molecular biology of pathogen-plant interactions; microbial-plant symbiotic interactions; biological control of plant pathogens; detection of pathogens. Genetic engineering of plants. Algal culture
BIOL917 Aquatic and Environmental Biotechnology  
Spring session; 6 credit points (20 hrs of lectures and tutorials plus practical work)  
Pre-requisite: BIOL920, 921  
Assessment: seminars, project, examination.  
Aquatic microbiology; Screening for useful chemicals from aquatic organisms; Biological degradation of aquatic pollutants including hydrocarbons and chlorinated compounds; Biological treatment processes to remove heavy metals from effluents and ores; Biodegradation and biodeterioration of organic and inorganic compounds including waste treatment. The subject will provide the scientific background behind the listed topics, relevant practical knowledge and an understanding of their applications in developed and developing countries.  
Textbook: Journal Articles.  
Co-ordinator: To be advised.

BIOL918 Diagnostic Biotechnology  
Spring session; 8 credit points (24 hrs of lectures and tutorials plus practical work)  
Pre-requisites: BIOL920, 921  
Assessment: seminars, project, examination.  
Production of diagnostic probes based on DNA and antibody technology for the diagnosis of diseases of humans, plants and animals, including diseases in aquaculture systems. Utilisation of such probes to detect specific pathogens in tissue samples and environmental samples, including soil, water and effluents. Collection and preservation of samples. DNA restriction analysis, oligonucleotide mapping and specific antigen detection in identifying micro-organisms. Basic epidemiology. ELISA and immuno-diagnosis. The subject will provide the scientific background behind the listed topics, relevant practical knowledge and an understanding of their applications in developed and developing countries.  
Textbook: Journal Articles.  
Co-ordinator: Dr M J Walker.

BIOL920 Biotechnology: Cells, Proteins and Antibodies  
Autumn session; 12 credit points (42 hrs lecture/tutorials plus practical work)  
Pre-requisites: appropriate experience, or BIOL 320 and BIOL321  
Assessment: major essay, quiz, tutorial papers, poster, seminar, written examination.  
Co-ordinator: Dr M S Baker.
CHEMISTRY COURSES OFFERED

The following postgraduate degrees and diploma are available:

1. Doctor of Philosophy
2. Honours Master of Science by Research
3. Master of Science
4. Master of Science (Science Administration)
5. Graduate Diploma in Science

POSTGRADUATE PROGRAM

Chemistry

CURRENT RESEARCH AREAS

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

- Atmospheric trace gas analysis using Fourier transform infrared spectroscopy
- Atmospheric reaction mechanisms
- Photochemistry caused by ozone depletion
- Environmental chemistry, especially the development of new methods for the analysis and treatment of industrial wastes and trace toxins
- Studies of heavy metal levels in the environment and investigations of the mechanism of toxic action
- Geochemical transport of metals, including uranium and thorium
- Electroanalytical chemistry, especially the development of chemically modified electrodes and electrochemical detectors for liquid chromatography
- Application of electrochemically-produced polymers in corrosion protection, biotechnology, catalysis, and as analytical sensors
- Development of microcomputer controlled on-site analysis systems
- Transport and equilibrium properties of liquids and solutions
- Kinetics of extraction processes involved in the food and beverage industries
- Structural studies of organic, organometallic, and inorganic compounds using 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
- Asymmetric synthesis using organometallic complexes
- Metal-protein and metal-DNA interactions, and model studies
- New methods for organic synthesis and asymmetric synthesis
- Organic synthesis of natural products such as leukotrienes and prostaglandins, and their biological chemistry
- Medicinal chemistry involving the design, synthesis and evaluation of new compounds with specific biological activity
- Synthesis and properties of new heterocyclic molecules
- The mechanism of senile cataract formation in man
- Novel methods for peptide synthesis and modification using organometallic reagents
- Protein modification by endogenous chemicals; Structure/function of proteins and peptides using high-field n.m.r. spectroscopy and other analytical techniques
- Studies on the mass spectrometry of biological molecules such as peptides and nucleic acids
- Design, synthesis and evaluation of DNA-interactive anti-tumour agents

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN CHEMISTRY leading to the Master of Science

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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<tr>
<td>CHEM910</td>
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</tr>
<tr>
<td>CHEM915</td>
<td>Advanced Chemistry Laboratory Project</td>
<td>16</td>
</tr>
<tr>
<td>CHEM918</td>
<td>Chemistry Report</td>
<td>16</td>
</tr>
<tr>
<td>CHEM919</td>
<td>Advanced Topics in Chemistry</td>
<td>16</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.
GRADUATE DIPLOMA IN SCIENCE

Subjects to the value of 48 credit points chosen from the following list in consultation with the Head of the Department of Chemistry. The Departmental Head may also nominate other subject(s) deemed appropriate.

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<td>CHEM311</td>
<td>Inorganic Chemistry III</td>
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<td>CHEM314</td>
<td>Instrumental Analysis</td>
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<td>CHEM320</td>
<td>Biological Chemistry</td>
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<td>CHEM321</td>
<td>Organic Chemistry III</td>
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<td>CHEM323</td>
<td>Physical Chemistry III</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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<tr>
<td>CHEM910</td>
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<td>Selected Topics in Chemistry B</td>
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<tr>
<td>CHEM918</td>
<td>Chemistry Report</td>
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OTHER POSTGRADUATE SUBJECTS

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<tr>
<th>Number</th>
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<td>Chemistry Report</td>
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<td>CHEM919</td>
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<tr>
<td>CHEM920</td>
<td>Chemistry Research Project</td>
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</table>

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in CHEM920 and undertake a research project in one of the areas listed above.

2. HONOURS MASTER OF SCIENCE

Introduction and Objectives

There have been many rapid advances in Chemistry, particularly in chemical instrumentation, over the past decade. Many techniques and applications are now in common use which did not even exist five years ago. There is therefore a need for Chemistry graduates, especially those of 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 Rules.

There are two paths to the degree:

(1) by research only, for students entering with a degree of Honours Class II, Division 2 standard or above. They will do the 48 credit point CHEM920;

(2) by a combination of research and coursework, for students entering with a degree below Honours Class II, Division 2 standard. They will do a research project (CHEM920) plus three of the following subjects: CHEM910 Selected Topics in Chemistry, CHEM915 Advanced Chemistry Laboratory Project, CHEM918 Chemistry Report, and CHEM919 Advanced Topics in Chemistry, described below. That is, they will take subjects to a value of 96 credit points.

Entry to the Course

Entry is subject to the approval of the Board of Research and Postgraduate Studies on the advice of the Departmental Head.

Selection of Subjects

Students must consult the Departmental Head for approval of their proposed choice of subjects.
Pre-requisites
The minimum pre-requisite for all subjects is that the student must have graduated with at least 24 credit points of 300-level Chemistry subjects.

3. MASTER OF SCIENCE

Introduction and Objectives
The objectives of this course are similar to those of the Honours Master of Science above. It is designed for applicants from industry and education and for students who wish to proceed beyond the 3 year pass degree but for whom the research component of the Honours degree is inappropriate.

Structure
This is a 48 credit point coursework degree in which students do three of the following subjects CHEM910, CHEM915, CHEM918 and CHEM919, in accordance with the Pass Master Degree Rules.

Entry to the Course
Students must consult the Departmental Head for approval of overall entry and for the choice of subjects in CHEM915, CHEM918 and CHEM919.

Pre-requisites
The minimum pre-requisite is that the student must have graduated with at least 24 credit points of 300-level Chemistry subjects.

4. MASTER OF SCIENCE (SCIENCE ADMINISTRATION)

Candidates should refer to the "SCIENCE ADMINISTRATION" entry for further information in the 'Faculty of Science' Section.

5. GRADUATE DIPLOMA IN SCIENCE

Introduction and Objectives
This one year Graduate Diploma is designed principally as a Masters Qualifying course for students who have an inadequate preparation for direct entry into our MSc degree programs. It will be found useful by international students and by students either without a full major in Chemistry at undergraduate level or who completed their first degree some years ago.

Entry to the Course
Students must consult with the Departmental Head for approval of overall entry. The particular combination of subjects to be taken by each student will be decided after discussion with the Head and will take into account the student's specific background and needs.

SUBJECT DESCRIPTIONS

CHEM910 Selected Topics in Chemistry A
Double session (A); 16 credit points (56 hrs lectures, 56 hrs tutorials)
Compulsory for all students 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 examinations 80%, two essays 20%.
Eight topics (each 7 lectures/7 tutorials) chosen from: Organic and inorganic Geochemistry and its effects on the Environment; Synthesis of Biologically Important Compounds; Plant Secondary Metabolism; The Bioinorganic Chemistry of Iron; Inorganic Reaction Mechanisms; Catalysis with Organometallic Compounds; Physical Mass Spectrometry; Analysis of Atmospheric Particles; Computers in Chemistry; Gas Lasers; Advanced NMR Techniques; and others topics added as required.
Textbooks:
A reading list will be provided at the beginning of the session.
Co-ordinator: Professor J Bremner.

CHEM911 Selected Topics in Chemistry B
Autumn or Spring session; 8 credit points (28 hrs lectures, 28 hrs tutorials)
Assessment: written examination 90%, essay 10% .
Four topics (each 7 lectures/7 tutorials) chosen from: Organic and inorganic Geochemistry and its effects on the Environment; Synthesis of biologically important compounds; Plant secondary metabolism; The Bioinorganic Chemistry of Iron; Inorganic Reaction Mechanisms; Catalysis with Organometallic Compounds; Physical Mass Spectrometry; Analysis of Atmospheric Particles; Computers in Chemistry; Gas Lasers; Advanced NMR Techniques; and other topics added as required.
Textbooks:
A reading list will be provided at the beginning of the session.
Co-ordinator: Professor J Bremner.

CHEM915 Advanced Chemistry Laboratory Project
Autumn and/or Spring session; 16 credit points (168 hrs laboratory work)
Assessment: substantial report 90% and seminar 10%.
Under the supervision of staff appointed by the Departmental Head the student will undertake a laboratory project and present a written report and a seminar on a topic chosen by the supervising staff.
Co-ordinator: Professor J Bremner.
CHEM918 Chemistry Report
Double session (A); 16 credit points (112 hrs tutorials)
Assessment: substantial report 90% and seminar 10%.
Under the supervision of staff appointed by the Departmental Head students will survey the chemical literature and prepare a report on a topic chosen by the supervising staff.
Co-ordinator: Professor J Bremner.

CHEM919 Advanced Topics in Chemistry
Double session (A); 16 credit points (56 hrs lectures, 56 hrs tutorials)
Assessment: written examinations 90%, essays 10%.
Advanced lecture topics drawn from organic chemistry, inorganic chemistry, physical chemistry and analytical chemistry. The material available in any given year will reflect student interest and the availability of staff.
Co-ordinator: Professor J Bremner.

CHEM920 Chemistry Research Project
48 credit points
Assessment: major thesis.
Topic to be arranged in consultation with the Departmental Head and approved by the Board of Research and Postgraduate Studies.
Co-ordinator: Professor J Bremner.
ENVIRONMENTAL SCIENCE

COURSE OFFERED

The following postgraduate degrees are available:

1. Doctor of Philosophy
2. Honours Master of Environmental Science by Research and Coursework

POSTGRADUATE PROGRAM

Environmental Science

CURRENT RESEARCH AREAS

The following areas of research are available to candidates:

Responses of plant and animal populations to bushfires

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN ENVIRONMENTAL SCIENCE
leading to the Honours Master of Environmental Science

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
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</thead>
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<tr>
<td>Category (a) subjects for all candidates:</td>
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<tr>
<td>ENVI930</td>
<td>Thesis</td>
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<td>ENVI920</td>
<td>Environmental Management</td>
<td>8</td>
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<tr>
<td>ENVI921</td>
<td>Environmental Planning</td>
<td>8</td>
</tr>
<tr>
<td>STS929</td>
<td>Studies in Resource and Environmental Policy</td>
<td>8</td>
</tr>
</tbody>
</table>

Additional subjects for Category (b) candidates only:

At least 24 credit points of

- MGMT310 Introduction to Management for Professionals B 8
- LAW310 Law for Environmental Managers 8
- ENVI385 Environmental Engineering 8
- STS300 The Environmental Context 8

Plus Two of

- ENVI910 Directed Studies in Pollution Chemistry 12
- ENVI911 Directed Studies in Ecology 12
- ENVI912 Directed Studies in Land Resources 12
- ENVI913 Directed Studies in Earth Sciences 12

For further details, see Course Requirements below.
COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

This course is open to students with an honours degree at a minimum standard of Class II, Division 2 in a relevant discipline.

Candidates for this degree enrol in ENVI999.

2. HONOURS MASTER OF ENVIRONMENTAL SCIENCE

This degree combines research and coursework to provide:

(a) continuing education for Bachelor of Environmental Science graduates;
(b) environmental Science education for Science or Engineering graduates or professional employees in the environmental science area, with no undergraduate background in environmental science.

Candidates in category (a) with a strong educational background in environmental science are required to complete 48 credit points comprising a 24 credit point thesis and 24 credit points of coursework which consists of three special single session tutorial/seminar subjects on the evaluation and management of a range of environmental problems.

Candidates in category (b) with little formal education in environmental science would be required to complete 96 credit points, i.e. 48 credit points of core subjects and research plus a further 48 credit points of coursework which would be selected with the approval of the Dean of Science from the additional subjects for Category (b) students listed above.

Candidates would normally be advised to select the subjects in which they do not have previous qualifications or experience in order to broaden their understanding of environmental issues.

This course structure facilitates the tailoring of coursework to suit the individual requirements of candidates with differing undergraduate qualifications and employment experience.

Entry Requirements

Admission is granted with the approval of the Dean of the Faculty of Science to candidates who would normally be required to have completed an undergraduate degree in Science or Engineering, or equivalent tertiary qualifications and/or professional experience.

SUBJECT DESCRIPTIONS

ENVI910 Directed Studies in Pollution Chemistry

Spring session, 12 credit points (112 hrs comprising 56 hrs lectures/tutorials, 28 hrs practical, 28 hrs case study)

Pre-requisite: 100-level Chemistry and CHEM214 or equivalent. (The subject incorporates CHEM327, which is taken concurrently.)

Assessment: final examination, practicals, essay/case study report, seminar.

The chemistry of water and air pollution. Toxins in the environment. Sources, sinks and transport processes, methods for quantitative measurement and control.

Co-ordinator: Associate Professor J Ellis.

ENVI911 Directed Studies in Ecology Autumn or Double (A) session; 12 credit points (106 hrs comprising 28 hrs lectures, 28 hrs tutorials, and 2 major case-study projects)

Assessment: tutorial assignments, seminars, final examination, major case study report (can be done in either session).


Textbooks:


Co-ordinator: Associate Professor R J Whelan.

ENVI912 Directed Studies in Land Resources Double session (A); 12 credit points (56 hrs lectures, 56 hrs seminars/laboratory and field work)

Assessment: examination, two essays, two research projects.

This subject will examine coastal, river, water and soil managements focussing on human induced changes to these natural systems. Emphasis will be given to geomorphological processes, remote sensing of land and biological resources.

Co-ordinator: Associate Professor G Narson.

ENVI913 Directed Studies in Earth Sciences Double session (A); 12 credit points (up to 42 hrs lectures, seminars, up to 4 days field work, at least 40 hrs case study project)

Assessment: reports, seminars, final examination.

Topics include the relationship of mining operations to communities; downstream pollution problems; mineralogical composition and types of associated dusts; composition of mine waters and stack emissions, the reclamation of mine sites; effects of mine subsidence; the composition, uses and disposal
of waste residues; environmental impact studies. One major project.
Co-ordinator: Dr B E Chenhall.

ENV920 Environmental Management
Spring session; 8 credit points (28 hrs lectures, 28 hrs seminar, up to four days fieldwork)
Assessment: final examination, 2 essays, 1 research report.
This course covers topics designed to give students a comprehensive overview of the scientific basis of environmental management. The course will adopt a multi-disciplinary approach to the scientific understanding of how major ecosystems work and show how an appreciation of such knowledge leads to the development of appropriate management strategies for these systems. While there will be some emphasis on the Australian situation, much of the material is applicable in any country. The systems to be covered include estuaries, reefs, coastal wetlands, forests (tropical and temperate), large and small catchment areas, semi-arid areas. In addition the science of the management of hazardous wastes (including radioactive materials) will be discussed. Case studies from Australia, South East Asia and the Pacific Islands will be included. As part of the course, students will complete a project carried out in teams to facilitate the development of interdisciplinary skills and an appreciation of the benefits of teamwork in addressing environmental management issues.
Co-ordinator: Professor J Morrison.

ENV921 Environmental Planning
Autumn session; 8 credit points (28 hrs lectures, 28 hrs seminar, up to four days field work)
Assessment: final examination, 2 essays, 1 research report.
This course presents material necessary for a comprehensive overview of the status and development of environmental planning in government and industry. In the course students will be introduced to the principles of environmental planning. This will be followed by presentations from staff from a wide range of organisations involved in environmental planning such that the mechanisms, difficulties and benefits of current planning activities in Australia are explained. While the emphasis is on the Australian situation, reference to activities in other countries will be included, in addition to aspects of the global situation regarding environmental planning.
Co-ordinator: Professor J Morrison.

STS929 Resource and Environmental Policy
Autumn session; 8 credit points (4 hrs lecture/seminars per wk)
Assessment: 1 major research essay of 4000 words, 1 minor essay of 1500 words, seminar performance, plus class exercises.
This subject will provide advanced study of the social, economic and political processes through which environmental policy is negotiated and instituted. The subject will be thematic, choosing one or more particular areas of technological development and its environmental impact as a case study. (The areas will be chosen in any given year on the basis of their contemporary relevance.) Theoretical perspectives which will be developed in this context may include the politics and sociology of scientific controversy, global, national and regional developments in environmental regulation, theories of state regulation and intervention, and the choice and negotiation of different environmental strategies. Students will be expected to read extensively and critically, to engage in coherent and documented argument and to approach the problems considered by utilising insights from a number of different theoretical perspectives.
Textbooks:
The study program will rely on extensive library study in journals and books, supplemented by case study material assembled for the subject.
Co-ordinator: Professor J Falk.

ENV930 Thesis
Double session (A); 24 credit points
Assessment: written dissertation and seminar presentation.
A research topic in an area of environmental science will be selected by each candidate after consultation with the degree co-ordinator. The thesis will be supervised by staff from the appropriate department or departments.
Co-ordinator: Professor J Morrison.

ENV999 Major Thesis
48 Credit points
Assessment: major thesis
The major thesis takes the form of a supervised research project on a topic approved by the Professor of Environmental Science and the Graduate Faculty.
Co-ordinator: Professor J Morrison.
The following areas of research are available to candidates undertaking the Honours Master degrees by research and the Doctor of Philosophy degree:

- Physical Geography
- Quaternary studies
- Australian prehistory
- Agricultural geography
- Coastal geomorphology
- Fluvial geomorphology
- Evolution of landforms
- Environmental impact
- Remote sensing applications
- Biogeography
- Palynology
- Natural hazards
- Human Geography
- Urban studies
- Population studies
- South-east Asian studies
- Ageing and the elderly
- Health and welfare
- Food, nutrition and hunger
- Social and liability insurance in capitalist environments
- Social theory
- Comparative international health services
- Economic restructuring

POSTGRADUATE PROGRAMS

Environmental Conservation
Human Environment Change
Tropical Environments

and other studies in Geography.

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN TROPICAL ENVIRONMENTS leading to the Master of Arts or Master of Science

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
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<tbody>
<tr>
<td>GEOG911</td>
<td>Tropical coastal and marine environments</td>
<td>12</td>
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<tr>
<td>GEOG912</td>
<td>Hydrology and geomorphology of tropical rivers</td>
<td>12</td>
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<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>
</tr>
<tr>
<td>GEOG918</td>
<td>Environmental application of remote sensing and geographical information systems</td>
<td>12</td>
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</table>

For further details, see Course Requirements below.

POSTGRADUATE PROGRAM IN ENVIRONMENTAL CONSERVATION leading to the Master of Arts or Master of Science

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<tbody>
<tr>
<td>GEOG922</td>
<td>Evaluation and conservation of archaeological and prehistoric sites</td>
<td>12</td>
</tr>
<tr>
<td>GEOG923</td>
<td>Landscape and soil surveys</td>
<td>12</td>
</tr>
<tr>
<td>GEOG924</td>
<td>Coastal and estuarine conservation</td>
<td>12</td>
</tr>
<tr>
<td>GEOG925</td>
<td>River management and water resource conservation</td>
<td>12</td>
</tr>
<tr>
<td>GEOG926</td>
<td>Conservation of biotic resources</td>
<td>12</td>
</tr>
</tbody>
</table>

Note: Students may, with approval from the program co-ordinator, substitute GEOG918 from the Tropical Environments program for one of the subjects listed in this program.

For further details, see Course Requirements below.
POSTGRADUATE PROGRAM IN HUMAN ENVIRONMENT CHANGE: ANALYSIS AND POLICY
leading to the Master of Arts or Master of Science

<table>
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<tr>
<th>Number</th>
<th>Subject</th>
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<tbody>
<tr>
<td>GEOG931</td>
<td>Urban Social Analysis and Policy</td>
<td>12</td>
</tr>
<tr>
<td>GEOG932</td>
<td>Regional Analysis and Policy</td>
<td>12</td>
</tr>
<tr>
<td>GEOG933</td>
<td>Population Dynamics Analysis and Policy</td>
<td>12</td>
</tr>
<tr>
<td>GEOG934</td>
<td>Nutrition and Hunger: Analysis and Policy</td>
<td>12</td>
</tr>
<tr>
<td>GEOG935</td>
<td>Research Report</td>
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For further details, see Course Requirements below.

OTHER POSTGRADUATE SUBJECT

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG944</td>
<td>Major Thesis</td>
<td>48</td>
</tr>
</tbody>
</table>

For further details, see Course Requirements below.

COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Available to candidates with honours degrees of at least Class II Division 2 standard. Candidates for this degree enrol in GEOG999.

2. HONOURS MASTER OF SCIENCE

The primary aim of the Honours Masters program in Geography is to provide research training at the postgraduate level. Students are required to have at least an Honours Class II, Division 2 degree in an appropriate discipline and will be required to complete a thesis with a value of at least 48 credit points.

3. HONOURS MASTER OF ARTS

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 with a satisfactory background in Geography will be required to complete subjects with a value of 48 credit points. Other students will be required to complete subjects with a value of 72 points. 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.

6. GRADUATE DIPLOMA IN SCIENCE

The Graduate Diploma in Science offers graduates lacking a major strand of Geography in their degree the opportunity to acquire competence in the discipline. Alternatively, Geography graduates may enrol in the program in order to update, broaden and/or intensify their knowledge, e.g. for teaching, or to equip themselves for work in applied fields such as environmental, urban, regional or social planning. In addition to the University’s Rules for Graduate Diplomas, candidates for the Graduate Diploma in Science shall:

i) complete Geography subjects to a value of not less than 48 credit points from those listed in the General Schedule, at least 24 credit points being for subjects at the 300-level and the remainder at 200-level, provided that, by approval of the Departmental Head, up to 12 credit points at 200-level may be obtained for cognate subjects offered by another Department;

ii) not include in the diploma program subjects which, in the opinion of the Departmental Head, are substantially
equivalent in the content to those for which credit has already been obtained towards some other degree or diploma;

iii) have their program approved by the Departmental Head before enrolling;

iv) successfully complete the graduate diploma program in not more than 4 academic sessions.

SUBJECT DESCRIPTIONS

GEOG911 Tropical Coastal and Marine Environments
Autumn or Spring session; 12 credit points (3 hrs lecture/seminar; 3 hrs practical/tutorial per wk)
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 land use management and planning in the tropics are considered with reference to fluctuations in sea level and to tropical storms.
Co-ordinator: Dr C D Woodroffe.

GEOG912 Hydrology and Geomorphology of Tropical Rivers
Autumn or Spring session; 12 credit points (3 hrs lecture/seminar; 3 hrs practical/tutorial per wk)
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.
Co-ordinator: Associate Professor G C Nanson.

GEOG913 Tropical Climates and Climate Hazards
Autumn or Spring session; 12 credit points (3 hrs lecture/seminar; 3 hrs practical/tutorial per wk)
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.
Co-ordinator: Associate Professor E A Bryant.

GEOG914 Land and Vegetation Resources of the Tropics
Autumn or Spring session; 12 credit points (3 hrs lecture/seminar; 3 hrs practical/tutorial per wk)
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.
Co-ordinator: Dr C D Woodroffe.

GEOG918 Environmental Application of Remote Sensing and Geographical Information Systems
Autumn or Spring session; 12 credit points (3 hrs lecture/seminar; 3 hrs practical/tutorial per wk)
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.
Co-ordinator: Ms A L O'Neill.

GEOG922 Evaluation and Conservation of Archaeological and Prehistoric Sites
Autumn or Spring session; 12 credit points (3 hrs lecture/seminar; 3 hrs practical/tutorial per wk)
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.
Co-ordinator: Dr L M Head.

GEOG923 Landscape and Soil Survey
Autumn or Spring session; 12 credit points (3 hrs lecture/seminar; 3 hrs practical/tutorial per wk)
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.
Co-ordinator: To be advised.

GEOG924 Coastal and Estuarine Conservation
Autumn or Spring session; 12 credit points (3 hrs lecture/seminar; 3 hrs practical/tutorial per wk)
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.
Co-ordinator: Associate Professor E A Bryant.
GEOG925 River Management and Water Resources
Autumn or Spring session; 12 credit points (3 hrs lecture/seminar; 3 hrs practical/tutorial per wk)
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.
Co-ordinator: Associate Professor G C Nanson.

GEOG926 Conservation of Biotic Resources
Autumn or Spring session; 12 credit points (3 hrs lecture/seminar; 3 hrs practical/tutorial per wk)
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.
Co-ordinator: Ms A L O'Neill.

GEOG931 Urban Social Analysis and Policy
Autumn or Spring session; 12 credit points (3 hrs lecture/seminar; 3 hrs practical/tutorial per wk)
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.
Co-ordinator: To be advised.

GEOG932 Regional Analysis and Policy
Autumn or Spring session; 12 credit points (3 hrs lecture/seminar; 3 hrs practical/tutorial per wk)
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.
Co-ordinator: To be advised.

GEOG933 Population Dynamics Analysis and Policy
Autumn or Spring session; 12 credit points (3 hrs lecture/seminar; 3 hrs practical/tutorial per wk)
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.
Co-ordinator: Professor M G A Wilson.

GEOG934 Nutrition and Hunger: Analysis and Policy
Autumn or Spring session; 12 credit points (3 hrs lecture/seminar; 3 hrs practical/tutorial per wk)
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.
Co-ordinator: Dr R Ball.

GEOG935 Research Report
Autumn or Spring session; 12 credit points (2 hrs workshop per wk)
Assessment: research report.
This subject will allow the student to research in detail a problem identified in another subject within the program. Approval to enrol in this subject will only be granted to students who have demonstrated their capacity to undertake research by their performance in one or more of the other subjects in the strand.
Co-ordinator: Head of Department.

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

COURSES OFFERED

The following postgraduate degrees and diploma are available:

1. Doctor of Philosophy
2. Honours Master of Science
   (a) Coursework
   (b) Coursework and Research
   (c) Research
3. Master of Science
4. Graduate Diploma in Science

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.

POSTGRADUATE PROGRAMS

Fuels - Sedimentology
Resources - Hard Rock Geology

CURRENT RESEARCH AREAS

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

Coal Geology
Sedimentology of coal measure sequences, coalification, organic petrology, coal macerals and lithotypes, thermal maturation, organic geochemistry, coal quality evaluation, coal reserve estimation, coke and carbonization;

Environmental Geology
Pollution studies of coastal and estuarine depositional systems, palaeoecology of coastal sequences, pollution associated with mining, organic and inorganic geochemistry, isotope studies, land stability, clay mineralogy, hydrogeology, waste disposal, environmental impact studies;

Geophysics
Seismic refraction and reflection studies, structural and stratigraphic interpretation of seismic sections, gravity and magnetic methods, laboratory rock physics including velocity and attenuation in reservoir rocks and coal measures. Collaboration with industry may be arranged for electrical and electromagnetic studies;

Igneous Petrology
Igneous petrology, especially geochemistry of granite and related volcanic rocks, isotope geochemistry, volcanology and the stratigraphy of volcanogenic sequences, mineralogy;

Metamorphic Petrology
Low grade regional metamorphism, prograde and retrograde metamorphism, serpentinites, pressure and temperature studies in metamorphic petrology, mineralogy, geochemistry, skarn deposits;

Ore Geology
Structural and stratigraphic setting of ore deposits, ore petrology, geochemistry, isotope studies, ore reserve estimation and mathematical modelling, ore genesis;

Palaeontology and Stratigraphy
Systematic descriptions of invertebrate fossils, trace fossils and fossil assemblages provide the basis for ecological and biostratigraphic studies (especially of Early and Middle Palaeozoic sequences). Sequence stratigraphic analysis and applied geophysical methods can be used to aid stratigraphic correlation and analysis;

Petroleum Geology and Oil Shales
Aspects of petroleum geology include sequence stratigraphy, sedimentology, diagenesis and porosity relationships in petroleum reservoirs, organic petrology, thermal maturation of organic matter in source and reservoir rocks, organic geochemistry of oil and gas, reserve estimations, applications of geophysical techniques to basin studies, petrography, sedimentology and geochemistry of oil shale;

Sedimentology
The sedimentology of clastic and carbonate depositional systems including sedimentary petrology, palaeocurrent and basin analysis, with special reference to terrestrial and shallow marine facies;

Structural Geology and Tectonics
Structural geology of orogenic belts and sedimentary basins; plate tectonic interpretations of orogenic belts.
## POSTGRADUATE PROGRAMS IN RESOURCES - HARD ROCK GEOLOGY

<table>
<thead>
<tr>
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<tr>
<td>Odd Years</td>
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<tr>
<td>GEOL901</td>
<td>Isotope Geochemistry</td>
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</tr>
<tr>
<td>GEOL904</td>
<td>Ore Genesis</td>
<td>6</td>
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<tr>
<td>GEOL909</td>
<td>Applied Geophysics</td>
<td>6</td>
</tr>
<tr>
<td>GEOL918</td>
<td>Analytical Methods in Geology</td>
<td>6</td>
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<tr>
<td>GEOL922</td>
<td>Tectonics</td>
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<td>Even Years</td>
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<tr>
<td>GEOL906</td>
<td>Metamorphism</td>
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<tr>
<td>GEOL907</td>
<td>Seismic Exploration</td>
<td>6</td>
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<tr>
<td>GEOL914</td>
<td>Volcanology</td>
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<tr>
<td>GEOL918</td>
<td>Analytical Methods in Geology</td>
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<td>GEOL923</td>
<td>Structural Geology</td>
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<tr>
<td>GEOL913</td>
<td>Advanced Topics in Geology D</td>
<td>6</td>
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</table>

For further details, see Course Requirements below.

## POSTGRADUATE PROGRAM IN FUELS - SEDIMENTOLOGY

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<tr>
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<td>GEOL901</td>
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<td>GEOL902</td>
<td>Diagenesis</td>
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<td>GEOL916</td>
<td>Organic Geochemistry</td>
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</tr>
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<td>GEOL909</td>
<td>Applied Geophysics</td>
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<td>GEOL918</td>
<td>Analytical Methods in Geology</td>
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<td>GEOL919</td>
<td>Basin Setting and Analysis</td>
<td>6</td>
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<td>GEOL921</td>
<td>Environmental Geology</td>
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<td>Even Years</td>
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<td>GEOL903</td>
<td>Biostratigraphy</td>
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<td>Seismic Exploration</td>
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<td>GEOL917</td>
<td>Petroleum Geology</td>
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<td>GEOL920</td>
<td>Organic Petrology</td>
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<tr>
<td>GEOL923</td>
<td>Structural Geology</td>
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</tr>
</tbody>
</table>

For further details, see Course Requirements below.

Note: Advanced Topics in Geology (GEOL910-913) in areas of specialisation may be included where appropriate and will be offered in the appropriate session.

A research thesis may be taken in addition to coursework, or in place of a coursework program, as appropriate to the degree course. Available thesis options are GEOL989 (30 credit points) and GEOL999 (48 credit points).

## GRADUATE DIPLOMA SUBJECTS

<table>
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<tr>
<th>Number</th>
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<tbody>
<tr>
<td>GEOL301</td>
<td>Field Geology</td>
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<tr>
<td>GEOL302</td>
<td>Basin analysis and groundwater</td>
<td>8</td>
</tr>
<tr>
<td>GEOL303</td>
<td>Lithospheric processes and products</td>
<td>8</td>
</tr>
<tr>
<td>GEOL304</td>
<td>Dynamic Earth</td>
<td>8</td>
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<td>GEOL305</td>
<td>Basin resources</td>
<td>8</td>
</tr>
<tr>
<td>GEOL306</td>
<td>Mineral exploration</td>
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</tr>
</tbody>
</table>
COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in GEOL999.

2. HONOURS MASTER OF SCIENCE

Introduction and Objectives
The rapid development of earth sciences has produced a need for postgraduate coursework. The courses offered by the 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 one of the listed postgraduate programs or appropriate 30 or 48 credit point research theses.

Students entering with a degree in Geology at the level of at least Honours Class II, Division 2 will take subjects to a value of 48 credit points.

Students entering with a pass degree will take subjects to a value of 96 credit points.

Entry to the Course
Entry is subject to the approval of the Graduate Faculty 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 subject combinations in each program may be varied to take account of the candidates qualifications, objectives and study plan.

Pre-requisites
The minimum pre-requisite for all subjects is that the student must have graduated with at least 24 credit points of 300-level Geology subjects.

3. MASTER OF SCIENCE

The 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 Master degree Rules.

Entry to the course will be dependent upon approval by the Graduate Faculty 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 one of the listed postgraduate programs.

4. GRADUATE DIPLOMA IN SCIENCE

This course will provide:

(1) a mechanism which permits practising geologists within the industry to acquire the knowledge necessary to improve their performance; and

(2) holders of a general geology degree to specialize in an expanding field of employment.

This course can be taken as an inservice part-time course aimed at upgrading and updating professional expertise in areas of rapid development.

Admission Requirements
Applicants for admission are required to:

(1) have a degree with a major in Geology from the University of Wollongong or an approved degree from another tertiary institution; or

(2) have other appropriate qualifications and professional experience.

Course Structure
Students will be required to complete subjects to the value of 48 credit points. Subjects should be selected from one of the listed postgraduate programs, together with one or more appropriate 300-level geology subjects (as set out in the Undergraduate Calendar) from the following list. The selection of subjects shall be approved by the Departmental Head who may also nominate other subject(s) deemed appropriate.

SUBJECT DESCRIPTIONS

GEOL901 Isotope Geochemistry

Autumn session; 6 credit points (up to 42 hrs of lectures/seminars/practicals/tutorials).

Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include sample preparation; mass spectrometry; applications of both radiogenic and stable isotopic systems; geochronology modelling; petrogenetic modelling.

References:
Co-ordinator: Dr P F Carr.

GEOL902 Diagenesis
Spring session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work).
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include evolution of diagenetic processes acting on clastic and carbonate sedimentary sequences; interaction between cementation, secondary porosity and permeability in the development of subsurface reservoirs. Laboratory work will include petrology of selected suites of rocks including photomicroscopy, SEM, XRD and assessment of porosity and permeability.

References:
Co-ordinator: Associate Professor B G Jones.

GEOL903 Biostratigraphy
Autumn session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work)
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include principles of and developments in biostratigraphy; zonation, assemblages, correlation; biogeography; importance of various fossil groups; Australian and other case histories in biostratigraphy. Field work will include study and analysis of biostratigraphic aspects of a basin sequence.
Co-ordinator: Associate Professor A J Wright.

GEOL904 Ore Genesis
Spring session; 6 credit points (up to 42 hrs of lectures/seminars/practicals/tutorials; up to 4 days field work).
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include principles of ore genesis; spatial and temporal considerations; experimental studies; plate tectonics and ore genesis; hydrothermal fluids, fluid inclusions; genesis of hydrothermal, magmatic, metasomatic, sedimentary and residual deposits.
Co-ordinator: Dr A C Hutton.

GEOL906 Metamorphism
Spring session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work).
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include the genesis of metamorphic rocks; contact metamorphic and metasomatic phenomena; regional metamorphism at contrasted pressures and temperatures; and the roles of pressure, temperature, time and fluid composition in metamorphism.
Co-ordinator: Dr B E Chenhall.

GEOL907 Seismic Exploration
Spring session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work).
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include acquisition and processing of seismic data, structural interpretation of seismic sections; seismic stratigraphy; well logging and well ties; seismic modelling and reservoir evaluation; high resolution seismic reflection, in-seam seismic. Laboratory work includes interpretation of seismic data using both conventional paper records and interactive computer displays.
Co-ordinator: Dr L E A Jones.

GEOL909 Applied Geophysics
Spring session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work).
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include gravity; magnetics; electrical and electromagnetic methods; well logging methods and interpretation. Laboratory work includes interpretation of synthetic and real data; field work includes use of equipment, data collection and interpretation.
Co-ordinator: Dr L E A Jones.

GEOL910 Advanced Topics in Geology A
Double session (A); 12 credit points
Assessment: as appropriate from essays, reports, seminars, final examination.
Co-ordinator: To be advised.

GEOL911 Advanced Topics in Geology B
Double session (A); 12 credit points
Assessment: as appropriate from essays, reports, seminars, final examination.
Co-ordinator: To be advised.

GEOL912 Advanced Topics in Geology C
Autumn or Spring session; 6 credit points
Assessment: as appropriate from essays, reports, seminars, final examination.
Co-ordinator: To be advised.

GEOL913 Advanced Topics in Geology D
Autumn or Spring session; 6 credit points
Assessment: as appropriate from essays, reports, seminars, final examination.
Co-ordinator: To be advised.
GEOL914 Volcanology
Autumn session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work)
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include physical aspects of volcanology of both modern and ancient volcanic deposits; tectonic setting of volcanoes and the physical properties of magmas; effects on volcanic processes and deposits.
Co-ordinator: Dr P F Carr.

GEOL916 Organic Geochemistry
Autumn session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work)
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include carbon compounds; kerogen and its analysis (elemental analysis (van Krevelen diagrams), pyrolysis (RockEval, pyrolysis-GC), solvent extraction, gas chromatography, mass spectrometry); formation and analysis of petroleum, biomarkers; petrology of oil shale and source rocks; source rock and maturation concepts in petroleum geology; reflectance profiles, geothermal gradients and burial history; thermal modelling.
Co-ordinator: Dr A C Hutton.

GEOL917 Petroleum Geology
Spring session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work)
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include definition and prediction of subsurface petroleum reservoirs based on sedimentological and petrological criteria; use of facies models for reservoir prediction and evaluation; reservoir dynamics - fluid migration, entrapment and extraction; drilling and extraction methods, well testing, reservoir and reserve evaluation; Australian and international petroleum reserves. Laboratory work: evaluation of petroleum reservoirs based on theoretical and real examples.
Co-ordinator: Associate Professor B G Jones.

GEOL918 Analytical Methods in Geology
Autumn session; 6 credit points (up to 42 hrs of lectures/seminars/practicals/tutorials).
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include an outline of the theory and practice of modern analytical methods in petrology and determinative mineralogy; mineral separation; use of various analytical techniques including XRD, XRF, SEM, ICP and microprobe.
Co-ordinator: Dr B E Chenhall.

GEOL919 Basin Setting and Analysis
Autumn session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work).
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include tectonic development of sedimentary basins (coal, petroleum and mineral deposits in sedimentary basins); spatial relationships; analytical aspects of basin analysis including palaeocurrent analysis, sedimentary facies relationships within the basin fill, petrological parameters in sedimentary basins and mathematical analysis of basin data; coal forming environments. Field work includes comparison of facies on the cratonic and arc sides of the retroarc Sydney Basin sequence.
Co-ordinator: Associate Professor B G Jones.

GEOL920 Organic Petrology
Spring session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work).
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include sample preparation; fluorescence and white light microscopy; macerals, microlithotypes, lithotypes; evolution of flora; formation of peat; coalification; type and rank; heat-affected coals, coke; Gondwana coals; coal petrology and associated stratigraphic, tectonic and palaeogeographic problems; minerals in coal and oil shale. Laboratory exercises include examination of Gondwana and northern hemisphere coals; field work includes examination of seams in outcrop and core.
Co-ordinator: Dr A C Hutton.

GEOL921 Environmental Geology
Spring session; 6 credit points (up to 42 hrs lectures/seminars/practicals/tutorials; up to 4 days field work).
Assessment: as appropriate from essays, reports, seminars, final examination.
Topics include the relationship of mining operations to communities; downstream pollution problems; mineralogical composition and types of associated dusts; composition of mine waters and stack emissions, the reclamation of mine sites; effects of mine subsidence; the composition, uses and disposal of waste residues; environmental impact studies; alienation of resources; conflicts of interest in mining operations. Field work includes visits to appropriate and topical field
locations, extractive mineral and industrial sites.

Co-ordinator: Dr B E Chenhall.

GEOL922 Tectonics
Autumn session; 6 credit points (up to 42 hrs lectures/seminars/practicals; up to 4 days field tutorials)
Assessment: as appropriate from essays, reports, seminars, final examination.
The subject provides an overview of the dynamic Earth with analysis of plate tectonics and the tectonic development of ancient rock assemblages and orogenic systems. Aspects of tectonic theory are treated by reference to several examples of Phanerozoic and Precambrian orogenic systems.

Reference:

Co-ordinator: Dr C L Fergusson.

GEOL923 Structural Geology
Autumn session; 6 credit points (up to 42 hrs lectures/seminars/practicals; up to 5 days field tutorials)
Assessment: as appropriate from essays, reports, seminars, final examination.
The subject provides an overview of deformation of the Earth's crust and modern applied techniques in structural geology. The principles of stress, strain and deformation are taught and applied to the understanding of rock structures.

Reference:

Co-ordinator: Dr C L Fergusson.

GEOL950 Project A
18 credit points
Assessment: report, seminar and essays and examinations as appropriate.
This project will consist of a field, laboratory and/or library study on some topical aspect of geology equivalent to four months of full-time study.

GEOL951 Project B
18 credit points
Assessment: report, seminar and essays and examinations as appropriate.
This project will consist of a field, laboratory and/or library study on some topical aspect of geology equivalent to four months of full-time study.

GEOL989 Thesis
30 credit points
Full-time research work on either a field or laboratory project nominally equivalent to two thirds of a year of research.

GEOL999 Major Thesis
48 credit points
PHYSICS

COURSES OFFERED

The following postgraduate degrees and diplomas are available:

1. Doctor of Philosophy
2. Honours Master of Science by Research
3. Master of Science (Science Administration)
4. Graduate Diploma in Science

CURRENT RESEARCH AREAS

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

- Astronomy - visible and infrared, planetary surfaces
- Experimental nuclear physics
- Laser spectroscopy
- Scattering of light by solids
- Solid state spectroscopy of impurities in semiconductors
- Studies of electronic wave functions in solids

SCHEDULE OF GRADUATE SUBJECTS

Graduate Diploma Science (Physics)

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS230</td>
<td>Intermediate Physics</td>
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<tr>
<td>PHYS225</td>
<td>Radiation Physics</td>
<td>6</td>
</tr>
<tr>
<td>PHYS245</td>
<td>Astronomy</td>
<td>6</td>
</tr>
<tr>
<td>PHYS251</td>
<td>Concepts of the Modern Universe</td>
<td>6</td>
</tr>
<tr>
<td>PHYS255</td>
<td>Mechanics and Thermodynamics</td>
<td>6</td>
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<tr>
<td>MATH201</td>
<td>Multivariate and Vector Calculus*</td>
<td>6</td>
</tr>
<tr>
<td>MATH202</td>
<td>Applied Differential Equations*</td>
<td>6</td>
</tr>
<tr>
<td>MATH251</td>
<td>Complex Analysis and Linear Algebra*</td>
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</tr>
<tr>
<td>PHYS301</td>
<td>Classical Mechanics and Electromagnetism</td>
<td>6</td>
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<tr>
<td>PHYS302</td>
<td>Classical Mechanics, Electromagnetism &amp; Plasma Physics</td>
<td>12</td>
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<tr>
<td>PHYS311</td>
<td>Quantum and Statistical Mechanics</td>
<td>12</td>
</tr>
<tr>
<td>PHYS321</td>
<td>Nuclear &amp; Solid State Physics</td>
<td>6</td>
</tr>
<tr>
<td>PHYS322</td>
<td>Astro-, Nuclear and Solid State Physics</td>
<td>12</td>
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<tr>
<td>PHYS401</td>
<td>Theoretical Mechanics and Electromagnetism</td>
<td>8</td>
</tr>
<tr>
<td>PHYS411</td>
<td>Astro- and Nuclear Physics</td>
<td>8</td>
</tr>
<tr>
<td>PHYS441</td>
<td>Quantum Mechanics</td>
<td>8</td>
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<tr>
<td>PHYS446</td>
<td>Solid State Physics</td>
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<tr>
<td>PHYS910</td>
<td>Advanced Project in Physics A</td>
<td>6</td>
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<tr>
<td>PHYS921</td>
<td>Applied Physics Report</td>
<td>18</td>
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<tr>
<td>PHYS947</td>
<td>Special Topics in Physics A</td>
<td>6</td>
</tr>
<tr>
<td>PHYS948</td>
<td>The Physics of Imaging</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>PHYS990</td>
<td>Applied Physics Project</td>
<td>24</td>
</tr>
</tbody>
</table>

* These subjects are pre and co-requisite of some of the physics subjects.

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>
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</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>PHYS948</td>
<td>The Physics of Imaging</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>

For further details, see Course Requirements below.
COURSE REQUIREMENTS

1. DOCTOR OF PHILOSOPHY

Candidates for this degree enrol in PHYS999.

2. HONOURS MASTER OF SCIENCE

The course will be made up of subjects selected from those described below, in accordance with the Honours Masters Degree Rules together with the following conditions:

(1) entry to the degree program will normally be from an Honours degree in Physics or the Graduate Diploma in Science (Physics) or from a pass degree with an appropriate three year sequence in Physics;

(2) students entering with a degree of Honours Class II, Division 2 or above in an appropriate area, will do the 48 credit point PHYS999 Major Thesis;

(3) students entering with a degree below Honours Class II, Division 2 will do the 48 credit point PHYS999 and a 48 credit point combination of subjects chosen from the remaining Graduate Subjects below and the Bachelor Degree Schedule. These subjects will normally be chosen in consultation with and approved by the Departmental Head.

3. MASTER OF SCIENCE (SCIENCE ADMINISTRATION)

Candidates should refer to the "Science Administration" entry for further information in this section.

4. GRADUATE DIPLOMA IN SCIENCE

Introduction and Objectives

This one year full-time or two year part-time course is designed to provide:

(i) a Masters Qualifying course for students who have inadequate preparation for direct entry into the Honours Masters program;

(ii) an opportunity for Science teachers who have a degree but have taken Physics to first or second year level only, to improve their understanding and horizons in Physics;

(iii) an opportunity for International students and students without a full major in Physics to update their knowledge of Physics.

Entry to the Course

Students must consult the Departmental Head for admission to the course. The particular combination of subjects to the value of 48 credit points will be chosen in consultation with the Departmental Head.

SUBJECT DESCRIPTIONS

PHYS910 Advanced Project in Physics A

Autumn session; 6 credit points (42 hrs laboratory)

Assessment: satisfactory operation and written descriptions of completed experiments.

The student will be required to design and construct several self-contained experiments at the level of those encountered in PHYS309 Advanced Experimental Physics. The number and type shall be determined by two members of the academic staff of the Department of Physics.

Co-ordinator: Associate Professor W Zealey.

PHYS946 Advanced Solid State Physics

Double Session (A); 6 credit points

Assessment: 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.

Co-ordinator: Professor P Fisher and Dr C Zhang.

PHYS947 Special Topic in Physics A

Autumn session; 6 credit points (14 hrs seminars and 14 hrs tutorials)

Assessment: project work and seminar.

A special topic to be selected from any area of physics. The selection to be made by the Departmental Head in consultation with the Departmental Assessment Committee.

Co-ordinator: Associate Professor W Zealey.

PHYS948 The Physics of Imaging

Autumn session; 6 credit points (28 contract hrs)

Pre-requisite: Relevant academic or professional background.

Assessment: assignments and end of session paper.

Photographic processes and interpretation; Optical and infrared arrays; Image digitising systems; Radio synthesis imaging and fourier optics; Image analysis; Applications in industry, medicine and astrophysics.
Textbook:  
Notes will be provided and relevant reading material will be drawn from monographs and papers.  
Co-ordinator: Associate Professor W Zealey.

PHYS960 Advanced Project in Physics B  
Spring session; 6 credit points (42 hrs laboratory)  
Assessment: satisfactory operation and written descriptions of completed 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.  
Co-ordinator: Associate Professor W Zealey.

PHYS997 Special Topic in Physics B  
Spring session; 6 credit points (14 hrs seminars and 14 hrs tutorials)  
Assessment: as for PHYS947.  
A special topic to be selected from any area of physics. The selection to be made by the Departmental Head in consultation with the Departmental Assessment Committee.  
Co-ordinator: Associate Professor W Zealey.

PHYS999 Major Thesis  
Double session (A); 48 credit points  
The major thesis takes the form of a supervised research project on an approved topic.
COURSES OFFERED

The following postgraduate degree is available:

1. Master of Science

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN SCIENCE ADMINISTRATION
leading to the degree of Master of Science

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
<th>Credit Points</th>
<th>Session Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

**TABLE 1 TWO YEAR (FULL-TIME) PROGRAM**

**First Year Compulsory**

ACCY901 Accounting for Managers 6 Autumn

One of

BIOL921 Applied Biology Report 18 Annual

CHEM921 Applied Chemistry Report 18 Annual

PHYS921 Applied Physics Report 18 Annual

and

MGMT911 Organisational Behaviour 6 Autumn or Spring

Options (three of the following)

MGMT976 Competitive Strategy and Analysis 6 Autumn or Spring

SCIE900 Research Methodology and Communication 6 Autumn

STS946 The Management of Technological Change 6 Spring

Either

LAW960 Law for Professionals 6 Spring

or

LAW331 Intellectual Property Law 6 Autumn

**Second Year Compulsory**

One of

BIOL990 Applied Biology Research Project 24 Annual

CHEM990 Applied Chemistry Research Project 24 Annual

PHYS990 Applied Physics Research Project 24 Annual

and

MGMT922 Marketing Management 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 Spring

MGMT945 Technology Enterprise Project 6 Annual

**TABLE 2 14 MONTH (FULL-TIME) PROGRAM**

One of

BIOL921 Applied Biology Report 18 Summer

CHEM921 Applied Chemistry Report 18 Summer

PHYS921 Applied Physics Report 18 Summer
POSTGRADUATE PROGRAM IN SCIENCE ADMINISTRATION (Cont’d)
leading to the degree of Master of Science

<table>
<thead>
<tr>
<th>Number</th>
<th>Subject</th>
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<tbody>
<tr>
<td>Autumn session</td>
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<tr>
<td>MGMT911</td>
<td>Organisational Behaviour</td>
<td>6</td>
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<tr>
<td>MGMT976</td>
<td>Competitive Strategy and Analysis</td>
<td>6</td>
</tr>
<tr>
<td>MGMT922</td>
<td>Marketing Management</td>
<td>6</td>
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<tr>
<td>ACCY901</td>
<td>Accounting for Managers</td>
<td>6</td>
</tr>
<tr>
<td>Spring session</td>
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<tr>
<td>Core</td>
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<tr>
<td>SCIE900</td>
<td>Research Methodology and Communication</td>
<td>6</td>
</tr>
<tr>
<td>STS931</td>
<td>Risk Assessment, Health and Safety</td>
<td>12</td>
</tr>
<tr>
<td>Double session (A)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core</td>
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<tr>
<td>MGMT945</td>
<td>Technology Enterprise Project</td>
<td>6</td>
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<tr>
<td>Options (one of the following)</td>
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<tr>
<td>LAW960</td>
<td>Law for Professionals</td>
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<td>STS946</td>
<td>The Management of Technological Change</td>
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<tr>
<td>Summer session (Dec/Feb)</td>
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<td>One of</td>
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<td>BIOL990</td>
<td>Applied Biology Research Project</td>
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<tr>
<td>CHEM990</td>
<td>Applied Chemistry Research Project</td>
<td>24</td>
</tr>
<tr>
<td>PHYS990</td>
<td>Applied Physics Research Project</td>
<td>24</td>
</tr>
</tbody>
</table>

COURSE REQUIREMENTS

1. MASTER OF SCIENCE

Introduction and Objectives
Three major career routes are generally followed by science graduates: (i) the research route involving an Honours year which is followed by a PhD if interested in a scientific 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 science qualification such as an Honours Master of Science, after some experience has been gained.

The Master of Science (Science Administration) - MSc (ScAdmin) - course is aimed at category (iii) graduates. While many scientists begin their industrial careers scientists '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 those in government laboratories desiring management training.

The objectives of this proposed degree are therefore two-fold, namely to provide science 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 science via a major literature survey and a research project in applied science.

Close integration of the two strands will be achieved by the use of scientifically based case studies in relevant management subjects and by the use of the applied research project in BIOL990 or CHEM990 or PHYS990. 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 Science subjects, namely BIOL921 and BIOL990, or CHEM921 and CHEM990 or PHYS921 and PHYS990, the latter of each pair 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 approximately 6 students who must consult the Departmental Head for approval of overall entry, and for the choice of topics and supervisors in BIOL921 and BIOL990, or CHEM921 & CHEM990 or PHYS921 & PHYS990.

Pre-requisites
The minimum pre-requisite is a BSc degree, or its equivalent, with a major in Biology or Chemistry or Physics.

SUBJECT DESCRIPTIONS

BIOL921 Applied Biology 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 biological literature, prepare a report and present a seminar on a topic of relevance to the biological industry chosen by the supervising staff.
Co-ordinator: To be advised.

BIOL990 Applied Biology 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 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.
Co-ordinator: To be advised.

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.
Co-ordinator: To be advised.

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.
Co-ordinator: To be advised.

PHYS921 Applied Physics 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 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.
Co-ordinator: To be advised.

PHYS990 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.
Co-ordinator: To be advised.
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.

Textbook: To be advised.

Co-ordinator: To be advised.
CROSS FACULTY PROGRAM
COURSES OFFERED

The following courses are available:

1. Honours Master of Total Quality Management
2. Graduate Diploma in Total Quality Management
3. Graduate Certificate in Total Quality Management

SCHEDULE OF PROGRAMS

POSTGRADUATE PROGRAM IN TOTAL QUALITY MANAGEMENT

leading to the Honours Master of Total Quality Management, Graduate Diploma in Total Quality Management and Graduate Certificate in Total Quality Management

<table>
<thead>
<tr>
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<tr>
<td>STAT949</td>
<td>Statistical Thinking</td>
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<tr>
<td>or</td>
<td>ENGG921 Engineering Data Reduction and Error Analysis</td>
<td>6</td>
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<td>or</td>
<td>MGMT911 Organisational Behaviour</td>
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<td>or</td>
<td>TQM911 Introduction to Quality Concepts</td>
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<td>Graduate Certificate subjects plus:</td>
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<td>STAT941</td>
<td>Statistical Quality Control 1</td>
<td>6</td>
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<tr>
<td>or</td>
<td>ENGG922 Statistical Process Control in Manufacturing and Service Industries</td>
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<td>or</td>
<td>MGMT915 Management of Change</td>
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<td>or</td>
<td>TQM912 An Overview of Quality Management</td>
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<td>MGMT914</td>
<td>Human Resource Development</td>
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<td>STAT943</td>
<td>Statistical Quality Control 2</td>
<td>6</td>
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<tr>
<td>MECH967</td>
<td>International Quality Techniques</td>
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<tr>
<td>Plus one elective from</td>
<td></td>
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<tr>
<td>MGMT970</td>
<td>Contemporary Issues in Services Quality</td>
<td>6</td>
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<tr>
<td>MGMT953</td>
<td>Human Resource Management</td>
<td>6</td>
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<tr>
<td>MECH965</td>
<td>Quality in Engineering Design</td>
<td>6</td>
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<tr>
<td>or any other postgraduate subject approved by the Co-ordinator and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TQM913</td>
<td>Major Project in Quality Management</td>
<td>24</td>
</tr>
<tr>
<td>or</td>
<td>Applicants with an outstanding achievement record at Graduate Diploma level may be admitted to:</td>
<td></td>
</tr>
<tr>
<td>TQM914</td>
<td>Thesis in Quality Management</td>
<td>48</td>
</tr>
</tbody>
</table>
COURSE REQUIREMENTS

1. HONOURS MASTER OF TOTAL QUALITY MANAGEMENT

This course will be offered on a part-time and full-time basis and will require a minimum study period of one and a half years full-time and three years part-time. Candidates will be required to complete the Graduate Diploma in Total Quality Management and a further 48 credit points. The 48 credit points must include a 24 credit point research thesis and 4 subjects as outlined above. The research thesis must be completed with supervision in at least one of the Departments of Management, Statistics or Mechanical Engineering. This research project can be industry based and tailored to the candidates work-place requirements.

Entry Requirements: A Graduate Diploma in Total Quality Management or an appropriate Graduate Diploma or Honours degree in the University or other approved institution. Prior to the conferring of the degree of Honours Master of Total Quality Management upon a candidate, the candidate must surrender the testamur for the Diploma in Total Quality Management and in doing so will be deemed to have surrendered all rights pertaining to the diploma.

2. GRADUATE DIPLOMA IN TOTAL QUALITY MANAGEMENT

The candidate is required to successfully complete 48 credit points of course work as outlined above.

If the co-ordinator of the diploma determines that a candidate has successfully completed material in a subject or a combination of subjects that corresponds substantially to a prescribed subject, then the candidate will be exempt from that subject and will replace it with another subject.

Entry Requirements: Three or four year Bachelor Degree from the University or other approved institution with the qualifications of candidates applying for entrance to be assessed by the course co-ordinator(s).

3. GRADUATE CERTIFICATE IN TOTAL QUALITY MANAGEMENT

The candidate is required to successfully complete 24 credit points of course work as outlined above.

If the co-ordinator of the certificate determines that a candidate has successfully completed material in a subject or a combination of subjects that corresponds substantially to a prescribed subject, then the candidate will be exempt from that subject and will replace it with another subject.

Entry Requirements: Please refer to the Department of Mechanical Engineering. The University may consider candidates who may not possess formal qualifications but can offer substantial professional experience in the area.

EXTERNAL COURSES

The Graduate Diploma in Total Quality Management and the Graduate Certificate in Total Quality Management are available externally through the Wollongong Graduate Consortium.

SUBJECT DESCRIPTIONS

ENGG921 Engineering Data Reduction and Error Analysis
6 credit points (3 hrs per wk)
Assessment: final examination and compulsory assignments.
Co-ordinator: Associate Professor K Tieu.

ENGG922 Statistical Process Control in Manufacturing and Service Industries
6 credit points (3 hrs per wk)
Assessment: final examination and compulsory assignments.

MECH960 Quality Management
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)
Assessment: final examination, other examinations, projects, tutorials and assignments may be incorporated in the final assessment.
Quality systems, Accreditation v TQC; National and international quality policies (eg. ISO9000); Supplier appraisal and auditing; Quality costs, JIT (Just In Time); Quality, process capability studies and statistical process control case-studies; Defect analysis; TPM: Total Productive Maintenance v TQC; Worker involvement in improvement role of quality circles (SGIA); Improvements management, education and training; Introduction to quality of design, reliability, safety and product liability.
Co-ordinator: Dr P Gibson.
MECH961 Quality Improvement Systems and Implementation  
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)  
Assessment: final examination, other examinations, projects, tutorials and assignments may be incorporated in the final assessment.  
Basic quality philosophy as per Feigenbaum, Juran, Deming and Crosby – emphasis on system, cost and people improvement; Introduction to Practical Industrial Quality Systems (PIQS) (Kaizen, Ishikawa, Improvement Methodology and tools); Measurement of conformance and prevention of non-conformance; Team approaches to problem solving – the roles of management; Suppliers and customers; Implementation examples through case-studies of prominent organizations; Audit procedures for TQM.  
Co-ordinator: Dr P Gibson.

MECH963 Industrial Quality Technology  
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)  
Assessment: final examination, other examinations, projects, tutorials and assignments may be incorporated in the final assessment.  
Appraisal systems: Vision, CNC measuring machines, in-process, in-cycle, and post process gauging, integrated quality in automated manufacturing processes, quality information systems; Measurement of geometry, size and surface texture; Calibration systems; The use of integrated SPC and expert systems.  
Co-ordinator: Dr P Gibson.

MECH965 Quality in Engineering Design  
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)  
Assessment: final examination, other examinations, projects, tutorials and assignments may be incorporated in the final assessment.  
Design as the source of quality; Value engineering, failure mode and effects analysis; Organization for design quality; Design case studies in Taguchi methods and quality function deployment; Design standards, testing, reliability, safety maintainability, product liability, product certification; Contract and design reviews.  
Co-ordinator: Dr P Gibson.

MECH967 International Quality Techniques  
Autumn or Spring session; 6 credit points (28 hrs lectures; 14 hrs tutorials)  
Assessment: final examination, other examinations, projects, tutorials and assignments may be incorporated in the final assessment.  
Japan v the “West”: Cultural and other differences, historical background; Specific Japanese quality and management concepts; International comparison; Training program/seminars: “Kaizen” philosophy, concepts, techniques and tools. Emphasis on people, simplicity and visibility in quality; Applications in manufacturing and service sectors.  
Co-ordinator: Professor G Arndt.

MGMT911 Organisational Behaviour  
6 credit points (2 hrs lectures per wk)  
Assessment: seminars, case studies, essay(s) and examination(s).  
This subject is designed to introduce students of TQM to the basic principles and concepts underlying behaviour in organisations. Topics to be covered include individual attributes, motivation, decision-making, group structure and process, communication, leadership, conflict and organisational change. The context for the discussion of organisational behaviour recognises that TQM is an ongoing process, implemented by a management and staff aware of the central role played by organisational culture in the development of continuous improvement.  
Co-ordinator: To be advised.

MGMT914 Human Resource Development  
6 credit points (2 hrs lectures/seminars per wk)  
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.  
Textbook: To be advised.  
Co-ordinator: Professor M Hough.

MGMT915 Management of Change  
6 credit points (2 hrs lectures/seminars per wk)  
Assessment: seminars, project and examination.  
Pre-requisite: MGMT912.  
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; intervention strategies; planning and monitoring change; sustaining change.  
Textbook: To be advised.  
Co-ordinator: To be advised.

MGMT953 Human Resource Management  
6 credit points (2 hrs lectures per wk)  
Assessment: seminars, case studies, essay(s) and examination(s).  
Managing people at work, including recruitment, selection, human resources
planning, performance appraisal, training and development, compensation, health and safety, and ergonomics.

**Textbook:** To be advised.

**Co-ordinator:** To be advised.

**MGMT970 Contemporary Issues in Services Quality**

*6 credit points (2 hrs per wk)*

**Assessment:** critique of academic literature, case presentations, assignments.

This advanced course is designed to follow on from MGMT939, Managing Services Marketing. It will focus on advance topics in service quality, customer satisfaction with services, and strategic issues relating to the marketing of service firms. Emphasis will be placed on reviewing contemporary readings in the academic and professional literature.

Available only to MCom students.

**Co-ordinator:** Associate Professor P Patterson.

**STAT941 Statistical Quality Control 1**

*6 credit points*

**Pre-requisite:** MATH949

**Assessment:** assignments and examinations.


**Co-ordinator:** To be advised.

**STAT943 Statistical Quality Control 2**

*6 credit points*

**Pre-requisite:** MATH949 and MATH941

**Assessment:** assignments and examinations.


**Co-ordinator:** To be advised.

**STAT949 Statistical Thinking**

*6 credit points*

**Assessment:** assignments and examinations.


**Co-ordinator:** Professor D Griffiths.

**TQM911 Introduction to Quality Concepts**

*6 credit points*

**Assessment:** one presentation, two major assignments.

An overview of the concept of quality in organisational settings. The concept of a “quality audit” and how to undertake it. Issues and problems in implementing and coordinating total quality techniques in an organisational setting. The concepts and issues of design quality, planning quality and implementation quality. Students will be required to undertake an extensive case study of the success factors and challenge issues of implementing total quality into an organisation, and present a detailed, comprehensive analysis from the selected case study.

**TQM912 An overview of Quality Management**

*6 credit points*

**Assessment:** seminars and mini-projects.

**TQM913 Thesis in Quality Management**

*24 credit points*

**Assessment:** seminars and mini-projects.

**TQM914 Thesis in Quality Management**

*48 credit points*

**Assessment:** presentation of completed thesis.

Each candidate will be required to have a substantive research proposal approved in an aspect of total quality management, undertake a satisfactory research cycle into the approved topic, and submit a thesis of an acceptable format and standard.
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