THE UNIVERSITY OF
NEW SOUTH WALES

Faculty of the Built Environment

HANDBOOK

2000

THE UNIVERSITY OF
NEW SOUTH WALES

Faculty of the Built Environment

HANDBOOK

2000

The address of the University of New South Wales is:

The University of New South Wales
SYDNEY 2052 AUSTRALIA

Telephone: (02) 93851000
Facsimile: (02) 9385 2000
Email: Records.Admin@unsw.edu.au
Telegraph: UNITECH, SYDNEY
Telex: AA26054
http://www.unsw.edu.au

Designed and published by Publishing and Printing Services,
The University of New South Wales

Printed by Sydney Allen Printers Pty Ltd

ISSN 1323-7861

Contents

Introduction 1

Changes to Academic Programs in 2000 3

Calendar of Dates 5

Staff 7

Handbook Guide 11

Faculty Information 13
Some People Who Can Help You 13
Faculty of the Built Environment Enrolment Procedures 13
Rules for Progression 13
Units of Credit 13
Library Facilities 13
Faculty Laboratories 14
Computing at UNSW 14
Student Clubs and Societies 15
Student Equity 15
Equal Opportunity in Education Policy Statement 15
Students With Disabilities 15
Special Government Policies 16
Faculty of Built Environment General Education Rules 16

Undergraduate Study 19

Architecture Program 19
3260 Bachelor of Architecture 19
Degree Rules 20
Faculty Regulations for the BArch 20

Science (Architecture) Program 21
3265 Bachelor of Science (Architecture) 21
Degree Rules 21
Faculty Regulations for the BSc(Arch) 22

Interior Architecture Program 23
3255 Bachelor of Interior Architecture 23
Degree Rules 24
Faculty Regulations for the BIA 24

Building Construction Management Program 25
3331 Bachelor of Building Construction Management 25
Degree Rules 26
Faculty Regulations for the BBCM 26
Program Guidelines 26

Industrial Design Program 27
3385 Bachelor of Industrial Design 27
Degree Rules 28
Faculty Regulations for the BIndDes 28

Landscape Architecture Program 29
3380 Bachelor of Landscape Architecture 29
Degree Rules 30
Faculty Regulations for the BLA 30

Planning and Urban Development Program **31**
3360 Bachelor of Town Planning 31
Degree Rules 32
Faculty Regulations for the BTP 32
Program Guidelines 32

Combined Degrees
3262 Bachelor of Architecture/Bachelor of Arts 33
Degree Rules 34
Faculty Regulations of the BArch BA 34
3263 Bachelor of Architecture Bachelor of Social Science 35
Degree Rules 36

Faculty Regulations for Undergraduate Study in the Faculty of the Built Environment **37**

Course Descriptions **40**
Program Core Courses (listed by Program and Stream) 40
Bachelor of Architecture 40
Bachelor of Science (Architecture) 45
Bachelor of Interior Architecture 46
Bachelor of Building Construction Management 50
Bachelor of Industrial Design 54
Bachelor of Landscape Architecture 57
Bachelor of Town Planning 60
Faculty Elective Courses **63**

Postgraduate Study 73

Faculty of the Built Environment Graduate Enrolment Procedures 73
Higher Degrees – Research 73
Higher Degrees – Coursework 73

Research Degrees **73**
1120 Doctor of Philosophy 73
2200 Master of Architecture 74
2206 Master of Science 74
2210 Master of Building 74
2220 Master of Landscape Architecture 74
2230 Master of Town Planning 74
2240 Master of the Built Environment 74

Coursework Degrees **74**
8125 Master of Construction Management 74
8128 Master of Real Estate 75
8131 Master of Urban Development and Design Program 75
8132 Master of the Built Environment (Sustainable Development) 77
8142 Master of Architecture (by coursework) 78
8145 Master of Industrial Design Program 80
5205 Town Planning Graduate Diploma 82

Course Descriptions **83**
Faculty of the Built Environment Courses 83
Core Courses Offered by Other Faculties 90

Conditions for the Award of Degrees 91

First Degrees 91
Higher Degrees 91
Doctor of Philosophy (PhD) 91
Master of Architecture by Research (MArch), Master of Building (MBuilding),
Master of the Built Environment (MBEnv), Master of Landscape Architecture (MLArch),
Master of Town Planning (MTP) 93
Master of Architecture (MArch) by Coursework 94
Master of Construction Management (MConstMgt) 95
Master of the Built Environment (Building Conservation) (MBEnv),
Master of Industrial Design (MID), and Master of Science (Industrial Design) (MSc(IndDes)) 95
Master of the Built Environment (Sustainable Development) (MBEnv(SustDev)) 96
Master of Engineering or Master of Science by research 97
Master of Real Estate (MRE) 98
Master of Urban Development and Design (MUDD) 99
Graduate Diploma (GradDip) 99
Graduate Diploma in Built Environment (Sustainable Development) (GradDipBEnv) 100
Graduate Certificate in Sustainable Development (GradCertBEnv) 100

Scholarships 103
Undergraduate Scholarships 104
Postgraduate Scholarships 115

Prizes 127

Introduction

This Faculty includes disciplines that deal with the built environment at a variety of levels. Our range of interests includes the micro level, such as the chair that a person uses and it extends to encompass the building in which a person is housed, the environmental and urban design issues that relate to the overall placement of the building, the urban setting and the urban region in which that setting is located. As potential custodians of the built environment, our students are expected to be conversant with the range of important issues associated with achieving the best possible built environment.

The Faculty of the Built Environment has a structure aimed at encouraging synergy among the disciplines in the Faculty and providing flexibility for students. We expect our students to gain expertise in their chosen disciplines but we also expect that they will take the opportunities to become familiar with the concepts and ideas of the other disciplines in the Faculty. The world in which our graduates will pursue their chosen profession is one where interdisciplinary teams of professionals work together to achieve the best results for the built environment. We believe that the earlier the student is introduced to the range of ideas and concepts that the disciplines in the built environment represent, the more complete a professional he or she will become.

The Faculty has streamlined the services provided to the student through the establishment of a Faculty Student Centre, which is the place of first call for students and potential students. All routine matters dealing with general inquiries, enrolment, course changes and other related matters should be first directed to the Faculty Student Centre. Where a referral is necessary, the FSC staff will make the arrangements. This Handbook contains the detailed information on all the programs of the Faculty as well as descriptions of available courses and research areas. The same information is also available on the university web page. The information contained in this Handbook is important for you to understand the structure of the programs, the courses in the programs and the requirement of each of the programs. Study it and use it well.

Chung-Tong Wu
Dean

Changes to Academic Programs in 2000

From the start of 2000, the University will move to a new academic structure that will be common to all undergraduate and postgraduate programs. The new structure will lead to greater flexibility and improved educational opportunities for students.

While many programs are already structured in a way consistent with the new direction, others have been revised for 2000 to take advantage of the benefits of the new structure.

What is the New Academic Structure?

The new academic structure is based on units of credit, which replace credit points. A full-time enrolment for one year is defined as 48 units of credit. A normal full-time enrolment for one semester is 24 units of credit. (You will be regarded as full-time if you enrol in at least 18 units per semester.)

Courses (subjects) will also change to reflect the new structure. Most courses will be worth 6 units of credit. Some courses will have a higher or lower value: for example, undergraduate General Education courses will be worth 3 units of credit.

A full-time student in an undergraduate or graduate coursework program will typically enrol in four x 6 unit courses per semester.

How Are the Changes Being Implemented?

The changes take effect from the start of 2000. Handbooks, forms, program specific enrolment materials, and timetables will all reflect the new structure.

You will notice the changes when you enrol for 2000. Your program office will give you information specific to your program as part of the enrolment process.

How Will These Changes Affect Me?

If you do not complete requirements for your program in 1999, and need to re-enrol in 2000 your remaining program requirements will be measured in units of credit. Similarly, courses you have previously taken will be reported in terms of a conversion to the new units of credit.

Units of Credit

From January, 2000 the University will move to a new academic structure based on units of credit. A full-time enrolment for one year is defined as 48 units of credit (24 per semester). A course will have the same unit of credit value and generate the same load for HECS and fees irrespective of the program or stage in which it is taken. All courses will be measured in whole units of credit. The normal workload expectations are 25 - 30 hours per semester for each unit of credit, including class contact hours, preparation and time spent on all assessable work.

Terminology

Along with the change from credit points to units of credit there will be other changes in terminology from 1 January 2000. What you know as your course (Example: 3502 Bachelor of Commerce) will become your program and what you know as a subject (Example: ACCT2522) will become a course.

Further Information

For information specific to your program, including advice about enrolment, your standing and study options contact your program office.

For general information about these changes and updates to arrangements:

NewSouth Q (Kensington) - 9385 3093

Student Centre, College of Fine Arts - 9385 0684

UNSW Website - www.unsw.edu.au

SISWeb - http://www.misu.unsw.edu.au/adaweb/sisguide.html

NewSouth Solutions - nss.admin.unsw.edu.au/student/student_info.html

Calendar of Dates

The academic year is divided into two sessions, each containing 14 weeks for teaching. Between the two sessions there is a break of approximately six weeks, which includes a one-week study period, two weeks for examinations, and three weeks recess. There is also a short recess of one week within each session.

Session 1 commences on the Monday nearest 1 March.

Faculties other than Medicine, AGSM and University College, ADFA

	2000	2001
Session 1 (14 weeks)	28 February to 20 April 1 May to 9 June	26 February to 12 April 23 April to 8 June
Mid-session recess	21 April to 30 April	13 April to 22 April
AVCC Common dates:	16 April to 20 April	
Study period	10 June to 14 June	9 June to 14 June
Examinations	15 June to 29 June	15 June to 3 July
Mid-year recess	30 June to 16 July	4 July to 22 July AVCC Common dates: 2-6 July
Session 2 (14 weeks)	17 July to 10 September 7 October to 17 November	23 July to 21 Sept 1 October to 2 November
Mid-session recess	11 September to 6 October	22 September to 30 September AVCC Common dates: 24-28 Sept
Study period	18 November to 22 November	3 November to 8 November
Examinations	23 November to 7 December	9 November to 27 November

Important dates for 2000

January 2000

S 1 New Year's Day - Public Holiday
M 3 Public Holiday
T 6 Medicine V - Term 1 begins
M 10 Medicine IV - Term 1 begins
W 26 Australia Day - Public Holiday

February 2000

M 7 Medicine VI - Term 2 begins
AGSM Executive MBA Program - Session 1 begins
M 14 AGSM MBA Program - Year 1 classes - Term 1 begins
M 21 AGSM MBA Program - Year 2 classes - Term 1 begins
M 28 Session 1 begins - for Faculties other than Medicine, AGSM and University College, ADFA

March 2000

M 6 University College, ADFA - Session 1 begins
F 10 Last day applications are accepted from students to enrol in Session 1 courses
Su 12 Medicine IV - Term 1 ends
Medicine V - Term 1 ends
M 13 Medicine IV - Term 2 begins
M 20 Medicine V - Term 2 begins
F 24 Medicine VI - Term 2 ends
S 25 Medicine VI - Recess begins
F 31 Last day for students to discontinue without failure Session 1 courses
HECS census date for Session 1

April 2000

Su 2 Medicine VI - Recess ends
M 3 Medicine VI - Term 3 begins
F 21 Mid-session recess begins - for Faculties other than Medicine, AGSM and University College, ADFA
Good Friday - Public Holiday
S 22 Easter Saturday
Su 23 Easter Sunday
Medicine IV - Term 2 ends
M 24 Easter Monday - Public Holiday
Medicine IV - Recess begins
T 25 Anzac Day - Public Holiday
Su 30 Mid-session recess ends - for Faculties other than Medicine, AGSM and University College, ADFA
Medicine IV - Recess ends
AGSM MBA Program - Year 1 classes - Term 1 ends
AGSM MBA Program - Year 2 classes - Term 1 ends

May 2000

M 1 Medicine IV - Term 3 begins
AGSM MBA Program - all classes - Examinations begin
F 5 AGSM MBA Program - all classes - Examinations end
S 6 University College, ADFA - Mid-session recess begins
T 9 Publication of provisional timetable for June examinations
Su 14 Medicine VI - Term 3 ends
M 15 Medicine VI - Term 4 begins
AGSM MBA Program - all classes - Term 2 begins
W 17 Last day for students to advise of examination clashes
F 19 AGSM Executive MBA Program - Session 1 ends
Su 21 Medicine V - Term 2 ends
University College, ADFA - Mid-session recess ends

S 27 AGSM EMBA Program – Examinations start
M 29 Medicine V - Term 3 begins
T 30 Publication of timetable for June examinations

June 2000

F 9 Session 1 ends - for Faculties other than Medicine, AGSM and University College, ADFA
S 10 Study period begins - for Faculties other than Medicine, AGSM and University College, ADFA
Su 11 Medicine IV - Term 3 ends
M 12 Queen's Birthday - Public Holiday
Medicine IV - Term 4 begins
W 14 Study period ends - for Faculties other than Medicine, AGSM and University College, ADFA
Th 15 Examinations begin - for Faculties other than Medicine, AGSM and University College, ADFA
F 23 University College, ADFA - Session 1 ends
University College, ADFA - Examinations begin
T 29 Examinations end - for Faculties other than Medicine, AGSM and University College, ADFA
F 30 Mid-year recess begins - for Faculties other than Medicine, AGSM and University College, ADFA

July 2000

F 7 Medicine VI - Term 4 ends
University College, ADFA - Examinations end
University College, ADFA - Mid-year recess begins
S 8 Medicine VI - Recess begins
M 10 AGSM - Executive MBA Program - Session 2 begins
Su 16 Mid-year recess ends - for Faculties other than Medicine, AGSM and University College, ADFA
Medicine VI - Recess ends
University College, ADFA - Mid-year recess ends
M 17 Session 2 begins - for Faculties other than Medicine, AGSM and University College, ADFA
University College, ADFA - Session 2 begins
Su 23 AGSM MBA Program - all classes - Term 2 ends
M 24 AGSM MBA Program - all classes - Examinations begin
F 28 AGSM MBA Program - all classes - Examinations ends
Last day applications are accepted from students wishing to enrol in Session 2 courses
Su 30 Medicine V - Term 3 ends

August 2000

Su 6 Medicine IV - Term 4 ends
M 7 Medicine IV - Term 5 begins
Medicine V - Term 4 begins
AGSM MBA Program - all classes - Term 3 begins
Th 17 Medicine VI - Term 5 begins
Su 27 Medicine VI - Term 5 ends
M 28 Medicine VI - Term 6 begins
Th 31 Last day for students to discontinue without failure Session 2 courses
HECS Census date for Session 2

September 2000

S 2 Open Day
S 9 Medicine V - Recess begins (Olympic Break)
Medicine VI - Recess begins (Olympic Break)
M 11 Mid-session recess begins - for Faculties other than Medicine, AGSM and University College, ADFA
Th 14 Closing date for 'on-time' applications to the Universities Admissions Centre
S 16 University College, ADFA - Mid-session recess begins
Su 17 Medicine IV - Term 5 ends
M 18 Medicine IV - Recess begins (Olympic Break)

October 2000

Su 1 Medicine IV - Recess ends (Olympic Break)
Medicine V - Recess ends (Olympic Break)
Medicine VI - Recess ends (Olympic Break)
M 2 Labour Day - Public Holiday
Medicine IV - Term 6 begins
University College, ADFA - Mid-session recess ends
F 6 Mid-session recess ends - for Faculties other than Medicine, AGSM and University College, ADFA
T 17 Publication of provisional timetable for November examinations
W 25 Last day for students to advise of examination clashes
F 27 University College, ADFA - Session 2 ends
S 28 University College, ADFA, study period begins
Su 29 Medicine V - Term 4 ends
Medicine VI - Term 6 ends

November 2000

F 3 University College, ADFA, Study period ends
S 4 University College, ADFA - Examinations begin
T 7 Publication of timetable for November examinations
F 10 AGSM MBA Program - all classes - Term 3 ends
Su 12 Medicine IV - Term 6 ends
M 13 AGSM MBA Program - all classes - Examinations begin
F 17 Session 2 ends - for Faculties other than Medicine, AGSM and University College, ADFA
University College, ADFA - Examinations end
AGSM MBA Program - all classes - Examinations end
S 18 Study period begins - for Faculties other than Medicine, AGSM and University College, ADFA
AGSM - Executive MBA Program - Session 2 begins
W 22 Study period ends - for Faculties other than Medicine, AGSM and University College, ADFA
Th 23 Examinations begin - for Faculties other than Medicine, AGSM and University College, ADFA

December 2000

Th 7 Examinations ends - for Faculties other than Medicine, AGSM and University College, ADFA
M 25 Christmas Day - Public Holiday
T 26 Boxing Day - Public Holiday

Comprises School of the Built Environment with Programs of Architecture, Building and Construction Management, Landscape Architecture, Planning and Urban Development, Industrial Design and Interior Architecture.

Dean
Professor Chung-Tong Wu, BArch *Calif. Berkeley*, PhD *Calif. Los Angeles*, MSc *Col.*, MRAPI

Presiding Member
Susan Margaret Thompson, BA DipEd *Macq.*, PhD MTCP *Syd.*, MRAPI

Associate Dean (Research) Head of School
Professor Jon Lang, BArch *Witw.*, MRP PhD *Cornell*

Associate Dean (Postgraduate Studies)
Professor Alexander Rankine Cuthbert, DipArch DipTP MSc *Heriot Watt*, PhD *Lond.*, MRIBA, MRTPI, MHKIP

Associate Dean (Undergraduate Studies)
James David Plume, BArch MArch *Syd.*

Director of Research Students
Bruce Herbert Judd, BArch PhD *Syd.*, ARAIA

Executive Officer
Brian John Newell, BCom *UNSW*

Executive Assistant
Susan Lundy, BA DipEd *UNSW*

Administrative Assistant to the Dean
Patricia Anne Poynting

Undergraduate Studies

Associate Dean (Undergraduate Studies)
James David Plume, BArch MArch *Syd.*

Administrative Staff
Margret Fernandes
Deborah Macreadie
Margaret McInnes
June Odlum

Architecture Program

Head of Program
Desley Olwyn Luscombe, BSc BArch MArch *UNSW* ARAIA

Professor of Architecture
Jon Lang, BArch *Witw*, MRP PhD *Cornell*

Associate Professors
Deo Prasad, BArch *Auck*, MArch MSc PhD *UNSW*, FRAIA
Peter Reginald Proudfoot, BArch *Syd*, MArch *Penn*, PhD *UNSW*, Rome Scholar, ARAIA
Vinzenz Franz Josef Sedlak, DiplingArch *TU Graz*, MPhil *Sur*

Senior Lecturers
John Richard Cooke, BArch PhD *Syd*, LLB MSc *UNSW*, FRAIA, AIArbA
Catherine Mary De Lorenzo, BA, DipEd PhD *Syd*
Stanislaus Fung, BSc *UNSW*
Paul-Alan Johnson, BArch *Syd*, DipCD PhD *UNSW*, FRAIA
Bruce Herbert Judd, BArch PhD *Syd*, ARAIA
Steven King, BArch DipBdgSc *Syd*, ARAIA
Peter Kohane, MArch *Melb*, MSc PhD *Penn*
William Richard Lawson, BSc PhD *UNSW*, MAPS, MAIHR
James David Plume, BArch MArch *Syd*
Robert Samuels, BA *Witw*, MURP *UCT*, MSc *Sur*, PhD *R'dg*
Michael Charles Tawa, BSc BArch PhD *UNSW*

Lecturers
Dijana Alic, BArch *Sarajevo*, MArch *UNSW*
John Carrick, BECiv *UNSW*, MEngSci *UNSW* MIEA
Peter Murray, BArch *UNSW*, MTCP *Syd*, DipEnvStud *Macq*, MHEd *UNSW*
Stephen Peter, BArch DipArchComp *Syd*
Ann Maree Quinlan, BSc BArch *UNSW*, MHEd *UNSW*, ARAIA

Associate Lecturers
Maryam Gusheh, BArch *UNSW*
Paul Hogben, MArchSt *University of Adelaide*
James Marshall McGrath, BArch *UNSW*
Jeffrey Mueller, BArch *UNSW*

Visiting Professors
Philip Cox, AO, BArch DipTCP *Syd*, FRAIA

Adjunct Professor
Victor Martin Berk, BArch DipAdmin *UNSW*
Louise Cox, AO, BArch, DipTCP, LFRAIA, RIBA
Richard Hough, BSc, BE, MEng *Toronto*, MIE Aust, CPEng
Adam Kreisler, MArch, MTP *Cracow Pol*, RAIA
Peter Thompson, DIC, MIEAust, FIStructE
Ken Maher, BArch, MArch, GDip Landscape Des, GDipEnvStudies, FRAIA

Building Construction Management Program

Head of Program
Paul Kingsley Marsden, ASTC, MSc *UNSW*, GradDip *SydTeachers' Coll*, AAIQS

Professor of Building
Vacant

Professor of the Built Environment
Denny McGeorge, MSc *Heriot-Watt*, FRICS, FAIQS, FAIB

Associate Professors
Marton Marosszeky, BE *N'cle(NSW)*, MEngSc *UNSW*, MIEAust, MAIB
Roger Mark Anthony Miller, BBuild *UNSW*, SM CE *MIT*, FAIB
Thomas Edward Uher, BBuild MSc PhD *UNSW*, FAIB, MAIPM

Senior Lecturers
Philip John Davenport, LLB *Syd*
Martin Loosemore, BSc PhD *Reading*
Karl Goran Runeson, BA MBuild *UNSW*, PhD *QUT*

Lecturers
Perry Forsythe, BBuild *UNSW*
Ojars Indulis Greste, BE ME *UNSW*, DEng *Calif*
Jinu Kim, BSc Seoul *NU*, MPM *UNSW*, MAIPM, AVLE(Econ), PhD *UNSW*
Patric XN Zou, BEng *Hunan*, MCivEng PhD *UNSW*

Emeritus Professor
Arthur Raymond Toakley, BCE BA MEngSc *Melb*, PhD *Manc*, CPEng, LMus, FIEAust, FAIB

Adjunct Professors
Tom W Crow, BE, MBuild, FIEAust, MIMC
Brian Farmer, DipCivEng *NSWIT*, MEngSc, MBA *UNSW*, FIEAust, FIAMA, FIVMA
Stephen Hibbert, BE(Civil), LLM *Syd*, MIEAust, MIAMA

Industrial Design Program

Head of Program
Jonathan Talbot, BSc DipEd *UNSW*

Senior Lecturers
Rina Bernabei, BDes *UTS*
Lance Green, BE *NSWIT*, MDes *UTS*, MHEd *UNSW*, CPEng, FIEAust, MDIA, FRSA

Lecturers
Michael John Hort, MDes *RCA*, BScEng *Imperial College*
Miles Park, BDes *UTS*

Adjunct Senior Lecturers
Adam Laws, BAppSc *UC*, IDSA
Mark Armstrong, DipArt *RMIT*, MDIA

Adjunct Lecturer
Ruth McDermott, DipID *Wellington*, FDIA

Honorary Visiting Professor
John Redmond, BA DipIDEng, MA *RCA*, FRSA, MESA, AADM, FDIA

Technical Officer
Antony Yarham, DipEd *UTS*

Interior Architecture Program

Head of Program
Harry Anthony Stephens, BArch DipLD *UNSW*, FRAIA

Lecturers
William MacMahon, BSc *UNSW*, BArch *UNSW*, MB Env *UTS*
Susan Serle,BA(Interior Design)*RMIT*
Lisa Turbitt, BDes *Uni of S Aust*

Landscape Architecture Program

Head of Program
Linda Corkery, BSc *Iowa State Univ*, MLA MRP *Cornell*

Professor of Landscape Architecture
James Weirick, MLA *Harv*

Lecturer
Robin Simpson, BLArch *UNSW*, MDes *Harvard*

Associate Lecturer
Sacha Coles, BLA *RMIT*

Planning and Urban Development Program

Head of Program
Stephen Harris, BTP *UNSW*, FRAPI

Professor of Town Planning
Alexander Rankine Cuthbert, DipArch DipTP MSc *Heriot Watt*, PhD *Lond*, MRIBA, MRTPI, MHKIP

Professor
Peter Ashton Murphy, BA *Syd*, PhD *Macq*

Associate Professors
Robert Gordon Freestone, BSc *UNSW*, MA *Minn*, PhD *Macq*, MRAPI
Robert Bolles Zehner, BA *Amherst*, MA PhD *Mich*, MASA, MRAPI

Senior Lecturer
Peter John Williams, BSc *UNSW*,BLegS, MEnvPlan *Macq*, MPubPol *NE*, MRAPI
Susan Margaret Thompson, BA DipEd *Macq*, PhD MTCP *Syd*, MRAPI

Adjunct Professor
Gabrielle Kibble, AO, BA DipTP *Syd*, FRAPI

Postgraduate Studies

Associate Dean (Postgraduate)
Alexander Rankine Cuthbert, DipArch DipTP MSc *Heriot Watt*, PhD *Lond*, MRIBA, MRTPI, MHKIP

Adjunct Professor
Sonya Svetlana Lyneham, BA MTCP *Syd*, FRAPI

Postgraduate Program Directors

Architecture
Paul-Alan Johnson, BArch *Syd*, DipCD PhD *UNSW*, FRAIA

Construction Management
Thomas Edward Uher, BBuild MSc PhD *UNSW*, FAIB, MAIPM

Industrial Design
Lance Green, BE *NSWIT*, MDes *UTS*, MHEd *UNSW*, CPEng, FIEAust, MDIA, FRSA

Real Estate
Peter John Williams, BSc *UNSW*,BLegS, MEnvPlan *Macq*, MPubPol *NE*, MRAPI

Sustainable Development
Deo Prasad, BArch *Auck*, MArch MSc PhD *UNSW*, FRAIA

Urban Development and Design
Alexander Rankine Cuthbert, DipArch DipTP MSc *Heriot Watt*, PhD *Lond*, MRIBA, MRTPI, MHKIP

Research Office

Associate Dean (Research)
Jon Lang, BArch *Witw*, MRP PhD *Cornell*

Director of Research Students
Bruce Herbert Judd, BArch PhD *Syd*, ARAIA

Administrative Staff
Julia Hauman

Faculty Administrative Units

Faculty Student Centre

Manager
Andrew Knight

Administrative Assistants
Kath Bradburn
Janine van der Waal
Jose Pinzon
Isobel Waters
Julian Wong

Faculty Finance and Facilities Unit

Administrative Officers
Edith Chu
Harry Chambers

Faculty Printer
Edward Ward

Faculty Continuing Education

Celia Mary Waldron

Faculty Computing Unit

Manager
Graham Hannah

Support Staff
Jizelle Dabaghi
Marko Furschke

Faculty Resource Centre

Faculty Librarian
Ruth Buntman

This Handbook is divided into two main sections comprising undergraduate study and postgraduate study. Initially, program outlines are presented in each section, providing a guide to the degrees within organisational units. Read the opening sections of the handbook first, and then read the information contained under Program Outlines (Undergraduate or Postgraduate as appropriate). Detailed information on each course can then be found under Course Descriptions which provides full details of course content, contacts and prerequisite details.

As changes may be made to information provided in this Handbook, students should frequently consult the noticeboards of the schools and the official noticeboards of the University.

Information Key

The following key provides a guide to abbreviations used in this book:

UOC	unit of credit
HPW	hours per week
P/T	part-time
S1	Session 1
S2	Session 2
S3	Full year course
SS	Single Session, but which Session taught is not known at time of publication
WKS	weeks of duration
X	external
X1	Summer Session
X2	Winter Session

Prefixes

The identifying alphabetical prefixes for each organisational unit offering courses to students in the Faculty of the Built Environment follow.

Prefix	Organisational Unit	Faculty/Board
ACCT	School of Accounting	Commerce and Economics
AGSM	Australian Graduate School	Australian Graduate School of Management
ARCH	Architecture Program	Built Environment
BENV	School of the Built Environment	Built Environment
BLDG	Building Program	Built Environment
CIVL	School of Civil Engineering	Engineering
COFA	College of Fine Arts	College of Fine Arts
COMP	School of Computer Science and Engineering	Engineering
CONS	School of the Built Environment	Built Environment
ECON	School of Economics	Commerce & Economics
FINS	School of Banking & Finance	Commerce & Economics
GEOG	School of Geography	Science and Technology
GEOL	School of Geology	Science and Technology
GMAT	School of Geomatic Engineering	Engineering
IDES	Industrial Design Program	Built Environment
INTA	Interior Architecture Program	Built Environment
LAND	Landscape Architecture Program	Built Environment
MARK	School of Marketing	Commerce and Economics
MATH	School of Mathematics	Science and Technology
PHYS	School of Physics	Science and Technology
PLAN	Planning and Urban Development Program	Built Environment
REST	School of the Built Environment	Built Environment
SESC	School of Safety Science	Science and Technology
SUSD	School of the Built Environment	Built Environment
UDES	School of the Built Environment	Built Environment

Some People Who Can Help You

If you require advice about enrolment, degree requirements, progression within programs, information and advice about course content and requirements, contact the Faculty Student Centre, Level 3 Foyer, Red Centre Building.

To speak to the Associate Dean (Undergraduate Studies) or any of the Undergraduate Program Heads, you need to make an appointment through the Undergraduate Programs Office on Level 4.

For an appointment with the Head of School, or any of the staff responsible for the postgraduate programs offered in the Faculty, go to the Postgraduate Studies and Research Office on Level 2.

It is University and Faculty policy to promote equal opportunity in education (refer to Equal Opportunity in Education Policy Statement, University of New South Wales Calendar and the 2000 Student Guide).

Faculty of the Built Environment Enrolment Procedures

All students re-enrolling in the Faculty will receive pre-enrolment forms containing information concerning their 2001 enrolment, before the end of Session 2, 2000.

Rules for Progression

Progression in programs offered in the Faculty of the Built Environment is generally dependent on the successful completion of prerequisites and/or co-requisites for courses as listed in the schedules of courses for each program.

Where the academic record of students is not of a satisfactory standard, the Head of Program may recommend a restricted program. This applies to all undergraduate programs offered by the Faculty.

Units of Credit

From 1996, UNSW introduced a university wide units of credit system for all courses offered to both undergraduate and postgraduate students. The system means that a course will have the same units of credit value irrespective of which faculty's program it is counting towards. Students are able to determine the value of courses taken from other faculties when planning their programs of study. The student load for a course is calculated by dividing the units of credit value of a course by the total Units of Credit required for the program for that year of the program. Student load is used to determine both HECS and overseas student fees. Students who take more than the standard load for that year of a program will pay more HECS.

From January 2000, old course measures have been replaced by new university units of credit. Every effort has been made to ensure the accuracy of the units of credit values shown for all courses. However, if any inconsistencies between old and new units of credit measures cause concern, students are advised to check with their faculty office for clarification before making 2000 course selections based on the Units of Credit shown in this handbook.

Library Facilities

Although any of the university libraries may meet specific needs, the staff and students of the Faculty of the Built Environment are served mainly by the Physical Sciences Library and the Resource Centre housed in the Faculty of the Built Environment.

The Physical Sciences Library

The Physical Sciences Library, located on levels 5, 6 and 7 of the Library Building, provides information for students and staff from the Faculties of Science, Engineering, the Built Environment and Applied Science.

During the academic year, the Library is open from 8.00am to 10.00pm Monday to Thursday, 8.00am to 6.00pm on Friday and 12.00pm to 5.00pm Saturday and Sunday. During vacations, Library hours of opening will vary.

Staff are available to provide assistance after 10.00am, including help with catalogue, CD-Roms, interlibrary loans, maps and online searching. An information skills program is in place with emphasis on developing basic information access and management skills for first years and advanced skills for final year and postgraduate students.

The Library's catalogue and selected CD-Rom databases are available over the Campus Wide Network.

Physical Sciences Librarian: Rhonda Langford.

Undergraduate Services

The undergraduate collection caters for the needs of students in Years 1 and 2 and other groups where large numbers require mass teaching. Levels 3 and 4.

The Open Reserve section, houses books and other material which are required reading. Level 2.

The Audio-Visual section, contains multimedia, videos and cassette tapes of lectures. The Audio-Visual section has wired study carrels and cassette players for student use. The map collection is also housed here. Level 3.

The Reader Education program provides orientation tours and introductory library research method lectures to students.

Faculty of the Built Environment Resource Centre

The Resource Centre is located on the ground floor of the Red Centre Building and serves the day to day needs of the staff and students in the Faculty. It provides information services based on both print and electronic resources. The reference collection which

has no lending facilities consist of textbooks and recommended reading, background information to programs, serials and standards, (these being duplicated in the Physical Sciences Library). Unique materials held consist of donations, undergraduate thesis, trade catalogues and an open reserve collection of specific materials left by lecturers to supplement program work.

The Resource Centre also provides 24 computers with access to library catalogues and other on-line databases, e-mail facilities and the Internet. Six computers have word processing facilities. Photocopying facilities are provided.

Assistance is provided by the librarian in using the Centres' resources and developing of information retrieval skills. In addition a printed guide on how to use the Resource Centre is issued to each student. During Session 1 & 2, the Resource Centre is open from 8.30am to 6.00pm Monday to Thursday, 8.30am to 4.00pm on Friday. Out of session, the Resource Centre is open from 8.30am to 4.00pm Monday to Friday, closed all January, weekends and public holidays.

Faculty Laboratories

Research Laboratories

The Faculty controls research laboratories located on campus at Kensington, at the University of New South Wales Research Station, King Street, Randwick and the Little Bay Campus. The laboratories have sections equipped for work on environment and climate, materials, model testing, services, lighting and acoustics. Extensive testing and research equipment and workshop facilities are available, including a structural modelling facility and a structural testing bay. Research work and testing programs carried out in the laboratories include:

- Condensation behaviour of double-glazed windows.
- Transfer of heat and moisture through wall elements.
- Penetration of moisture into and through concrete.
- Development of methods of extending the use of solar energy in domestic architecture.
- Study of noise transmission in buildings.
- Investigation of traffic noise measurement, analysis and prediction.
- The effectiveness of artificial luminous environments.

The Australian Centre for Construction Innovation with it's main office in the Red Centre and laboratories at Randwick, offers additional services to the building industry.

The Faculty has recently completed a new field testing and research facility at its Little Bay Campus (1408 Anzac Parade). This facility has accredited testing of thermal performance of building components, energy evaluation, renewable energy integration in buildings and other energy – environmental testing and research facilities. State-of-the-art hot box, double hot box and solar calorimeters are part of the equipment. In addition spectrophotometric studios on materials including degradation studies are also undertaken. Industry specific professional development programs are also being conducted through this facility. Other energy and environmental activities of the SOLARCH group can be accessed through this facility as well.

Computing Facilities Laboratory

The Faculty has five major computing laboratories containing around 80 personal computers available for general use by students in the Faculty. These laboratories are used for teaching formal classes, as well as providing general network and computing access for students. They are a mix of high-end Pentium and Pentium2 workstations configured to support a wide range of applications including: CAD, modelling, rendering, visualisation, multimedia presentations, analysis; general office applications and much more. The Faculty's Resource Centre has a further 30 computers which provide net access and office applications to all students.

These lab resources are supported by a range of devices and services from standard printers, plotters and scanners to notebooks, digital cameras and projectors for presentations. The Faculty has just established a new printing service providing large format colour printing, photo-quality output and laminating. This will allow student presentations to exceed professional quality. The labs provide an environment where the computing technology can be utilised throughout the wide range of courses offered in the Built Environment's disciplines.

The above facilities are generally for use by program work students. For postgraduate research students, there are a total of around 20 dedicated computers within the Faculty ranging from low-end wordprocessing devices to high-end graphics and multimedia computers to support postgraduate research work.

All these computers are connected to the Campus Wide Network, providing secure on-line file storage, access for students to the information resources supported by the Faculty and the University generally, as well as the international resources of the Internet. All students are provided with email, which can be accessed from all the Faculty's labs as well as remotely. For remote access the University provides a good value dial-up service to students.

Faculty World Wide Web Site

The Web/Internet and the Faculty's web site form a vital resource for both staff and students. The Faculty's web site is internationally acclaimed in the Built Environment field providing detailed information on the Faculty's programs, staff, research and events as well as exhibits of student work and an extensive online learning resource.

The Built Environment web address is http://www.fbe.unsw.edu.au/

The UNSW central web site forms another important resource, providing access to information on every aspect of the University. This site also links into other important web resources on campus like the library, UNSW computing and more.

The UNSW web address is http://www.unsw.edu.au/

Student Ownership of Personal Computers

The Faculty encourages all students to consider the purchase of a personal computer to support their studies. The prevailing policy is that the Faculty endeavours to provide for the high-end computing needs of students, in the belief that many students are able to meet their own needs for more basic applications. To that end, the Faculty publishes a document which is available from the Web Site, providing advice to students regarding the purchase of personal computers.

Computing at UNSW

The Division of Information Services (DIS) encompasses information technology and the University Library at UNSW.

Specific University information which is frequently updated is available on the World Wide Web (WWW) in the UNSW home page at http://www.unsw.edu.au/ which has an index to its contents which includes URLs http://www. acsu.unsw.edu.au/ and http://www.misu.unsw.edu.au/. You can access this information from your workstation and in any computing laboratory with access to WWW.

The information provided on the WWW includes more details about DIS information technology units such as points of contact for particular areas of responsibility and services provided.

Student Clubs and Societies

Students have the opportunity of joining a wide range of clubs and societies. Many of these are affiliated with the Students' Union. There are numerous religious, social and cultural clubs and also many sporting clubs which are affiliated with the Sports Association. Within the Faculty are a number of student societies. These include BEAT (Built Environment Action Team), TAC (The Architecture Club), BUGS (Building Undergraduate Society), IDSOC (Industrial Design Society), SOLA (Society of Landscape Architects) and OOPS (Organisation of Planning Students).

Clubs and societies seeking to use the name of the University in their title, or seeking University recognition, must submit their constitutions either to the Students' Union or the Sports Association if they wish to be affiliated with either of these bodies, or to the Academic Registrar for approval by the University Council.

Student Equity

The University of New South Wales is committed to providing an educational environment that is free from discrimination and harassment. Both commonwealth and state anti-discrimination law requires the University not to discriminate against students or prospective students on the following grounds: sex, race/ethnicity, age, disability, sexual harassment, racial harassment, disability harassment, marital status, pregnancy, sexual preference, HIV/AIDS. Also included are acts of vilification on the grounds of: race and HIV/AIDS.

Complaint/Disputes
The University has internal dispute handling procedures to deal with complaints against staff or other students. The Discrimination and Harassment Grievance Procedures are handled by the Student Equity Unit of the Equal Employment Opportunity Unit. Complaints that largely concern academic matters are usually handled through the Head of School.

Advocacy and Support
Students can seek assistance getting disputes resolved, either in relation to discrimination or academic matters. Assistance can be sought from various areas in the University including:

Student Equity Unit; Student Guild Advocacy Service; Student Counselling; Equal Employment Opportunity Unit; Course Coordinators; Senior Academic Staff; Heads of School.

Students may be confident that their interests will be protected by the University if a complaint is lodged. This means that students should not be disadvantaged or victimised because they have, in good faith, sought to assert their rights to equal opportunity in education.

Equal Opportunity in Education Policy Statement

Under the Federal Racial Discrimination Act (1975), Sex Discrimination Act (1984), and Disability Discrimination Act (1992) and the New South Wales Anti-Discrimination Act (1977), the University is required not to discriminate against students or prospective students on the grounds of age, disability, homosexuality (male or female), marital status, pregnancy, race (including colour, nationality, descent, ethnic, ethno-religious or national origin, and immigration), religious or political affiliation, views or beliefs, sex, and transgender or transsexuality. Under the University of New South Wales Act (1989), the University declares that it will not discriminate on the grounds of religious or political affiliations, views or beliefs.

University Commitment to Equal Opportunity in Education
As well as recognising its statutory obligations as listed, the University will eliminate discrimination on any other grounds which it deems to constitute disadvantage. The University is committed to providing a place to study free from harassment and discrimination, and one in which every student is encouraged to work towards her/hismaximum potential. The University further commits itself to course design, curriculum content, classroom environment, assessment procedures and other aspects of campus life which will provide equality of educational opportunity to all students.

Special Admissions Schemes
The University will encourage the enrolment of students who belong to disadvantaged groups through programs such as the University Preparation Program and the ACCESS Scheme. Where members of disadvantaged groups are particularly under-represented in certain disciplines, the responsible faculties will actively encourage their enrolment.

Support of Disadvantaged Students
The University will provide support to assist the successful completion of studies by disadvantaged group members through such means as the Aboriginal Education Program and the Learning Centre. It will work towards the provision of other resources, such as access for students with impaired mobility, assistance to students with other disabilities, the provision of a parents' room on the upper campus, and increased assistance with English language and communication.

Course Content, Curriculum Design, Teaching and Assessment, and Printed Material
Schools and faculties will monitor course content (including titles), teaching methods, assessment procedures, written material (including study guides and handbook and Calendar entries) and audiovisual material to ensure that they are not discriminatory or offensive and that they encourage and facilitate full participation in education by disadvantaged people.

Equal Opportunity Adviser Scheme
The University will continue its Equal Opportunity Adviser Scheme for students who feel that they have been harassed or who consider they have been disadvantaged in their education by practices and procedures within the University.

Harassment Policy
The University is committed to ensuring freedom from harassment for all people working or studying within the institution. It will continue to take action, including disciplinary action, to ensure that freedom from harassment is achieved.

Students With Disabilities

The University of New South Wales has a policy of equal opportunity in education and seeks wherever possible to ensure maximum participation of students with disabilities.

The University offers a range of assistance: examination support; specialised equipment; educational support; parking provisions; library assistance.

A Resource Guide for students and staff with disabilities and a map showing wheelchair access is available from the Coordinator for Disability Support Services, the EEO Unit, the Library, the Student Guild, and the Student Equity Unit.

It is advisable to contact the Coordinator for Disability Support Services during the enrolment period, to discuss any support needs.

The Coordinator for Disability Support Services can be contacted on (02) 9385 4770 or at the Student Equity Unit, in the East Wing of the Quadrangle Building.

Special Government Policies

The NSW Health Department and the NSW Department of Education and Training have special requirements and policies of which students of health-related and education programs should be aware. The requirements relate to:

- clinical/internship placements which must be undertaken as part of your program *and*
- procedures for employment after you have completed the program

Health-related programs

Criminal record checks

The NSW Health Department has a policy that all students undertaking clinical placements, undergo a criminal record check prior to employment or placement in any capacity in the NSW Health System. This check will be conducted by the NSW Police Service and will be co-ordinated by the Department of Health.

Infectious diseases

Students required to complete clinical training in the NSW hospital system will be subject to various guidelines and procedures laid down for health workers by the NSW Department of Health relating to vaccination and infection control.

An information sheet is available from your program officer and further details can be obtained from your Program Authority.

Education programs

Criminal record checks

It is a requirement that a check of police records be conducted for all teacher education students applying for an unsupervised internship placement in a New South Wales Government school.

Contact your program co-ordinator for further details.

Faculty of Built Environment General Education Rules

The University undertook a major review of the General Education program in 1994, the results of which laid the ground rules for the present program, introduced in 1996.

Every undergraduate student (who is not otherwise entitled to exemption – see below) must take 12 units of credit of General Education. In addition, UNSW policy requires that all students must complete up to 56 hours of study that fosters acceptance of professional and ethical action as well as social and environmental responsibility. Most programs in this Faculty fulfil that latter requirement as part of the normal program curriculum. However, in the case of both the BBCM and BSc(Arch) programs, students are required to take BENV1382, Social Responsibility and Professional Ethics.

The objectives of General Education, and details of the courses offered across the University, are published in the General Education Handbook, which is distributed free each year from Faculty Student Centre.

Certain restrictions apply to students' choices:

- From 2000 students can take General Education courses offered by the Faculty of the Built Environment as electives.
- Students should not take General Education courses (which are judged by the Faculty's General Education Committee or program authority as being) in discipline areas similar to the major discipline area(s) of the student's program.

Students' first choices cannot be guaranteed, as students in later program stages will be given preference over those in earlier stages; quotas may be set for different Faculties, and courses. Courses with insufficient enrolments will be cancelled by 31 January (for Session 1 courses) and 27 June (for Session 2 courses).

Students who commenced their programs prior to 1996

These students were governed by the pre-1996 GE rules. The general principle that will be applied is that no such student is to be disadvantaged by the change. This principle is interpreted by the Faculty as follows:

- Such students must satisfy the rules which applied in 1995 regarding the number of units of credit of General Education to be undertaken.
- Previously, these requirements had to be split between General Education "Categories" in prescribed ways. This is no longer the case, and such students will be permitted to choose any General Education courses for which they possess the prerequisites, and from which they are not excluded. Courses taken prior to 1996 will be aggregated with those taken subsequently, with hours converted to units of credit at the rate of 28 hours = 3 units of credit.

Exemption from part of or all of the General Education program

There will be no general exemptions for students enrolled in single degree programs.

Special Student Exemptions

Students transferring to the Faculty from another Faculty at UNSW, or from another higher education/tertiary institution, who believe that their prior learning and/or qualification satisfies the University's General Education objectives are eligible to seek exemption from all, or part of the UNSW General Education requirements (4 courses or 12 units of credit).

Applicants for exemption must supply full written justification for their request, plus appropriate documentation, showing how they have satisfied the GE objectives (see General Education Handbook). Applications will be considered on a case by case, and course by course basis by the Faculty's General Education Committee, which will make a determination and notify the student accordingly. The Committee's yardsticks will be:

- the extent to which the courses nominated for exemption satisfy sufficient GE objectives (ie cooperative interaction with students in other disciplines, most importantly; skills/competencies complementary to the major discipline area; social and ethical responsibility and development; empowerment to challenge traditional knowledge/paradigms);
- the extent to which the previous program is different in paradigm and content to that in which the student is presently enrolled;
- the length of previous study undertaken, where, in principle, 1 year might qualify for exemption from one GE course (3 units of credit), 2 years for 6 UOC, 3 years for 9 UOC and 4 years for 12UOC.

In all cases, the onus is on the student to present a written justification.

Note:
Life experience and/or mature age entry are not grounds for exemption.

Practical experience/industry placement or a UPP GE course are not grounds for exemption.

Substitution

Students may apply to the Faculty's General Education Committee for approval to substitute any course(s) from other Faculties, for which they have the prerequisites, for General Education courses up to a total maximum of 6 units of credit (or 50%) of General Education. Substitution requests must state how the proposed courses will, together with the remainder of the student's GE program, satisfy the GE objectives. The Committee will approve the request if satisfied that the substitution(s) will indeed allow this to occur.

Students may substitute the study of Language Other Than English (LOTES) within their General Education program. English (and other languages) as offered by the Institute of Languages or Learning Centre are excluded. Only languages offered by academic units are acceptable; a maximum of 2 language courses/sessions can be substituted for General Education courses.

- Irrespective of the amount of units of credit associated with a mainstream course, students can only count 3 UOC towards the General Education Requirement.
- Students should ensure that the substitute course has a seminar component. It is unlikely that the Faculty General Education Committee will accept it otherwise.

Prerequisites, co-requisites, and exclusions

The General Education Committee will determine prerequisites, co-requisites and exclusions as and when necessary.

Honours calculations: Include General Education courses.

Enquiries

Any General Education enquiries should be directed in the first instance to The Faculty Student Centre, Red Centre Building.

The Faculty of the Built Environment offers the following undergraduate degree programs: BArch, BSc(Arch), BIA, BBCM, BIndDes, BLArch, BTP and combined degrees BArchBA and BArchBSocSc. These programs provide professional education in the fields of architecture, industrial design, building, quantity surveying, interior architecture, landscape architecture and town planning. Put more generally, these programs provide education and training in the arts and sciences involved in the design and construction of buildings, in the development of cities, in landscape design and the development of manufactured products. In addition to professional and vocational training, the programs include general education courses to provide graduates with a broad understanding of the humanities and the social sciences.

Architecture Program

Program Head
Desley Luscombe

Architecture today is an art, a technology and a business. In the modern building industry the architect is the one person who considers the building as a whole end product: serving a purpose, built of materials using technology, to a cost, for a client, providing an environment of space, light and climate, changing its context by its location and form and conveying artistic meaning.

For small buildings the architect can lead and manage the whole process. As projects become larger and more complex the architect becomes a member of a team, sometimes captain of the team, often just one member but always from the beginning seeing the end product as a whole. From a comprehensive study of the requirements for a building the architect prepares a design concept which is continually adjusted and refined over the life of the project. The architect's role is one of continual creativity.

The BArch program provides graduates with an understanding of the forces that shape buildings and with the skills to guide those forces to a desired end product.

3260
Bachelor of Architecture

BArch

The Bachelor of Architecture degree provides academic education and practical experience leading to professional qualifications in architecture. It requires full time attendance for five years with six months work experience that must be completed prior to the Graduation Project. There are two central goals. The primary goal is to equip students with the theoretical and practical knowledge, skills and techniques needed for the design, documentation and administration of building construction. A more general goal is to provide students with an all-round general problem-solving education. Lectures and practical sessions cover theoretical knowledge in the following areas:

1. Architectural Design
2. Architectural Communications
3. Architectural History and Theory
4. Architectural Technology
5. Architectural Practice

Progression through the program is by years, each comprising two semester-long design studios and their corresponding corequisites. These design studios and corequisites may be taken in either order in any one year to facilitate mid-year entry to the program where required. However, admission to each year is subject to the successful completion of the preceding design stages and a majority of their corequisite courses, except where approval has been given by the Program Head.

Student Exchange

The University has established an extensive and growing number of Student Exchange programs with universities around the world. The Faculty strongly encourages all students to consider participating in one of the programs for one or two semesters. Students in the BArch program can go on exchange any time from the middle of year 3 (as indicated in Table 3260–1 Program Schedule). For detailed information on course options and scholarships contact the International Student Centre.

Registration/Professional Recognition

The Degree of Bachelor of Architecture from the University of New South Wales is recognised by the Board of Architects of New South Wales for the purpose of legal registration. In addition, to become registered the candidate must satisfy the following requirements:

1. Produce evidence of two years approved work experience, at least one of which has been subsequent to the completion of the program; and
2. Pass a special examination in Architectural Practice administered by the Board of Architects.

Graduates with two years approved work experience are eligible for Associate Membership of the Royal Australian Institute of Architects. Students enrolled in the BArch program (3260) or the BSc (Arch) program (3265) are eligible to become Student Members of the Royal Australian Institute of Architects.

Table 3260–1 Program Schedule

Year 1		
Session 1		**UOC**
BENV1101	Design Fundamentals: Studio 1	8
BENV1121	Architectural History and Theory 1	4
BENV1141	Computers and Information Technology	3
BENV1171	Architectural Technologies 1	9
	Total	**24**

Session 2

ARCH1102	Architectural Design Workshop 1	8
BENV1122	Architectural History and Theory 2	4
ARCH1142	Communications 1	4
BENV1172	Architectural Technologies 2	8
	Total	**24**

Year 2

Session 1		**UOC**
ARCH1201	Architectural Design Workshop 2	8
ARCH1221	Architectural History and Theory 3	4
ARCH1241	Communications 2	3
ARCH1271	Architectural Technologies 3	6
	General Education	3
	Total	**24**

Session 2

ARCH1202	Architectural Design Workshop 3	8
ARCH1222	Architectural History and Theory 4	3
BENV1242	Computer-Aided Design	3
ARCH1272	Architectural Technologies 4	4
ARCH1282	Research Practice	3
	General Education	3
	Total	**24**

Year 3

Session 1		**UOC**
ARCH1301	Architectural Design Studio 1	8
ARCH1321	Architectural History and Theory 5	3
BENV1341	Design Modelling and Visualisation	3
ARCH1371	Architectural Technologies 5	4
	Electives	3
	General Education	3
	Total	**24**

Session 2

ARCH1302	Architectural Design Studio 2	9
ARCH1382	Practicum	3
	Electives	9
	General Education	3
	Total	**24**

Opportunity for alternate off-campus Exchange Program with the approval of the Program Head.

Year 4

Session 1		**UOC**
ARCH1401	Architectural Design Studio 3	9
ARCH1471	Building Services 1	3
	Electives	12
	Total	**24**

Opportunity for alternate off-campus Exchange Program with the approval of the Program Head.

Session 2

ARCH1402	Architectural Design Studio 4	9
ARCH1472	Building Services 2	3
BENV1381	Professional Practice 1	3
	Electives	9
	Total	**24**

Opportunity for alternate off-campus Exchange Program with the approval of the Program Head.

Additional Requirement (completed after Yr 1 and before Yr 5):

ARCH1583	Work Experience	**24**

Year 5

Session 1

ARCH1501	Investigation Workshop	9
ARCH1581	Politics, Community and Practice	3
	Electives	12
	Total	**24**

Session 2

ARCH1502	Graduation Studio	9
ARCH1582	Professional Practice 2	3
	Electives	12
	Total	**24**

Degree Rules

1. The degree of Bachelor of Architecture is awarded at either pass or honours level after the successful completion of a minimum of 264 units of credit including 12 units of General Education.
2. To fulfil these requirements, students must complete:
   - 171 units of core courses, being all those prescribed in the in the faculty regulations for this program.
   - 24 units of work experience completed after Year 1 and before Year 5 as prescribed in the faculty regulations for this program.
   - 18 units of program electives, selected in accordance with the faculty regulations for this program.
   - 39 units of open electives, selected in accordance with the faculty regulations for undergraduate study in the Faculty of the Built Environment.
3. The minimum duration of the program is 5 years or 10 sessions of full-time study, consisting of 24 units of credit each session, plus the required work experience.
4. General Education courses may not be taken before a student enters Year 2 of the Program.

Faculty Regulations for the BArch

Core Courses

The core courses prescribed for the Program are all those listed in Table 3260–1 Program Schedule.

Program Electives

Program electives must be selected from those offered by the Faculty of the Built Environment as listed in Table BENV-1.

Honours

The Bachelor of Architecture degree may be awarded with honours based on the quality of performance in the program and in accordance with current program policy. Honours are Class 1 or Class 2 Division 1 or Class 2 Division 2.

Work Experience

Each student is required to undertake 24 weeks of off-campus activity in the pursuit of architectural work experience. This is required to be taken after Year 1 and before Year 5. It may be carried out in several components, any one of which must not be less than eight weeks in duration. If students wish to propose an alternative experience to that carried out in a registered architect's office, approval must be given by the Program Head. Assessment is only within the terms of the course ARCH1583 Work Experience in the Bachelor of Architecture degree program. The Architecture Program takes no responsibility for any assessment or consideration for registration with the Board of Architects of New South Wales or membership of the Royal Australian Institute of Architects.

Composite Courses

Where a composite course is failed, all component parts must be repeated.

Science (Architecture) Program

Program Head
Desley Luscombe

Program Coordinator
Stephen Peter

This program provides an opportunity for students to undertake studies within the discipline of architecture, generally within a well-defined area of specialization. At present, a formal specialization is offered in the area of architectural computing, but the opportunity exists for any major to be identified through consultation with the Program Coordinator. Where at least 24 units of electives and both research projects have to be completed within the area of specialization, then that major will be identified on the degree testamur. The program can also be undertaken with no identified major, in which case it is referred to as the generalist stream and no major is identified on the testamur at graduation.

3265
Bachelor of Science (Architecture)

BSc(Arch)

The program is normally completed in three years of full-time study. Year 1 is taken in common with BArch students. In Year 2, students undertake courses in their area of specialization. During Year 3 of the program, students undertake two research projects that provide an opportunity to explore areas of specialized interest in considerable depth.

There are at present two alternate streams in the program with differing requirements. The Generalist program (Table 3265-1) allows students to select courses based on their interests. These could include: Technology History & Theory or Communications. The Computing major (Table 3265-2) educates students in Architectural Computing and allows students to specialize in an area of computing such as: Computer-aided Design (CAD), Building Modelling, Rendering, Animation, Multimedia or IT Management.

It is UNSW policy that all students must complete up to 56 hours of study that fosters acceptance of professional and ethical action as well as social and environmental responsibility. This is known as Objective 5 in the General Education policy. This program satisfies half of that requirement within the courses that are taken in common with the BArch program. The remaining 28 hours are satisfied by taking the course BENV1382 Social Responsibility and Professional Ethics in the third year of study.

Student Exchange

The University has established an extensive and growing number of Student Exchange programs with universities around the world. The Faculty encourages all students to consider participating in a student exchange program. For detailed information, contact the International Student Centre.

Table 3265–1 Program Schedule - Generalist Stream

Year 1		
Session 1		**UOC**
BENV1101	Design Fundamentals: Studio 1	8
BENV1121	Architectural History and Theory 1	4
BENV1141	Computers and Information Technology	3
BENV1171	Architectural Technologies 1	9
	Total	**24**
Session 2		
ARCH1102	Architectural Design Workshop 1	8
ARCH1142	Communications 1	4
BENV1122	Architectural History and Theory 2	4
BENV1172	Architectural Technologies 2	8
	Total	**24**
Year 2		
Session 1		
ARCH1241	Communications 2	3
	Electives	18
	General Education	3
	Total	**24**
Session 2		
BENV1242	Computer-Aided Design	3
ARCH1282	Research Practice	3
	Electives	15
	General Education	3
	Total	**24**
Year 3		
Session 1		
ARCH1398	Research Project 1	6
BENV1382	Social Responsibility & Professional Ethics	3
	Electives	12
	General Education	3
	Total	**24**
Session 2		
ARCH1399	Research Project 2	9
	Electives	12
	General Education	3
	Total	**24**

Table 3265–2 Program Schedule - Computing Major

This table shows a typical pattern of study (from Year 2 onwards), recommended for someone pursuing a computing major. Note that students are required to complete 24 units (and the 2 projects) to receive the major, while this recommended program includes 30 units of computing courses.

Year 2		
Session 1		**UOC**
ARCH1241	Communications 2	3
BENV2405	Computer Graphics Programming	6
BENV2406	Design and Computation	3
	Electives	9
	General Education	3
	Total	**24**
Session 2		
BENV1242	Computer-Aided Design	3
ARCH1282	Research Practice	3
BENV1042	World Wide Web in Pres. & Comm.	6
BENV2403	Info Tech for Design and Construction	3
	Electives	6
	General Education	3
	Total	**24**
Year 3		
Session 1		
ARCH1398	Research Project 1	6
BENV1382	Social Responsibility & Professional Ethics	3
BENV1043	Multimedia in Design Presentation	6
BENV1341	Design Modelling and Visualisation	3
	Electives	3
	General Education	3
	Total	**24**

Session 2

ARCH1399	Research Project 2	9
BENV2404	CAD Management for Architects	3
	Electives	9
	General Education	3
	Total	**24**

Year 4 (Honours only)

Session 1

ARCH1498	Honours Project 1	24
	Total	**24**

Session 2

ARCH1499	Honours Project 2	24
	Total	**24**

Degree Rules

1. The degree of Bachelor of Science (Architecture) is awarded at pass level after the successful completion of a minimum of 144 units of credit including 12 units of General Education.
2. The degree of Bachelor of Science (Architecture) is awarded at honours level after the successful completion of a minimum of 192 units of credit including 48 units in an approved honours program and 12 units of General Education.
3. To fulfil these requirements, students must complete:
   - 75 units of core courses, being all those prescribed in the faculty regulations for this program.
   - 57 units of open electives, selected in accordance with the faculty regulations for undergraduate study in the Faculty of the Built Environment.
4. A student may undertake a major by completing a minimum of 24 units in an approved disciplinary stream (in lieu of an equivalent unit value of open electives) plus undertaking approved topics related to that disciplinary stream for both the core Research Project courses (ARCH1398 and ARCH1399).
5. The minimum duration of the program is 3 years or 6 sessions of full-time study, consisting of 24 units of credit each session. This is extended by 1 year (or 2 sessions), if the honours program is attempted.
6. General Education courses may not be taken before a student enters Year 2 of the Program.

Faculty Regulations for the BSc(Arch)

Core Courses

The core courses prescribed for the Program are all those listed in Table 3265–1 Program Schedule - Generalist Stream.

Honours

The Bachelor of Science (Architecture) degree may be awarded with honours after the successful completion of a two-semester honours program following the completion of the BSc(Arch) program, and in accordance with current Faculty regulations. Honours are Class 1 or Class 2 Division 1 or Class 2 Division 2.

Students must qualify by achieving a minimum credit average during the first three years of study before being admitted to the honours year.

Interior Architecture Program

Program Head
Harry Stephens

Interior architecture is the specialist area of architecture concerned with the interiors of buildings. From professional advice through design and the management of all the processes involved in the procurement of interiors, it is concerned with the internal arrangement, fitting out and finishing of buildings of all sizes and types.

This program is structured to meet the needs of the individual seeking the appropriate theoretical and practical education necessary to take a fully professional role in this field as an interior designer. (It should be noted that, unlike elsewhere in the world, use of the title "Interior Architect" in Australia is not permitted under current Australian legislation).

3255
Bachelor of Interior Architecture

BIA

The Bachelor of Interior Architecture is a four-year full-time semester-based program. It maintains strong links with the Bachelor of Architecture program from which it evolved with students of both programs taking some courses together, particularly in the earlier sessions.

The program consists of core and elective courses with design as the central concern. The Design Studio is the focus for the application of the theoretical material delivered in all other course as well as developing and presenting its own.

Student Exchange

The university has established an extensive and growing number of Student Exchange programs with universities around the world. The Faculty strongly encourages all students to consider participating in one of the programs for one or two semesters. Students in the BIA Program may go on exchange any time after the completion of year 2. For detailed information on course options and scholarships contact the International Student Centre.

Registration/Professional Recognition

The Degree of Bachelor of Interior Architecture from the University of New South Wales is recognised, through the Design Institute of Australia (DIA - the professional body representing Interior Architecture/Design in Australia), by the International Federation of Interior Architects (IFI). Students enrolled in the program are eligible to apply for Student membership of the Design Institute of Australia and Associate membership upon graduation. Full membership requires two years of approved professional experience after graduation.

Table 3255–1 Program Schedule

Year 1		
Session 1		**UOC**
BENV1101	Design Fundamentals: Studio 1	8
BENV1121	Architectural History and Theory 1	4
BENV1141	Computers and Information Technology	3
BENV1171	Architectural Technologies 1	9
	Total	**24**
Session 2		
INTA1102	Design Studio 2	8
BENV1122	Architectural History and Theory 2	4
INTA1142	Communications 1	4
BENV1172	Architectural Technologies 2	8
	Total	24
Year 2		
Session 1		
INTA1201	Design Studio 3	6
INTA1211	Design Studies 1	4
INTA1221	History of Interior Architecture and Design	3
INTA1241	Communications 2	4
INTA1271	Interior Technics 1	4
	General Education	3
	Total	24
Session 2		
INTA1202	Design Studio 4	6
INTA1212	Design Studies 2	3
BENV1242	Computer Aided Design	3
INTA1272	Interior Technics 2	3
	Electives	6
	General Education	3
	Total	24
Year 3		
Session 1		
INTA1301	Design Studio 5	6
INTA1311	Design Studies 3	3
BENV1341	Design Modelling and Visualisation	3
INTA1371	Interior Technics 3	3
	Electives	6
	General Education	3
	Total	24
Session 2		
INTA1302	Design Studio 6	9
INTA1312	Design Studies 4	3
INTA1342	Communications 3	3
BENV1381	Professional Practice 1	3
	Electives	6
	Total	24
Year 4		
Session 1		
INTA1401	Design Studio 7	9
INTA1421	Project Research	3
INTA1481	Professional Practice 2	3
	Electives	6
	General Education	3
	Total	24
Session 2		
INTA1402	Graduation Project	15
INTA1422	Dissertation	9
	Total	24

Degree Rules

1. The degree of Bachelor of Interior Architecture is awarded at either pass or honours level after the successful completion of a minimum of 192 units of credit including 12 units of General Education.
2. To fulfil these requirements, students must complete:
   - 156 units of core courses, being all those prescribed in the faculty regulations for this program.
   - 24 units of open electives, selected in accordance with the faculty regulations for undergraduate study in the Faculty of the Built Environment.
3. The minimum duration of the program is 4 years or 8 sessions of full-time study, consisting of 24 units of credit each session.
4. General Education courses may not be taken before a student enters Year 2 of the Program.

Faculty Regulations for the BIA

Core Courses

The core courses prescribed for the Program are all those listed in Table 3255–1 Program Schedule.

Honours

The Bachelor of Interior Architecture degree may be awarded with Honours based upon the quality of performance in the program and in accordance with current program policy. Honours are Class 1 or Class 2 Division 1 or Class 2 Division 2.

Building Construction Management Program

Program Head
Paul Marsden

This program prepares students for professional and executive employment within one of Australia's largest industries, the construction industry. Careers in a wide variety of areas, in both private enterprise and in the public sector are available to building construction management graduates. More specifically, these include positions as project manager, master builder, construction consultant, building estimator, quantity surveyor, building economist, property manager and building scientist.

3331
Bachelor of Building Construction Management

BBCM

The Bachelor of Building Construction Management is a four-year full-time program which allows students to specialize for careers in Construction and Project Management, Quantity Surveying, Property Development and Property Management.

The program is offered over a period of 4 years of full-time study, or a minimum of eight sessions, leading to the award of the degree of Bachelor of Building Construction Management (BBCM). The Program is structured as follows:

- Years 1-3 consist of a fixed program of compulsory courses.
- Year 4 consists of electives and a compulsory Thesis.

Assumed Knowledge

Before entry to the Bachelor of Building Construction Management program it is strongly recommended that students complete studies in at least 2 unit Mathematics and 2 unit General English (or their equivalent). Students who have not achieved a mark of 65% or better in 2 unit Mathematics (or equivalent) are advised to complete a bridging course in Mathematics prior to commencing the Program.

Student Exchange

The university has established an extensive and growing number of Student Exchange programs with universities around the world. The Faculty encourages all students to consider participating in a student exchange program. For detailed information, contact the International Student Centre.

Registration/Professional Recognition

The award of the degree, Bachelor of Building Construction Management is recognised for admission to membership by:

1. The Australian Institute of Building
2. The Australian Institute of Quantity Surveyors, subject to completion of the following electives in addition to all compulsory courses:

   BENV2709 Construction 6
   BLDG4275 Dispute Avoidance and Resolution
   BLDG4303 Quantity Surveying 3
   BLDG4314 Building Economics 3
   BLDG9998 Quantity Surveying Industry Program to be taken as 6 months employment in a quantity surveying environment, and to be completed before the start of the final year of the program.
3. The Institution of Surveyors Malaysia, subject to completion of the following electives in addition to all compulsory courses:

   BENV2709 Construction 6
   BLDG4275 Dispute Avoidance and Resolution
   BLDG4303 Quantity Surveying 3
   BLDG4314 Building Economics 3
   BLDG9998 Quantity Surveying Industry Program to be taken as 6 months employment in a quantity surveying environment, and to be completed before the start of the final year of the course.
4. The Australian Property Institute, subject to the completion of the following electives in addition to all compulsory courses and selection of a thesis topic in the area of Land Economics.

   BENV2807 Management 7
   BENV2808 Law for Builders 3
   BLDG4314 Building Economics 3
   BLDG4492 Property Development and Valuation
   BENV2911 Land Economics
   BENV2912 Property Management

Table 3331–1 Program Schedule

Year 1		
Session 1		**UOC**
BLDG1010	Communications and Resource Usage	3
BLDG1091	Built Environment 1	3
BLDG1111	Building Science 1 (Materials)	4
BLDG1201	Construction 1 (Domestic Construction)	4
BLDG1210	Construction Mathematics	3
BLDG1261	Management 1 (Management Principles)	4
BENV1141	Computers & Information Technology	3
	Total	**24**
Session 2		
BLDG1002	Construction 2 (Low Rise Residential)	4
BLDG1051	Structures 1	4
BLDG1411	Building Economics 1 (Micro Economics)	4
PHYS1250	Physics 1 (Building)	3
GMAT0411	Surveying in Building and Construction	3
BLDG2400	Research Methods	3
BLDG1271	Law for Builders 1	3
	Total	**24**
Year 2		
Session 1		
ACCT9001	Introduction to Accounting A	3
BLDG2003	Construction 3 (Framed Buildings)	4
BLDG2261	Management 2 (Planning and Control)	4
BLDG3272	Law for Builders 2	3
BLDG2411	Building Economics 2 (Macro Economics)	3
BLDG3052	Structures 2	4
BLDG1151	Building Services 1 (Hydraulics)	3
	Total	**24**
Session 2		
ACCT9002	Introduction to Accounting B	3
BLDG2112	Building Science 2 (Concrete and Metals)	4
BLDG2152	Building Services 2 (Mechanical)	3
BLDG2301	Quantity Surveying 1	4
BLDG2500	Construction Management Project 1	3
BLDG2264	Management 3 (Contracts)	4
	General Education	3
	Total	**24**

Year 3

Session 1

BLDG3004	Construction 4 (High Rise Buildings)	4
BLDG3266	Management 4 (People Management)	3
BLDG3321	Estimating 1	4
BLDG3303	Quantity Surveying 2	4
BLDG3280	Occupational Psychology, Health and Safety	3
BENV1382	Social Responsibility and Professional Ethics	3
	General Education	3
	Total	**24**

Session 2

BLDG3005	Construction 5 (Techniques)	4
BLDG3070	Geotechnical Engineering for Building	3
BLDG3275	Management 5 (Construction and Quality Management)	4
BLDG3282	Computer Applications in Building	4
BLDG3500	Construction Management Project 2	3
	General Education	6
	Total	**24**

Additional Requirement (completed before start of Year 4)

BLDG9999	Building Industry Program	12
	or	
BLDG9998	Quantity Surveying Industry Program	12

Year 4

Session 1

BLDG4500	Thesis Foundation	6
	Open Electives	18
	Total	**24**

Session 2

BLDG4501	Thesis	9
	Open Electives	15
	Total	**24**

Degree Rules

1. The degree of Bachelor of Building Construction Management is awarded at either pass or honours level after the successful completion of a minimum of 204 units of credit including 12 units of General Education.
2. To fulfil these requirements, students must complete:
   - 147 units of core courses, being all those prescribed in the faculty regulations for this program.
   - 12 units of work experience prior to entry into Year 4 as prescribed in the faculty regulations for this program.
   - 33 units of open electives, selected in accordance with the faculty regulations for undergraduate study in the Faculty of the Built Environment.
3. The minimum duration of the program is 4 years or 8 sessions of full-time study, consisting of 24 units of credit each session plus the required work experience.
4. General Education courses may not be taken before a student enters Year 2 of the Program.

Faculty Regulations for the BBCM

Core Courses

The core courses prescribed for the Program are all those listed in Table 3331–1 Program Schedule.

Honours

The award of honours is based on performance throughout the whole program, without requiring an additional honours program. Honours are determined on the basis of a score which is calculated by weighting more heavily the courses taken in the later years of the program.

Work Experience

Prior to commencing their final year, all students are required to have gained a minimum of 80 days work experience by appropriate employment in the building industry. Notwithstanding the above, for registration with the Australian Institute of Quantity Surveyors or the Institution of Surveyors Malaysia, students must undertake 6 months approved work experience to be completed before the start of the final year of the program.

A proposal for employment must be submitted to the Program Head for approval prior to starting work. Students will be required to produce documented evidence of their work experience. In order to complete this requirement, students must enrol in BLDG9999 Building Industry Program or in BLDG9998 Quantity Surveying Industry Program.

Program Guidelines

Electives

Students' attention is drawn to the list of suggested electives given in Table 3331–2 BBCM Electives. These courses are offered specifically to meet the requirements for membership of professional bodies as defined earlier in this Handbook.

Table 3331–2 BBCM Electives

Session 1		**UOC**
BENV2805	Project Management and Design Process	6
BENV2806	Organisational Behaviour	3
BENV2709	Construction 6 (Industrialisation & Technological Change)	3
BENV2807	Management 7 (Marketing)	3
BENV2808	Law for Builders 3	3
BLDG4314	Building Economics 3	6
BLDG4422	Estimating 2	6
BENV2710	International Housing Practice	3
Session 2		
BLDG4275	Dispute Avoidance and Resolution	3
BENV2408	Building Information Systems	6
BLDG4303	Quantity Surveying 3	3
BLDG4366	Management 6 (Corporate Strategy & Small Business)	3
BENV2911	Land Economics	6
BLDG4492	Property Development and Valuation	3
BENV2912	Property Management	3

Progression

In the event of failure in one or more courses, students may carry the failed course(s) provided that:

- prerequisite courses have been completed to the satisfaction of the Program Head.
- the total number of courses taken at any time does not exceed 8 including General Education.
- the total contact hours do not exceed 20 per week.

Industrial Design Program

Program Head
Lance Green

Industrial design involves the research and design of the whole range of consumer and capital products used by people. Products as diverse as telephones and cranes, gas fires and exhibition systems, toothbrushes and motor cars. Ideally, the industrial designer works as part of a team involving engineering, production and marketing. The industrial designer initially concentrates on establishing the concept as a marketable, producible, useable and socially responsible product; and subsequently details the human factors (ergonomics), appearance (style) and mode of operation. Frequently the designer becomes involved in the corporate image of companies and their products as well as the graphics of the product's packaging and the associated retail support systems.

The program prepares students for professional and executive employment in areas involving the research, design and development of new manufactured products. Whilst it is anticipated that most graduates will be initially employed in an industrial design capacity either in manufacturing companies or consultancies, it is likely that some graduates may subsequently choose to specialize in aspects of marketing, engineering, product management or design management.

3385
Bachelor of Industrial Design

BIndDes

The Bachelor of Industrial Design Program provides academic education and practical experience leading to professional qualifications in industrial design. It requires full time attendance for four years with 50 days work experience taken concurrently with course progress and prior to the Major Project. There are two central goals. The primary goal is to equip students with the theoretical and practical knowledge, skills and techniques needed for the design, documentation and administration of design and product development. A more general goal is to provide students with an all-round general problem-solving education. Lectures and practical sessions cover theoretical knowledge in the following areas:

1. Design Studio
2. Computer Aided Design
3. Commerce and Marketing
4. Science and Engineering
5. Materials and Manufacturing

Student Exchange

The university has established an extensive and growing number of Student Exchange programs with universities around the world. The Faculty strongly encourages all students to consider participating in one of the programs for one or two semesters. Students in the Industrial Design program can go on exchange any time from the middle of year 3 (as indicated in the Program Schedule). For detailed information on course options and scholarships contact the International Student Centre.

Registration/Professional Recognition

The Degree of Bachelor of Industrial Design from the University of New South Wales is recognised by the Design Institute of Australia.

Table 3385–1 Program Schedule

Year 1		
Session 1		**UOC**
BENV1101	Design Fundamentals: Studio 1	8
BENV1141	Computers and Information Technology	3
IDES1011	Workshop Technology	4
MATH1011	General Mathematics 1B	6
IDES1051	Geometrical and Mechanical Drawing A	3
	Total	**24**
Session 2		
IDES1031	Industrial Design Studio 1	6
IDES1082	Engineering Design Mechanics	4
IDES1052	Geometrical and Mechanical Drawing B	4
MATH1021	General Mathematics 1C	6
PHYS1259	Physics 1 (Industrial Design)	4
	Total	**24**
Year 2		
Session 1		
IDES2161	Industrial Design Studio 2 A	6
ACCT9003	Introduction to Accounting Principles	3
IDES1121	History of Industrial Design	3
IDES2201	Ergonomics	6
IDES2101	Perspective and Rendering Techniques	6
	Total	**24**
Session 2		
IDES2162	Industrial Design Studio 2 B	6
IDES2171	Computer Aided Design	6
IDES2182	Materials & Manufacturing Processes for Industrial Design A	3
MATH2839	Statistics SM	3
MARK1012	Marketing Fundamentals	6
	Total	**24**
Year 3		
Session 1		
IDES3221	Industrial Design Studio 3A	6
IDES3202	Materials & Manufacturing Processes for Industrial Design B	3
IDES3231	Computer Graphic Applications	6
MARK2051	Consumer Behaviour	6
IDES2091	Design Methodology	3
	Total	**24**
Session 2		
IDES3222	Industrial Design Studio 3 B	6
ELEC0806	Electrical Engineering for Industrial Design	6
IDES3262	Production Design & Technology for Industrial Design	3
IDES4311	Graphic Design	3
	General Education	6
	Total	**24**
Additional Requirement (completed after Year 3)		
IDES4391	Industrial Experience	12
Year 4		
Session 1		
IDES4291	Industrial Design Studio 4	6
IDES4301	Project Research	6
MARK3091	New Product and New Service Development	6
	General Education	6
	Total	**24**

Session 2

IDES4351	Project	15
IDES4371	Design Management for Industrial Design	3
IDES4321	Environmental and Interior Design	3
	Elective	3
	Total	**24**

Degree Rules

1. The degree of Bachelor of Industrial Design is awarded at either pass or honours level after the successful completion of a minimum of 204 units of credit including 12 units of General Education.
2. To fulfil these requirements, students must complete:
   - 177 units of core courses, being all those prescribed in the faculty regulations for this program.
   - 12 units of work experience following Year 3 as prescribed in the faculty regulations for this program.
   - 3 units of open electives, selected in accordance with the faculty regulations for undergraduate study in the Faculty of the Built Environment.
3. The minimum duration of the program is 4 years or 8 sessions of full-time study, consisting of 24 units of credit each session.
4. General Education courses may not be taken before a student enters Year 2 of the program.

Faculty Regulations for the BIndDes

Core Courses

The core courses prescribed for the Program are all those listed in Table 3385–1 Program Schedule.

Honours

The Bachelor of Industrial Design degree may be awarded with Honours based upon the quality of performance in the program, and in accordance with current program policy. Honours are Class 1 or Class 2 Division 1 or Class 2 Division 2.

Work Experience

Each student is required to gain 50 days of work experience in an organization that is involved in Industrial Design. The Program Head must approve the organization prior to negotiation of a student placement.

Landscape Architecture Program

Program Head
Linda Corkery

Landscape architecture is a design discipline that is concerned with the environment as a whole; its design, development, planning and management. It aims to create and sustain habitats for people and other living things in ways which conserve and celebrate ecological relationships, cultural values and symbolic associations.

The principal focus of landscape architecture is the theory and practice of landscape design with a strong emphasis on landscape planning, cultural studies and conservation of the environment.

At the University of New South Wales students are strongly encouraged to consider the study of landscape architecture as both a powerful way of thinking and as education for a specific vocation. On graduating from the program, students should have developed a critical awareness of social and environmental issues, a creative approach to landscape design and landscape planning, and a sound foundation in the technical and professional requirements of Landscape Architecture practice. In addition, the program aims to impress an ethical commitment to care of the environment and a strongly responsible attitude to the wider community.

3380
Bachelor of Landscape Architecture

BLArch

The Bachelor of Landscape Architecture program is of four years duration and requires full-time attendance throughout. Students are introduced to the theory and practice of landscape architecture through an exploration of design principles, graphic techniques, ecological processes and, studies of human modification of the environment. As students progress through the program, increasing emphasis is laid upon creative design with particular application to Australian conditions. Projects are related to the subject matter of concurrent lectures, and culminate in landscape studies of regional and national significance.

The majority of courses are taught specifically within the Landscape Architecture Program. However, contact with the students and staff of other Schools is assured by the inclusion of courses from the School of Geography, other programs in the Faculty of the Built Environment, the University's General Studies program and the program of elective courses. In the final two years of the program students are able to undertake a significant component of elective courses from the Landscape Architecture Program, other programs within the Faculty or from other faculties, which effectively allows them to develop a major specialization.

The program seeks the synthesis of knowledge and skills through project based learning in a sequence of eight Design Studios. Support courses are grouped into the strands: environment, history and theory, communication, technology and practice.

Student Exchange

The University has established an extensive and growing number of Student Exchange programs with universities around the world. The Faculty encourages all students to consider participating in a student exchange program. For detailed information, contact the International Student Centre.

Registration/Professional Recognition

The program is recognized by the Australian Institute of Landscape Architects and graduates holding the BLArch degree may qualify for corporate membership of the Institute.

Table 3380–1 Program Schedule

Year 1
Session 1

BENV1101	Design Fundamentals: Studio 1	8
BENV1141	Computers and Information Technology	3
LAND1121	Introduction to Landscape Architecture	3
LAND1151	Horticulture	4
GEOG1701	Environmental Systems and Analysis	6
	Total	**24**

Session 2

LAND1152	Landscape Analysis	8
LAND1142	Design Communication	4
LAND1102	Landscape Design 2: Design Process	4
LAND1171	Landscape Technology 1	4
LAND1122	History of Landscape Architecture	4
	Total	**24**

Year 2
Session 1

LAND1221	Environmental Sociology for Landscape Architects	3
LAND1281	Professional Practice 1	3
LAND1201	Landscape Design 3: Site Planning	8
LAND1251	Advanced Horticulture	3
LAND1271	Landscape Technology 2	4
	General Education	3
	Total	**24**

Session 2

LAND1202	Landscape Design 4: Landform and Planting Design	8
LAND1222	History and Theory Elective	3
LAND1272	Landscape Technology 3	3
LAND1351	Landscape Management	4
	General Education	6
	Total	**24**

Additional Requirement (completed before start of Year 3)

LAND1381	Landscape Practice 1	12

Year 3
Session 1

LAND1301	Landscape Design 5: Design with a Complex Program	9
LAND1371	Landscape Engineering	3
BENV1242	Computer Aided Design	3
	General Education	3
	Electives	6
	Total	**24**

Session 2

LAND1302	Landscape Design 6: Design Resolution & Documentation	9
LAND1321	Research Methods	3
LAND1382	Professional Practice 2	3
	Electives	9
	Total	**24**

Additional Requirement (completed before start of Year 4)

LAND1481	Landscape Practice 2	12

Year 4
Session 1

LAND1421	Landscape Thesis	15
	Electives	9
	Total	**24**

Session 2

LAND1401	Landscape Design 7: Urban Landscape Design	12
LAND1402	Landscape Design 8: Graduating Studio	12
	Total	**24**

Degree Rules

1. The degree of Bachelor of Landscape Architecture is awarded at either pass or honours level after the successful completion of a minimum of 216 units of credit including 12 units of General Education.
2. To fulfil these requirements, students must complete
   - 156 units of core courses, being all those prescribed in the faculty regulations for this program.
   - 24 units of work experience prior to Year 4 as prescribed in the faculty regulations for this program.
   - 24 units of open electives, selected in accordance with the faculty regulations for undergraduate study in the Faculty of the Built Environment.
3. The minimum duration of the program is 4 years or 8 sessions of full-time study, consisting of 24 units of credit each session, plus the required work experience.
4. General Education courses may not be taken before a student enters Year 2 of the Program.

Faculty Regulations for the BLArch

Core Courses

The core courses presented for the Program are all those listed in Table 3380 – 1 Program Schedule.

Honours

The Bachelor of Landscape Architecture degree may be awarded with Honours based upon the quality of performance in the program and in accordance with current program policy. Honours are Class 1 or Class 2 Division 1 or Class 2 Division 2.

Work Experience

Students of the undergraduate program must obtain a total of four months' work experience prior to graduation, of which a minimum of two months must be in a design office and a minimum of two months in landscape industry work. This normally takes the form of employment during long vacations between sessions supervised by a landscape architect, landscape contractor or nursery. Each student undertaking work experience must obtain prior approval of the Work Experience Coordinator. Each student must obtain from the employer a statement of experience gained, maintain an accurate record in logbook form and submit a written report describing the work undertaken during the various work experience components.

Planning and Urban Development Program

Program Head
Stephen Harris

Planners are interested in the design and conservation of the environment, and work with the processes that shape land use. As such, town planners must be multidisciplinary in their approach, combining expert analytical skills and strong communication techniques with an understanding of policy formulation, land-use allocation and design. Successful planners learn to write well, communicate well verbally with clients, colleagues and politicians, and apply strong analytical and design skills in commercial and public environments.

3360
Bachelor of Town Planning

BTP

The Bachelor of Town Planning Program provides academic education and practical experience leading to professional qualifications in town planning. The program is of four years full time duration with an additional mandatory year of practical experience, normally taken after completing Semester 1 of Year 3.

Town Planning has as its focus the management and development of urban and rural areas; ranging from small local precincts to metropolitan areas and regions. The town planner's task in this regard is to integrate and coordinate the aims and actions of a large number of government and private organizations and individuals to provide an equitable and efficient distribution of resources. This involves collecting and analysing information; identifying needs; making forecasts; preparing policies, plans and programs for consultation, decision and implementation; exercising development control; evaluating development proposals; and evaluating results.

The objectives of the program are to create an awareness of the context in which planning operates, impart knowledge of how planning can influence the community and the physical environment, equip students with the competence to apply this knowledge at different levels in a wide range of situations, create an understanding of the contribution other disciplines can make to planning and vice versa, and develop skills in policy formulation, land use allocation and control, design and communication. The program is also structured to allow students to study a secondary specialisation in a particular area, or to undertake a wide range of educational experiences from across the University.

Student Exchange

The university has established an extensive and growing number of Student Exchange programs with universities around the world. The Faculty strongly encourages all students to consider participating in one of the programs for one or two semesters. Students in the BTP program can go on exchange any time from the end of Year 1. For detailed information on course options and scholarships contact the International Student Centre.

Registration/Professional Recognition

The Degree of Bachelor of Town Planning from the University of New South Wales is recognised by the Royal Australian Planning Institute as the academic qualification for Corporate Membership. The Institute requires that for Corporate Membership graduates must have at least one additional year of practical experience after graduation.

Corporate Membership of the Royal Australian Planning Institute confers reciprocal recognition in many countries internationally. Thus, the BTP Degree brings with it international recognition as a professional town planning qualification.

Table 3360–1 Program Schedule

This is the recommended schedule for students enrolled in 2000 under transition to the new Planning program that will operate fully from 2001.

Year 1		
Session 1		
BENV1101	Design Fundamentals: Studio 1	8
BENV1141	Computers and Information Technology	3
GEOG1701	Environmental Systems and Analysis	6
PLAN1011	Urban Society and Sociology	3
PLAN1041	The Language of Planning	4
	Total	**24**
Session 2		
PLAN1062	Effective Communication	3
PLAN1012	Principles of Political Economy	3
PLAN1022	The Development Process	3
PLAN1042	Planning Processes	6
PLAN1052	Quantitative Methods	6
GMAT0753	Introduction to Spatial Information Systems	3
	Total	**24**
Year 2		
Session 1		
PLAN2011	Economy of Cities	3
PLAN2021	History of Urban Development	3
PLAN2032	Integrated Planning 1 - Urban Design	6
PLAN2041	Critical Research Seminars	6
	Open Electives	6
	Total	**24**
Session 2		
PLAN2012	Economic Development Planning	3
PLAN2042	History of Urban Planning	3
PLAN2051	Economics of Resource Management	3
	Open Electives/Planning Electives	9
	General Education	6
	Total	**24**
Year 3		
Session 1		
PLAN3031	Integrated Planning 2 - Existing Areas	6
PLAN3041	Planning Law and Administration	6
PLAN3051	Development Control	6
	Open Electives/Planning Electives	6
	Total	**24**
Session 2		
PLAN0081	Work Experience	**24**
Year 4		
Session 1		
PLAN0082	Work Experience	**24**
Session 2		
PLAN3012	Cultural Studies	3
PLAN3032	Integrated Planning 3 - New Development	6
PLAN3052	Qualitative Methods	6
	Planning Elective	3
	Open Electives	6
	Total	**24**
Year 5		
Session 1		
PLAN4021	Metropolitan Policy	3
PLAN4031	Research Design	3
	Open Electives/Planning Electives	12
	General Education	6
	Total	**24**

Session 2

PLAN4032	Thesis	15
PLAN4042	Professional Practice	3
	Open Electives/Planning Electives	6
	Total	**24**

Degree Rules

1. The degree of Bachelor of Town Planning is awarded at either pass or honours level after the successful completion of a minimum of 240 units of credit including 12 units of General Education.
2. To fulfil these requirements, students must complete:
   - 147 units of core courses, being all those prescribed in the faculty regulations for this program.
   - 48 units of work experience in 2nd session of Year 3 and 1st session of Year 4 as prescribed in the faculty regulations of this program.
   - 33 units of open electives selected in accordance with the faculty regulations for undergraduate study in the Faculty of the Built Environment.
3. The minimum duration of the program is 5 years, consisting 8 sessions of full-time study, completing 24 units of credit each session including two sessions of work experience.
4. General Education courses may not be taken before a student enters Year 2 of the Program.

Faculty Regulations for the BTP

Core Courses

The core courses prescribed for the Program are all those listed in Table 3360–1 Program Schedule (with the exception listed below).

The following two core courses will not be offered until 2001, after the transition period:

- GEOG3671 Transport and Land Use
- PLAN3021 Heritage and Conservation Planning

The following transition courses will cease after 2000 and be replaced from 2001 onwards:

- PLAN3012 replaced by PLAN3015 Social Planning
- PLAN4042 replaced by PLAN4043 Planning in Practice

Honours

Honours are awarded in the Bachelor of Town Planning degree on the basis of quality of performance throughout the whole program and in accordance with current program policy. For the purpose of calculating Honours at graduation, the Honours value of each course is indicated by the credit points associated with that course. Credit points generally reflect the workload required of students in courses in which grades are awarded.

Work Experience

During the program, students must undertake 48 weeks of approved employment related to the program: for example, in private development companies or with planning consultants, in government planning and housing authorities, in local councils preparing or implementing Local Environment Plans. This is normally undertaken in the twelve months following Session 1 of Year 3 as indicated in the Program Schedule. Work experience requirements must be completed prior to graduation. The type of employment proposed must be submitted to the Program Head for approval.

Program Guidelines

Program Minor

Students are strongly encouraged to use the elective courses to develop a Minor program of study – a specialization in addition to their Town Planning degree.

Combined Architecture and Arts Program

Program Head
Desley Luscombe

This combined degree allows students to add their choice of an Arts program to the standard, professionally accredited Architecture program offered by the Faculty of the Built Environment. It provides flexibility in the choice of courses with the full Arts program and enables students to gain a broad education in Arts as well as the specialised studies of Architecture. Since both the Architecture and Arts programs can have common subject areas, and the Architecture program contains a percentage of open electives, the combined program requires only one additional session of study on top of the standard BArch program to gain the additional qualification of Bachelor of Arts. In general, this additional study is taken concurrently with the BArch program and both can be completed in eleven sessions.

The award of this combined degree demands an amalgamation of the conditions governing both the BArch degree and the BA degree with changes to the requirements for participation in General Education programs and total units of credit.

3262
Bachelor of Architecture/Bachelor of Arts

BArch BA

The BArch BA program is administered by the Architecture Program in the Faculty of the Built Environment. The Program requires students to obtain the approval of the Faculty of Arts and Social Sciences for the BA components of their program. The final program and timetable must be approved by the Architecture Program Head in the Faculty of the Built Environment.

The program is open to all students who satisfy both the Architecture and Arts entry conditions. Students may enter directly in Year 1 or may apply to transfer from the Architecture program after the completion of at least one year if they have a credit or higher average or the permission of the Architecture Program Head. Transfer after the second year may result in the student taking more than minimum time to complete the combined degree.

Students should start discussing their program with representatives of the Architecture Program and the Faculty of Arts and Social Sciences as early as possible. Students should themselves determine the Arts program that they wish to undertake. The Arts and Social Science Handbook describes the options. There are rules that prescribe what may be taken in each year and students should be aware of the Architecture requirements prior to choosing Arts preferences.

Students will also need to refer to the current edition of the Faculty of Arts and Social Sciences Handbook for complete program and course details.

Student Exchange

The University has established an extensive and growing number of Student Exchange programs with universities around the world. The Faculty encourages all students to consider participating in a student exchange program. For detailed information, contact the International Student Centre.

Registration/Professional Recognition

Please refer to the BArch professional recognition section for complete details.

Table 3262–1 Program Schedule

Year 1		
Session 1		**UOC**
BENV1101	Design Fundamentals: Studio 1	8
BENV1121	Architectural History and Theory 1	4
BENV1141	Computers and Information Technology	3
BENV1171	Architectural Technologies 1	9
	Total	**24**
Session 2		
ARCH1102	Architectural Design Workshop 1	8
BENV1122	Architectural History and Theory 2	4
ARCH1142	Architectural Communications 1	4
BENV1172	Architectural Technologies 2	8
	Total	**24**
Year 2		
Session 1		
ARCH1201	Architectural Design Workshop 2	8
ARCH1221	Architectural History and Theory 3	4
ARCH1241	Architectural Communications 2	3
ARCH1271	Architectural Technologies 3	6
	Program Electives	3
	Total	**24**
Session 2		
ARCH1202	Architectural Design Workshop 3	8
ARCH1222	Architectural History and Theory 4	3
BENV1242	Computer-Aided Design	3
ARCH1272	Architectural Technologies 4	4
ARCH1292	Research Practice	3
	Program Electives	3
	Total	**24**
Year 3		
Session 1		
ARCH1301	Architectural Design Studio 1	8
ARCH1321	Architectural History and Theory 5	3
BENV1341	Design Modelling and Visualisation	3
ARCH1371	Architectural Technologies 5	4
	BA Courses	6
	Total	**24**
Session 2		
ARCH1302	Architectural Design Studio 2	9
ARCH1392	Practicum	3
	BA Courses	12
	Total	**24**

Opportunity for alternate off-campus Exchange Program with the approval of the Program Head.

Year 4		
Session 1		
ARCH1401	Architectural Design Studio 3	9
ARCH1071	Building Services 1	3
	BA Courses	12
	Total	**24**

Opportunity for alternate off-campus Exchange Program with the approval of the Program Head.

Session 2		
ARCH1402	Architectural Design Studio 4	9
BENV1381	Professional Practice 1	3
ARCH1702	Building Services 2	3
	Program Electives	3
	BA Courses	6
	Total	**24**

Opportunity for alternate off-campus Exchange Program with the approval of the Program Head.

Additional Requirement (After Year 1 and before Year 5)

ARCH1583	Work Experience	24

Year 5
Session 1

ARCH1501	Investigation Workshop	9
ARCH1591	Politics, Community and Practice	3
	BA Courses	12
	Total	**24**

Session 2

ARCH1502	Graduation Studio	9
ARCH1592	Professional Practice 2	3
	Program Electives	6
	BA Courses	6
	Total	**24**

Year 6
Session 1

	BA Courses	24
	Total	**24**

Degree Rules

1. The degree of Bachelor of Architecture Bachelor of Arts is awarded at either pass or honours level (BArch only) after successful completion of a minimum of 210 units of credit from the Architecture Program and 78 units of credit from the Arts Programs. The combined total units of credit is 288. To gain Honours in Arts, students are required to carry out an extra year of study (48 units of credit) with a Major in an approved area.
2. To fulfil these requirements, students must complete:
   - 171 units of core courses in Architecture, being all those prescribed in the faculty regulations for this program.
   - 24 units of work experience completed after Year 1 and before Year 5 as prescribed in the faculty regulations for this program.
   - 15 units of program electives in the Faculty of the Built Environment, selected in accordance with faculty regulations for this program.
   - 78 units of credit from the range of Arts Majors in accordance with the Faculty of Arts and Social Science Rules. Students in the combined degree should undertake no more than 24 units of credit in Level 1 courses.
3. The standard duration of the Program is 5.5 years or 11 sessions of full-time study, consisting of 24 units of credit each session, plus the required work experience.
4. Arts courses may not be taken until after the student has completed 96 units of credit points from the BArch program.
5. To fulfil the requirements of the BA component of the program, students must undertake a Major by completing 42 units of credit in one of the approved disciplinary streams identified in the faculty regulations for this program.

Faculty Regulations for the BArch BA

Core Courses in Architecture

The core courses prescribed for the Program are all those listed in Table 3262–1 Program Schedule.

Program Electives in Architecture

Program electives must be selected from those offered by the Faculty of the Built Environment and listed in Table BENV – 1.

Arts Major

The compulsory Major in the BA component of the combined degree must be selected from the following list.

Chinese Studies
Education Studies
English
Environmental Studies*
French
German Studies
Greek, Modern
History
Indonesian Studies
Japanese Studies
Korean Studies
Linguistics
Music
Philosophy
Political Science
Policy Studies
Russian Studies
Science & Technology Studies
Sociology
Spanish & Latin American Studies
Theatre, Film and Dance

* Students completing an Environmental Studies Major must complete, in addition to the 30 Upper-level units of credit specified, six Level 1 units of credit in an approved course. Students must also complete a Minor sequence of 18 units of credit in one of the other areas listed above.

Course Selection Restrictions

Except for courses completed as part of the Environmental Studies Major, no more than 12 units of credit may be obtained from courses in the BA program which are offered by Schools outside the Faculty of Arts and Social Sciences.

No course included for credit in the BArch program can be included in the 78 units of credit required in Rule 1 for the BA program.

Honours

Students may be awarded an Honours BA degree through successfully completing an honours year. It should be noted that entry into a particular BA Honours program may require completion of courses additional to those specified Degree Rules and Faculty Regulations. The Honours year would be outside the suggested time for the combined degree. The Bachelor of Architecture degree may be awarded with honours based on the quality of performance in the program and in accordance with current program policy. Honours are Class 1 or Class 2 Division 1 or Class 2 Division 2. It is therefore proposed that BArch Honours may be received at graduation of the combined degree unless students carry out the additional BA Honours program.

Work Experience

Each student is required to undertake 24 weeks of off-campus activity in the pursuit of architectural work experience. This is required to be taken after Year 1 and before Year 5. It may be carried out in several components, any one of which must not be less than eight weeks in duration. If students wish to propose an alternative experience to that carried out in a registered architect's office, approval must be given by the Program Head. Assessment is only within the terms of the course ARCH1583 Work Experience in the Bachelor of Architecture degree program. The Architecture Program takes no responsibility for any assessment or consideration for registration with the Board of Architects of New South Wales or membership of the Royal Australian Institute of Architects.

Combined Architecture and Social Science Program

Program Head
Desley Luscombe

This combined degree allows students to add their choice of a Social Science program to the standard, professionally accredited Architecture program offered by the Faculty of the Built Environment. It provides flexibility in the choice of courses with the full Social Science program and enables students to gain a broad education in Social Science as well as the specialised studies of Architecture. Because Architecture and Social Science programs can have common subject areas, and the Architecture program contains a percentage of open electives, the program requires only one additional session of study to gain the additional qualification of Bachelor of Social Science. In general, this additional study is taken concurrently with the BArch program and both can be completed in eleven sessions.

The award of this combined degree demands an amalgamation of the conditions governing both the BArch degree and the BSocSc degree with changes to the requirements for participation in General Education programs and total units of credit.

3263
Bachelor of Architecture Bachelor of Social Science

BArch BSocSc

The BArch BSocSc program is administered by the Architecture Program of the Faculty of the Built Environment. The Program requires the student to obtain approval of the Faculty of Arts and Social Sciences for the BSocSc components of their program. The final program and timetable must be approved by the Architecture Program Head in the Faculty of the Built Environment.

Students should start discussing their program with representatives of the Architecture Program and the Faculty of Arts and Social Sciences as early as possible. Students should themselves determine the Social Science Major that they wish to undertake. The Arts and Social Science Handbook describes the options available. There are rules that prescribe what may be taken in each year and students should be aware of the Architecture requirements prior to choosing Social Science preferences.

Students will also need to refer to the current edition of the Faculty of Arts and Social Sciences Handbook for complete program and course details.

Student Exchange

The University has established an extensive and growing number of Student Exchange programs with universities around the world. The Faculty encourages all students to consider participating in a student exchange program. For detailed information, contact the International Student Centre.

Registration/Professional Recognition

Please refer to the BArch professional recognition section for complete details.

Table 3263–1 Program Schedule

Year 1
Session 1

		UOC
BENV1101	Design Fundamentals: Studio 1	8
BENV1121	Architectural History and Theory 1	4
BENV1141	Computers and Information Technology	3
BENV1171	Architectural Technologies 1	9
	Total	**24**

Session 2

ARCH1102	Architectural Design Workshop 1	8
BENV1122	Architectural History and Theory 2	4
ARCH1142	Architectural Communications 1	4
BENV1172	Architectural Technologies 2	8
	Total	**24**

Year 2
Session 1

ARCH1201	Architectural Design Workshop 2	8
ARCH1221	Architectural History and Theory 3	4
ARCH1241	Architectural Communications 2	3
ARCH1271	Architectural Technologies 3	6
	Program Electives	3
	Total	**24**

Session 2

ARCH1202	Architectural Design Workshop 3	8
ARCH1222	Architectural History and Theory 4	3
BENV1242	Computer-Aided Design	3
ARCH1272	Architectural Technologies 4	4
ARCH1292	Research Practice	3
	Program Electives	3
	Total	**24**

Year 3
Session 1

ARCH1301	Architectural Design Studio 1	8
ARCH1321	Architectural History and Theory 5	3
BENV1341	Design Modelling and Visualisation	3
ARCH1371	Architectural Technologies 5	4
	BSocSc Courses	6
	Total	**24**

Session 2

ARCH1302	Architectural Design Studio 2	9
ARCH1392	Practicum	3
	BSocSc Courses	12
	Total	**24**

Opportunity for alternate off-campus Exchange Program with the approval of the Program Head.

Year 4
Session 1

ARCH1401	Architectural Design Studio 3	9
ARCH1071	Building Services 1	3
	BSocSc Courses	12
	Total	**24**

Opportunity for alternate off-campus Exchange Program with the approval of the Program Head.

Session 2

ARCH1402	Architectural Design Studio 4	9
BENV1381	Professional Practice 1	3
ARCH1702	Building Services 2	3
	Program Electives	3
	BSocScCourses	6
	Total	**24**

Opportunity for alternate off-campus Exchange Program with the approval of the Program Head.

Additional Requirement (After Year 1 and before Year 5)

ARCH1583	Work Experience	24

Year 5

Session 1

ARCH1501	Investigation Workshop	9
ARCH1591	Politics, Community and Practice	3
	BSocScCourses	12
	Total	**24**

Session 2

ARCH1502	Graduation Studio	9
ARCH1592	Professional Practice 2	3
	Program Electives	6
	BSocSc Courses	6
	Total	**24**

Year 6

Session 1

	BA Courses	24
	Total	**24**

Degree Rules

1. The degree of Bachelor of Architecture Bachelor of Social Science is awarded at either pass or honours level (BArch only) after successful completion of a minimum of 210 units of credit from the Architecture Program and 78 units of credit from the Social Science Program. The combined total units of credit is 288. To gain Honours in Social Science students are required to carry out an extra year of study (48 units of credit) with a Major in an approved area.
2. To fulfil these requirements, students must complete:
   - 171 units of core courses in Architecture, being all those prescribed in the faculty regulations for this program.
   - 24 units of work experience completed after Year 1 and before Year 5 as prescribed in the faculty regulations for this program.
   - 15 units of program electives in the Faculty of the Built Environment, selected in accordance with faculty regulations for this program.
   - 78 units of credit from the Social Science Policy Core and a Major in accordance with Faculty of the Arts and Social Sciences Rules. Students in the combined degree should undertake no more than 24 units of credit in Level 1 courses.
3. The standard duration of the Program is 5.5 years or 11 sessions of full-time study, consisting of 24 units of credit each session, plus the required work experience.
4. Social Science courses may not be taken until after the student has completed 96 units of credit points from the BArch program.
5. To fulfil the requirements of the BSocSc component of the program, students must complete a Social Science and Policy core and a Major (30 units of credit) in one of the approved disciplinary streams identified in the faculty regulations for this program.

Faculty Regulations for the BArch BSocSc

Core Courses in Architecture

The core courses prescribed for the Program are all those listed in Table 3263–1 Program Schedule.

Program Electives in Architecture

Program electives must be selected from those offered by the Faculty of the Built Environment and listed in Table BENV–1.

Social Science Major

The compulsory Major in the BSocSc component of the combined degree must be selected from the following list.

Computer Science
Economic History
Economics
Geography
Geology
History
Industrial Relations/Human Resource Management
Mathematics
Philosophy
Political Science
Psychology
Science and Technology Studies
Sociology
Spanish and Latin American Studies (History Stream)

Course Selection Restrictions

No course included for credit in the BArch program can be included in the 78 units of credit required in Rule 1 for the BSocSc program.

Honours

Students may be awarded Honours in the BSocSc by successful completion of honours year. It should be noted that entry into a particular BSocSc Honours program may require completion of courses additional to those specified in the Degree Rules and Faculty Regulations. The Honours year would be outside the suggested time for the combined degree. The Bachelor of Architecture degree may be awarded with honours based on the quality of performance in the program and in accordance with current program policy. Honours are Class 1 or Class 2 Division 1 or Class 2 Division 2. It is therefore proposed that BArch Honours may be received at graduation of the combined degree unless students carry out the additional BSocSc Honours program.

Work Experience

Each student is required to undertake 24 weeks of off-campus activity in the pursuit of architectural work experience. This is required to be taken after Year 1 and before Year 5. It may be carried out in several components, any one of which must not be less than eight weeks in duration. If students wish to propose an alternative experience to that carried out in a registered architect's office, approval must be given by the Program Head. Assessment is only within the terms of the course ARCH1583 Work Experience in the Bachelor of Architecture degree program. The Architecture Program takes no responsibility for any assessment or consideration for registration with the Board of Architects of New South Wales or membership of the Royal Australian Institute of Architects.

Faculty Regulations for Undergraduate Study in the Faculty of the Built Environment

1. Open Elective courses may be selected from any program offered at the University of New South Wales, provided such course has not been taken to fulfil any other requirement of the Degree Rules. Elective courses offered within the Faculty of the Built Environment are listed in Table BENV-1. Open electives selected outside the Faculty of the Built Environment are subject to the approval of the appropriate Program Head. Open Electives may also be selected from courses offered by other institutions, but only with the approval of the Program Head and at an agreed unit value approved by the Program Head.
2. As a general guide, expected normal student workload is 2 hours /unit of credit/week during session, including both class contact time as well as individual study, completion of assigned work and exam preparation where appropriate. Students are strongly advised not to overcommit themselves to paid work or voluntary activities that will impinge on that level of time commitment to their studies. Such external commitments will not be taken into consideration in relation to matters such as extensions of time for submission of project work or failure to attend classes or examinations.
3. Where reference is made to the requirement that a student complete units of credit by taking one or more courses, that requirement shall be construed as meaning that the student shall:
   - attend at least 80% of all lectures, studios, tutorials or other classes, including site visits or other activities as may be prescribed in that course, always maintaining a satisfactory standard of preparation for and participation in such classes and activities.
   - perform satisfactorily in such exercises, essays, theses, and other work (whether written, oral or practical) as may be prescribed in that course, and undertake any prescribed reading related to that subject.
   - achieve a satisfactory standard in all examinations and other assessable tasks assigned for that course.
4. Transfer between Programs in the Faculty should not be considered automatic, and is always subject to the approval of the Program Head in which admission is being sought. Applications are assessed on academic performance and approval is subject to places being available in the Program.
5. In general, students admitted with advanced standing into Programs within the Faculty are given units of credit towards the degree for all appropriate courses completed at UNSW or other approved institutions. This is in the form of full session exemptions and/or specified exemptions in particular courses. Such credit will not normally be given for study undertaken more than 7 years before the date of admission to the Program, except with the approval of the Program Head.
6. Notwithstanding any advanced standing that may have been granted upon entry to a Program, students may seek exemptions in specific courses on the basis of appropriate study or experience. Where such an exemption is granted for study at an approved institution, students are normally awarded the appropriate units of credit, unless such credit has already been allowed as part of admission with advanced standing. Where the exemption is granted on the basis of knowledge or skills gained through experience, students would normally be required to complete the equivalent units of credit as open electives.
7. In general, progression in all Programs offered by the Faculty is managed by individual course prerequisites. Except with the permission of the Program Head, students are required to complete all stated prerequisites before enrolling in any course, and must always repeat any failed course on the next occasion that it is offered.
8. Except with the permission of the Program Head, where two courses are shown as corequisite, they must be taken concurrently on the first occasion any one is attempted.
9. Students wishing to take courses additional to those required for the award should be aware that the relevant courses will attract an additional fee, payable up front.
10. Students may not enrol in two design studios as core courses in any one session.

Table BENV–1 Faculty Electives

The courses in this table include both faculty electives (identified by a BENVxxxx course code) and core courses from other undergraduate programs in the Faculty which are recommended as suitable electives for students outside that particular program. This list is accurate at the date of publication, but students are referred to the Faculty Web site for the latest details. Generally, elective courses will not run if enrolments are below 15 students two weeks before the commencement of the session in which the course is scheduled.

Session 1

Course ID	Course Name	UOC
Design and Sustainability		
BENV1073	Sustainable Design and Practice	6
BENV2101	Adaptive Re-use	3
BENV2104	Building Conservation 1: Introduction	6
BENV2106	Landscape Design 9: Integrated Studio	4
BENV2107	Landscape Design 10: Elective Studio	9
IDES2091	Design Methodology	3
IDES2201	Ergonomics	6
LAND1121	Introduction to Landscape Architecture	3
LAND1201	Landscape Design 3: Site Planning	8
LAND1301	Landscape Design 5: Design with a Complex Problem	9
History & Theory		
BENV1023	Modernity and Modernisms in Architecture	6
BENV1121	Architectural History and Theory 1	4
BENV2201	Twentieth Century Australian Architecture	3
BENV2202	Architects and Their Practices	6
BENV2203	Japanese Architecture	6
BENV2206	Theory of Form	3
BENV2208	Spirit in Architecture	3
BENV2210	Architecture and Music: Parallels and Practices	6

Course ID	Course Name	UOC
BENV2212	Architecture and Culture	6
BENV2213	Critical Perspectives on Twentieth Century Art and Design	3
BENV2214	History, Theory and Interpretation: Art and Architecture	3
BENV2220	The Culture of Nature	3
BENV2221	State of the Art: Contemporary Landscape Design	3
BENV2222	Architectural Studies 1	2
BENV2223	Architectural Studies 2	3
BENV2224	Architectural Studies 3	6
BENV2226	Chinese Gardens	6
BENV2229	Spectacles, Mardi Gras and Fascist Rallies: Use of Public Space	3
BENV2231	Process in Architecture and Landscape	6
BENV2232	Thinking Through Drawings	6
BENV2234	A History of the Modern City	6
ARCH1221	Architectural History and Theory 3	4
ARCH1321	Architectural History and Theory 5	3
IDES1121	History of Industrial Design	3
Communication		
BENV2301	Architectural Spatialization	6
BENV2302	Architectural Rendering Techniques – Wet Media	6
BENV2303	Drawing: Architectural Thematics	6
BENV2304	Colour Theory in Architecture	3
BENV2305	Graphic Design for Architects, Interior Architects and Industrial Designers	6
IDES1051	Geometrical and Mechanical Drawing A	3
Computing		
BENV1042	World Wide Web in Presentation and Communication	6
BENV1043	Multimedia in Design Presentation	6
BENV2405	Computer Graphics Programming	6
BENV2406	Design and Computation	3
Structure		
BENV1075	Structural Systems: Advanced	6
BENV2603	Lightweight Structural Design	3
BENV2604	Structural Systems: Basic	6
Construction and Manufacturing		
BENV2701	Advanced Building Materials (Ceramics)	6
BENV2704	Advanced Construction Systems	3
BENV2709	Construction 6 (Industrialization and Technological Change)	3
BENV2710	International Housing Practice	3
IDES3202	Materials and Manufacturing Processes for Industrial Design B	**3**
Law, Practice and Management		
BENV1382	Social Responsibility and Professional Ethics	3
BENV2801	Project Management	3
BENV2802	The Architect and the Law	3
BENV2803	Facility Planning	6
BENV2805	Project Management and Design Process	6
BENV2806	Organizational Behaviour	3
BENV2807	Management 7 (Marketing)	3
BENV2812	Documentation Techniques for Major Buildings	6
ARCH1581	Politics, Community and Practice	3
Urban Planning		
BENV2901	Planning Perspectives	3
BENV2902	The City: Sydney	3
BENV2907	Planning Elective	3
BENV2908	Planning Elective	3
BENV2909	Planning Elective	3
BENV2910	Planning Elective	3
LAND1221	Environmental Sociology for Landscape Architects	3
PLAN1011	Urban Society and Sociology	3
PLAN1041	The Language of Planning	4
PLAN2011	Economy of Cities	3
PLAN2021	History of Urban Development	3

Session 2

Course ID	Course Name	UOC
Design and Sustainability		
BENV1072	Design for Energy Efficiency	6
BENV2103	Environmental Planning	3
BENV2105	Building Conservation 2A: Management Plans	6
IDES 4371	Design Management for Industrial Design	3
LAND1102	Landscape Design 2: Design Process	4
LAND1152	Landscape Analysis	8
LAND1202	Landscape Design 4: Landform and Planting Design	8
LAND1302	Landscape Design 6: Design Resolution and Documentation	9
LAND1401	Landscape Design 7: Urban Landscape Design	12
LAND1402	Landscape Design 3: Graduating Studio	12
History & Theory		
BENV1022	Designing as a Discursive Practice	6
BENV1024	Post-Modernity and Architecture since the Sixties	6
BENV1122	Architectural History and Theory 2	4
BENV2204	Architecture in the 1990s	6
BENV2205	Classical Architecture	3
BENV2207	Imagination	3
BENV2211	Criticism and Evaluation	3
BENV2215	Of Other Spaces: Architecture and Post-Colonialism/Nationalism/Feminism	6
BENV2216	Interior Theory	6
BENV2217	Contemporary Interior Design	6
BENV2218	The Vernacular Landscape	3
BENV2219	History of Australian Landscape Architecture	3
BENV2222	Architectural Studies 1	2
BENV2223	Architectural Studies 2	3
BENV2224	Architectural Studies 3	6
BENV2225	Heritage Architecture in Practice	6
BENV2226	Chinese Gardens	6
BENV2227	Topics in Current Architecture	3
BENV2228	Twentieth Century Architecture: Modernity to Deconstruction	3
BENV2230	Principles and Philosophy of Design	3
BENV2233	Architectural Images	6
ARCH1222	Architectural History and Theory 4	3
LAND1122	History of Landscape Architecture	4
Communication		
BENV2302	Architectural Rendering Techniques – Wet Media	6
BENV2303	Drawing: Architectural Thematics	6
IDES1052	Geometrical and Mechanical Drawing B	4
LAND1142	Design Communication	4
Computing		
BENV1042	World Wide Web in Presentation and Communication	6
BENV1043	Multimedia in Design Presentation	6
BENV2401	Digital Design Techniques	6
BENV2402	Design Modelling - Time base Visualisation	6
BENV2403	Information Technology in Design and Construction	3
BENV2404	CAD Management for Architects	3
BENV2408	Building Information Systems	6
Structure		
BENV1074	Conceptual Structural Design	6
BENV2602	Advanced Structural Design	6
Construction and Manufacturing		
BENV2702	Advanced Building Materials (Organics)	6
BENV2703	Advanced Building Materials (Metals)	6
BENV2704	Advanced Construction Systems	3
BENV2705	Spatial Construction Studies	6
BENV2706	Advanced Modelling for Manufacturing	3
BENV2707	Advanced Landscape Engineering	3
BENV2708	Interior Detailing	6
IDES3262	Production Design and Technology for Industrial Design	3

Law, Practice and Management

BENV1381	Professional Practice 1	3
BENV2804	Construction Planning and Management	3
BENV2808	Law for Builders 3	3
BENV2812	Documentation Techniques for Major Buildings	6
ARCH1582	Professional Practice 2	3
LAND1351	Landscape Management	4

Urban Planning

BENV2903	Urban Design	6
BENV2904	Public Art	6
BENV2905	Multivariate Analysis for Planning	3
BENV2906	Politics, Power and Policy	3
BENV2907	Planning Elective	3
BENV2908	Planning Elective	3
BENV2909	Planning Elective	3
BENV2910	Planning Elective	3
BENV2911	Land Economics	6
BENV2912	Property Management	3
ARCH1581	Politics, Community and Practice	3
PLAN1052	Quantitative Methods	6
PLAN1012	Principles of Political Economy	3
PLAN1022	The Development Process	3
PLAN1042	Planning Processes	6
PLAN2012	Economic Development Planning	3
PLAN2042	History of Urban Planning	3
PLAN2051	Economics of Resource Management	3
PLAN3012	Cultural Studies	3
PLAN3052	Qualitative Methods	6
PLAN4042	Professional Practice	3

Course Descriptions

Program Core Courses (listed by Program and Stream)

Bachelor of Architecture

ARCHITECTURAL DESIGN STUDIO STREAM

BENV1101
Design Fundamentals: Studio 1
Staff Contact: Desley Luscombe and Lisa Tirbitt
UOC8 HPW7 S1
Corequisite/s: BENV1141

Introduction to design as fundamental to coherent thought and action in your discipline. Exploration of the influences on design thinking and practice, including the philosophical, historical, social and environmental. Critical thinking and expression in different forms. Studio projects and assignments to develop skills and understanding of design elements and principles. Introduction to a basic vocabulary of representation techniques used by designers to facilitate the development and communication of design ideas including: colour, freehand drawing, sketching, painting, construction, mixed media, desktop publishing, photomontage techniques, technical drawing and drafting.

ARCH1102
Architectural Design Workshop 1
Staff Contact: Jeffrey Mueller and Desley Luscombe
UOC8 HPW6 S2
Corequisite/s: BENV1122, BENV1172, ARCH1142

Exploration of the implications of precedents for design practice. Focus on the development of integrated design strategies and approaches responding to human needs, the natural environment and technical aspects of architecture. There will be an emphasis on the development of foundational knowledge and skills of research, critical analysis, conceptualisation, speculation and communication. Development and application of basic design principles. Critical reflections on students own design approaches and strategies. Detailed consideration of architectural elements, components, construction assemblies and environmental systems. Design of small-scale spaces and buildings, with simple programmatic requirements, to a basic level of integration. Predominantly individual work supported by peer-group activities. A series of studio-based design projects and assignments will be defined within tight programmatic limits, and resourced across selected aspects of the History and Theory, Technology and Communication streams to maximise possibilities of integration. See ARCH1122, ARCH1142, BENV1172.

ARCH1201
Architectural Design Workshop 2
Staff Contact: Michael Tawa
UOC8 HPW6 S1
Prerequisite/s: BENV1101, ARCH1102
Corequisite/s: BENV1221, ARCH1271, ARCH1241

Exploration of theoretical, tectonic and technological factors influencing design thinking and practice. An emphasis on critical and strategic skills of research and speculation, directed to the development of useful implications for design practice. Detailed design of small to medium-scale spaces and architectural elements, components and construction assemblies, to a moderate level of integration. Predominantly collaborative group-based work. A series of studio-based design projects and assignments will be defined within tight programmatic limits, and resourced across selected aspects of the History and Theory, Technology and Communications streams to maximise possibilities of integration. See ARCH1221, ARCH1271, ARCH1241.

ARCH1202
Architectural Design Workshop 3
Staff Contact: Peter Murray
UOC8 HPW6 S2
Prerequisite/s: BENV1101, ARCH1102
Corequisite/s: ARCH1222, ARCH1272, BENV1242

Critical research and elaboration of strategic architectural design approaches responding to behavioural, technological and environmental issues. A focus on the implications of design contexts and environmental sustainability for the development of ethical and sustainable design practices and outcomes. Detailed design of medium-scale buildings, with simple programmatic requirements, to a moderate level of integration. Consideration and incorporation of construction assemblies and integrated environmental systems of medium complexity. A balance between individual and collaborative group-based work. A series of studio-based design projects and assignments will be defined within tight thematic and technological limits, and resourced across selected aspects of the History and Theory, Technology and Communications streams to maximise possibilities of integration. See ARCH1222, ARCH1272, BENV1242.

ARCH1301
Architectural Design Studio 1
Staff Contact: Ann Quinlan
UOC8 HPW6 S1
Prerequisite/s: ARCH1201, ARCH1202
Corequisite/s: ARCH1321, ARCH1371, BENV1341

Exploration of the implications of theoretical, historical, technological and environmental factors influencing design thinking, practices, outcomes and modes of representation. An emphasis on the integration of critical research, visualisation, modelling and the development of appropriate design strategies. Detailed design of medium-scale buildings, and medium to large-scale architectural spaces, to an intermediate level of integration. Consideration and incorporation of selected components, construction assemblies and integrated environmental systems of increasing complexity. Predominantly collaborative group-based work.

ARCH1302
Architectural Design Studio 2
Staff Contact: Michael Tawa
UOC9 HPW6 S2
Prerequisite/s: ARCH1201, ARCH1202

Exploration of architectural design strategies responding to socio-cultural, tectonic, technological and environmental issues. Incorporation of legal and procedural parameters and constraints such as statutory planning and building codes. Detailed design of medium-scale buildings, with complex site and programmatic requirements, to an intermediate level of integration. Design of complex medium to large-scale architectural spaces, components, constructional assemblies and integrated environmental systems. Predominantly individual work articulated in relation to collaborative group-based objectives. A selection of a series of studio-based design projects and assignments will be defined within tight theoretical, pragmatic and technological limits, and resourced across relevant stream areas to maximise possibilities of integration. Students may apply to carry out exchange studies with universities which have an agreement with the University of New South Wales. Any application should be made to the university and is at the discretion of the Head of Program (Architecture) UNSW.

ARCH1401
Architectural Design Studio 3
Staff Contact: Michael Tawa
UOC9 HPW6 S1
Prerequisite/s: ARCH1301, ARCH1302

The design of medium to large-scale buildings and/or developments, with complex site and programmatic requirements, to a high level of integration. Emphasis on advanced integration of social, pragmatic, technological, urban and environmental aspects.

Elaboration and management of implied conflicting issues and needs - including site constraints, planning controls and building regulations, cultural, behavioural, functional and technical issues. Conservation and heritage values pertaining to adaptive re-use. Individual and group work, articulated in relation to collaborative group-based objectives. A range of studio project options will be offered each session, each with a different focus. Projects will be further defined and resourced by each student through elective specializations selected from a range of advanced electives offered in the History and Theory, Communications and Technology Streams. Students may apply to carry out exchange studies with universities which have an agreement with the University of New South Wales. Any application should be made to the university and is at the discretion of the Head of Program (Architecture) UNSW.

ARCH1402
Architectural Design Studio 4
Staff Contact: Michael Tawa
UOC9 HPW6 S2
Prerequisite/s: ARCH1301, ARCH1302

The design of medium to large-scale buildings and/or developments, with complex site and programmatic requirements, to a high level of integration. Emphasis on theoretical, technological and environmental aspects of the project. Elaboration and management of implied conflicting issues - including theoretical, technological and representational aspects. Individual and group work, articulated in relation to collaborative group-based objectives. A range of studio project options will be offered each session, each with a different focus. Projects will be further defined and resourced by each student through elective specializations selected from a range of advanced electives offered in the History and Theory, Communications and Technology Streams. Students may apply to carry out exchange studies with universities which have an agreement with the University of New South Wales. Any application should be made to the university and is at the discretion of the Head of Program (Architecture) UNSW.

ARCH1501
Investigation Workshop
Staff Contact: Desley Luscombe
UOC9 S1, S2
Prerequisite/s: ARCH1401, ARCH1402 or equivalent

Critical research, exploration and speculation, leading to the detailed definition of a proposal for an individual design project. An emphasis on the ethical and political dimensions of architectural practice as a public act. A focus on the integration of theoretical, socio-cultural, programmatic, technological and professional issues. Individual submissions developed within a collaborative and supportive peer-group environment. Proposals will be initiated, researched and elaborated by each student through elective specializations selected from a range of advanced electives offered in the History and Theory, Technology and Communications streams. Preparation of an investigative study and detailed design brief, articulating the parameters, values, objectives, components and implications of the project. Communication of the proposal through various seminars and forum of peers, critics and practitioners.

ARCH1502
Graduation Studio
Staff Contact: Ann Quinlan
UOC9 HPW6 S1, S2
Prerequisite/s: ARCH1501

Design development of the project defined in Investigation Workshop. Further elaboration of the project framework, content, criteria and parameters through elective specialization. Detailed resolution and presentation of the design to an advanced level of integration across all dimensions of the project: theoretical, historical, ethical, technological, environmental and professional. Individual submissions developed within a collaborative and supportive peer-group environment. Presentation of the project to peers, eminent critics and practitioners through various seminars, forums, and a high profile end of session graduate exhibition.

ARCHITECTURAL COMMUNICATIONS STREAM

ARCH1142
Communications 1
Staff Contact: Ann Quinlan
UOC4 HPW3 S2
Corequisite/s: ARCH1102, ARCH1122, BENV1172

This foundation course is concerned with developing capabilities in a broad range of communication skills. There are three main components, academic practices, social practices, and manual, discipline-specific graphic communication skills. Students will develop practical skills in academic thinking, evaluation, writing, reading and investigation. They will be introduced to social practices necessary for academic and professional success, such as ethical practices, oral presentations, working collaboratively with others and personal management skills. Skills and theories of communication specific to the discipline and profession of architecture are concerned with critical observation, visualisation and representation of design ideas and artifacts. Students will develop abilities in fundamental drawing and sketching skills, compositional skills, basic model-making, dry rendering techniques and the application of colour. Students will be introduced to professional drawing conventions such as orthographic, para-line projections and perspective techniques. Capabilities in disciplinary specific communication skills will be developed in a series of tutorial exercises and project tasks, supported by a series of lectures. Assessable project tasks are designed to complement parallel subject areas so as to maximize relevance and integration of skill development. Integral to the assessment process is the requirement that students provide written evaluation and feedback about their own and their peers completed tasks. The academic and social practice component of this course is a Corequisite for all courses undertaken by any student in the Bachelor of Architecture program.

ARCH1241
Communications 2
Staff Contact: James McGrath and Desley Luscombe
UOC3 HPW3 S1
Prerequisite/s: ARCH1142
Corequisite/s: ARCH1201

Through the application of basic drawing, compositional, modelling and rendering practices developed in Communication One, students will extend their ability in techniques of architectural representation. Opportunities will be provided for students to develop skills in model making, using materials such as cardboard, plastics and wood and in rendering techniques, using a selection of media. Students will be encouraged to explore different compositional, modeling and media techniques and critique the implications of their application. Students will develop basic capabilities in professional drawing production and will be required to demonstrate their understanding of architectural drawing conventions and their application in rendering and presentation techniques. A series of well-defined group and individual projects will provide opportunities for students, in tutorial settings, to demonstrate their extended skill and technique development as well as their ability to critique different modes of architectural representation. Integral to the assessment process is the requirement that students provide written evaluation and feedback about their own and their peers completed tasks.

BENV1141
Computers and Information Technology
Staff Contact: Jim Plume and Ojars Greste
UOC3 HPW3 S1
Corequisite/s: BENV1101

An introduction to the technology of computing and information technology as it pertains to the disciplines of the built environment. The computer is presented as a tool for storing and manipulating information by means of application programs which model the real world needs and activities of professionals in these disciplines. Topics include basic operation of a computer, information handling, networks and communications, computer graphics, CAD technology and computational processes. Students engage in weekly hands-on computer exercises to provide knowledge and experience in the use of applications commonly used in their own discipline.

Assessment is based on participation in the hands-on work, some written assignments and a final examination.

BENV1242
Computer-Aided Design
Staff Contact: Jim Plume
UOC3 HPW3 S1, S2
Prerequisite/s: BENV1141

An exploration of the variety of CAD and graphic tools available for modelling, understanding and presenting design proposals. This course has dual objectives to build skills and confidence in the operation of CAD and related graphic systems, while developing a deep understanding of the unique opportunities offered by computer-based modelling technologies. Applications explored include 2D and 3D CAD, simple visualisation, image editing and composition, and the crossovers possible between these various techniques. Conceptual modelling techniques and their relevance to the design disciplines will be discussed. Weekly one-hour lectures are supported by discipline-focussed laboratory classes where students gain hands-on experience in the use of a variety graphic applications. Assessment is based on satisfactory participation and the completion of staged CAD-based tasks.

BENV1341
Design Modelling and Visualisation
Staff Contact: Stephen Peter
UOC3 HPW3 S1
Prerequisite/s: BENV1242
Note/s: Excluded BENV2401

An exploration of computer graphic techniques for visualising design proposals. Information can be found on the Internet Web Page: http://www.fbe.unsw.edu.au/subjects/benv/1341/ The lectures cover the principles and techniques of 3D visualisation including lighting, reflection, transparency, surface shading, texture mapping and depth cues. Laboratory-based exercises explore these different techniques, along with a variety of presentation techniques such as rendered images, image editing, animation, Quicktime VR and VRML. Assessment is based on the earlier staged learning exercises and one major design presentation project.

HISTORY AND THEORY OF ARCHITECTURE STREAM

BENV1121
Architectural History and Theory 1
Staff Contact: Paul-Alan Johnson
UOC4 HPW3 S1
Corequisite/s: BENV1101

Module 1: Theory: Design and its parameters. This Module reviews the built environment design disciplines as discursive practices including: frames of reference for key values and attitudes invoked within the design disciplines; psychological and philosophical understandings of imagination and creativity and their impact on design thinking; implications of the preceding for modelling design and establishing design processes; some basic concepts, terminology and language used in design, aesthetics and form; typological and figural aspects of architecture and equivalents in allied design disciplines; some conceptual frames and performative tools for thinking and doing theory-eg. how to read design and architecture texts critically and strategically; how to spot lacunae and inconsistencies in terminology, thought, doctrine, etc; how to ask useful theoretical questions for design; how to delimit and then open a field of discourse; how to initiate and develop a theoretical argument; how to maintain rigour, discipline, responsibility, etc. as part of a discourse or discipline; how to front an audience and take up a voice or position. Material to be presented as one- and/or two-hour lectures and occasional tutorials supplemented with readings and analyses of selected texts in architectural theory.

Module 2, Part 1: History: European architectural and design history. This Part of the Module begins with an examination of history and historiography at large and their implications for design and architectural history writing, then addresses issues attendant upon architectural and design history written as chronology, thematics, narrative, stylistics, heroes and great works. This is followed by a chronological outline of European architecture from the break-up of the Roman Empire to the Industrial Revolution in the eighteenth century. Lectures and supporting teaching aids concentrate upon individual buildings, particularly religious buildings that are indicative of the dominance of religion in pre-modern culture. While stylistic issues are important, this Part will focus in particular on questions of use, symbolism, and technology. This Part is intended as an introduction, and no knowledge is assumed of antique, Medieval, or Renaissance architecture and design, its aim being to familiarise students with key pre-modern architectural techniques and images and to inspire further investigation.

BENV1122
Architectural History and Theory 2
Staff Contact: TBA
UOC4 HPW3 S2
Corequisite/s: ARCH1102 or INTA1102

Module 1: History: Art and Visual Culture. This module will introduce a range of practices by visual artists of the late nineteenth and twentieth centuries generated at times of critical social and artistic change. The aim is to develop skills of visual analysis in relation to contested theories of intent, criticism and art history and in so doing to show that images and ways we view them are mediated. Strategies for visual analysis (formal, cultural, contextual, intentional) as well as conflicting theoretical interpretations (representation, functionality, identity, gender, place, ecology) will be used and critiqued. This module will make use of a variety of teaching strategies designed to empower and skill the participants and to enable them to pursue their future interests in the history of art. Teaching mode will be face to face as well as independent study by individuals and groups. Assessment will include individual and group work.

Module 2: History: The crisis of representation in architecture. This Module strengthens our understanding of the present by studying the past. Firstly, classes on the architecture of antiquity, the Middle Ages and the Renaissance will show how buildings were conceived as representations of religious beliefs and cultural values. Of particular importance are the sacred meanings of proportion, geometry and number. Secondly, we will study the questioning of this kind of symbolic representation and its replacement by more narrowly focused theories based on instrumental reason. Thirdly, we will consider several twentieth-century architects who have questioned the dictates of instrumental production, creating buildings that engage the emotions and imagination of their users. Material is presented as two-hour lectures supplemented with readings and analyses of selected texts in architectural history and architectural theory.

ARCH1221
Architectural History and Theory 3
Staff Contact: Peter Kohane
UOC4 HPW3 S1
Prerequisite/s: Year 1 Core Courses
Corequisite/s: ARCH1201

Module 1: Theory: Theory as practice-design thematics. This Module introduces the notion of theory as a conceptual setting for thinking-through theoretical issues, and their implications for a strategic design practice. The context which theory fabricates weighs on design practices and tactics at numerous levels: at the level of the design process itself; in terms of community, gender, culture and politics; in relation to spatial and temporal articulation, as well as issues such as tectonics and composition, technics and technology, pragmatics and function, aesthetics and psychology. Four main themes aimed at developing a design thematics: limits, fragment, materiality, and representation; plus specific readings related to design projects and seminar exercises. Material is presented as one- and/or two-hour lectures and occasional tutorials supplemented with studies and readings of selected texts in philosophy, cultural studies and fiction, as well as architectural theories and precedents.

Module 2, Part 2: History: Australian architectural and design history. Using a selection of guest speakers, each authoritative in their chosen area, this Part of the Module offers different approaches to comprehending Australian architectural and design history, demonstrates a diversity of evidential material and narratives attendant upon and determined by these approaches, and brings to the fore issues of interpretation and assimilation on the part of the recipient. Lectures consider matters of aboriginality, origins,

nationalism, chronology, style, regionalism, vernacular, gender, architectural and design media, heritage, conservation, and the value systems and polemic adopted in pursuit of these. Material is presented in this Module as one- and/or two-hour lectures with occasional tutorials supplemented with readings and analyses of selected texts in architectural history and architectural theory.

ARCH1222
Architectural History and Theory 4
Staff Contact: Jeffrey Mueller and Desley Luscombe
UOC3 HPW2 S2
Prerequisite/s: Year 1 Core Courses
Corequisite/s: ARCH1202

History: Nineteenth-Century architecture and the present. By interpreting certain nineteenth- and early twentieth-century issues and debates, this Module makes it possible to clarify and question contemporary beliefs and achievements, such as technological progress, imperial expansion and the division of labour (which has prevented the exploration of more substantial relationships between the human body and architecture). Lectures will also look to history to reconsider issues which demand contemporary attention, including ornament, decorum, anthropomorphism, empathy and memory. Rather than presenting a survey of nineteenth-century architecture, each lecture will focus on a single issue and explore it through the works of particular architects and writers. The relevance to our current debates will be spelt out. Material is presented as one- and/or two-hour lectures supplemented with readings and analyses of selected texts in architectural history and architectural theory.

ARCH1321
Architectural History and Theory 5
Staff Contact: Bruce Judd and Jon Lang
UOC3 HPW2 S1
Prerequisite/s: Year 2 Core Courses
Corequisite/s: ARCH1301

Module 1: Theory: Design and human behaviour. This Module provides an understanding of behaviour-environment theory and its relevance to environmental design and raises questions concerning contemporary values and understandings in architecture. Lectures are presented on elementary behavioural theory, behaviour settings, personal space, territoriality, crowding, privacy, way-finding, place and place-making (genius loci), all of which are examined for their impact on architecture and planning. Aesthetic and functionalist ideas in architecture are cross-related with contemporary notions of meaning, community, identity and polity. Major architectural ideas and design approaches are subjected to scrutiny in light of behaviour-environment research techniques and findings. Material is presented as two-hour lectures supplemented with readings and analyses of selected texts in sociology, psychology, anthropology, environment-behaviour research and architectural theory.

Module 2: Theory: Urban theory and practice. This Module deals with architecture and the city, especially as it relates to the nature of the design task. The objective is to bring students attention to our current understanding of urban design and the various roles architects have in shaping the city. Explicit in this analysis will be a redefinition of functionalism in architectural and urban design. Implicit in all designs, if not explicit, is some positive construct of the people imagined as users or participants in the work designed. Questions arise about the adequacy of our definitions and people-constructs, about the degree to which the facts can assist our projections for the future, and on whether our modelling and imaging of life is sufficiently real. Critically evaluating the models we use enhances our creativity because it opens up possibilities that generally fall beyond the scope of our thoughts. Material is presented as two-hour lectures and supplemented by readings in urban theory, town-planning, architectural theory, and people-environment research.

ARCHITECTURAL TECHNOLOGIES STREAM

BENV1171
Architectural Technologies 1
Staff Contact: Bill Lawson
UOC9 HPW5 S1
Corequisite/s: BENV1101

Environment: An introduction to concepts of social responsibility, environmental accountability and ecological sustainability. Implications for the urban/built and natural environments. Fundamentals of building physics, as they relate to the concepts of comfort and environmental control.

Structures: Introduction to principles of structures, and their relationships to construction, material and environmental aspects of design. Analysis of structural precedents in relation to human need and design practice. Structural elements of different scale, and their relationships within larger structural components and systems. Typological outline of structural elements and components: point, line, surface, solid; foundation, footings, floors, walls, ceilings, roof systems, stairs, windows and doors. Basic structural performance requirements - safety, strength, stability and stiffness. Relationships with associated constructional performance - protection from elements, construction process, security; environmental performance - human needs, sustainability, energy efficiency; legal issues -best practice, code compliance; and economic parameters - establishment and life-cycle cost.

Construction: Introduction to different ways of thinking about construction in relation to design practice. Investigation of the artifactual nature and materiality of buildings. Detailed studies of selected precedents. Outline of construction principles and their implications for the development of construction strategies in architectural design. Analysis of typologies and classification systems for building materials.

These issues will be explored through an emphasis on timber as a construction material, and small timber buildings as a construction type. A series of workshop exercises, related to lecture material and/or design studio projects, will be jointly defined across the Environment, Structures and/or Construction discipline areas. These may include manual and/or computer laboratory exercises defined across the Communications discipline area.

BENV1172
Architectural Technologies 2
Staff Contact: Peter Murray
UOC8 HPW5 S2
Corequisite/s: ARCH1102

Environment: Thermal comfort and building climatology: perception and comfort; the body s responses; bioclimatic classification and traditional buildings. Solar geometry and control of sunlight. The building envelope: thermal performance; principles of heat transfer; solar radiation effects; absorptivity, reflectivity, conduction, thermal gradients; condensation and thermal insulation; degree day concept and prediction of heating requirements.

Structures: Introduction to basic structural behaviour and its relationship to construction, material and environmental aspects of design. Analysis of structural precedents in relation to human need and design practice. Outline of key structural behaviour concepts: loading - including load transfer, forces at supports and connections; resistance to loads - including stability, strength and stiffness; stress - including axial, shear, bending and deformation. Focus on basic linear structural elements and systems - including cable and arch, strut and column, beam, truss, frame. Concept and techniques of modelling, predicting and incorporating structural behaviour in design. Basic structural modelling techniques and problem solving tools - physical, graphical, numerical, computer-assisted. Introduction to basic statics, properties and strength of materials. Introduction to basic building physics. Implications for structural, constructional and environmental issues in design.

Construction: Introduction to building material science. Basic structure, properties, manufacturing processes, use and performance of materials in building and artifact design. Durability, movement and moisture control. Implications for design. Research and use of resource material. Introduction to construction documentation, drawing and specification practices.

These issues will be explored through an emphasis on masonry as a construction material, and small masonry buildings as a construction type. A series of workshop exercises, related to lecture material and/or design studio projects, will be jointly defined across the Environment, Structures and/or Construction discipline areas. These may include manual and/or computer laboratory exercises defined across the Communications discipline area.

ARCH1271
Architectural Technologies 3
Staff Contact: Bill Lawson
UOC6 HPW4 S1
Prerequisite/s: BENV1171, BENV1172
Corequisite/s: ARCH1201

Environment: Natural and artificial lighting. Quantitative and qualitative aspects of lighting design. Electric light sources, light control and prediction methods.

Structures: Design and optimisation of basic structural elements. Structural design process and codes - including establishment of loads and load paths. Analyses and choice of structural elements and systems - including cross sectional properties and behaviour. Material issues. Compliance checks. Design of structural elements - such as struts, columns, beams, and slabs in timber, steel and concrete. Basic foundations and brickwork design - including lintels, arches, vaults and domes.

Construction: Analysis of the relationships between theoretical and constructional agendas. Design themes and their implications for selection of materials and constructional systems. Building materials and materiality in architecture. Quantitative and qualitative design constraints, limits and opportunities posed by building materials, structural and constructional systems. Detailed analysis of junctions and connections between materials, components, assemblies and finishes. Implications of junctions and connections for spatial and techtonic articulation and modulation. Dimensional constraints and co-ordination. Construction drawing, detailing, modelling and design development as parallel practices. These issues will be explored through an emphasis on masonry and timber as construction materials, and small masonry and timber buildings as construction types. A series of workshop exercises, related to lecture material and/or design studio projects, will be jointly defined across the Environment, Structures and/or Construction discipline areas. These may include manual and/or computer laboratory exercises defined across the Communications discipline area.

ARCH1272
Architectural Technologies 4
Staff Contact: Peter Murray
UOC4 HPW3 S2
Prerequisite/s: BENV1172
Corequisite/s: ARCH1202

Environment: Acoustics and noise control: design of rooms, basic shape and volume, acceptable ambient sound levels. Acoustic performance: properties and behaviour of sound, sound transmission loss, external noise levels, structure borne and impact sound, reverberation times, selection of building envelope elements, selection of interior building materials and elements.

Structures: Design, stability and optimisation of structural assemblies for medium-span buildings of timber and steel. Trusses, frames and arches, cable-stayed systems. Basic fire engineering.

Construction: Analysis of relationships between political, ethical and constructional agendas. Cultural, social and environmental contexts, and their implications for selection of materials and constructional systems. Environmental sustainability and impact, including evaluation of embodied energy of building materials, as well as energy, water and waste in construction processes. Evaluation of prefabricated materials and components. Introduction to quantification, tabulation and costing of construction systems. Implications for selection of building materials, construction systems and assemblies. Case studies analysing the role of structural and constructional systems in lightweight and high-tech buildings. Construction drawing, detailing, modelling and design development as parallel practices. These issues will be explored through an emphasis on steel and concrete as construction materials, and steel and concrete buildings as construction types. A series of workshop exercises, related to lecture material and/or design studio projects, will be jointly defined across the Environment, Structures and/or Construction discipline areas. These may include manual and/or computer laboratory exercises defined across the Communications discipline area.

ARCH1371
Architectural Technologies 5
Staff Contact: Steve King
UOC4 HPW3 S1
Prerequisite/s: ARCH1271, ARCH1272
Corequisite/s: ARCH1301

Environment: Integration of passive design strategies. Case studies. Introduction to thermal evaluation and design tools, correlation and simulation models.

Structures: Multistorey building structures of concrete and steel. Systems, design and optimisation. Wind- and earthquake engineering. Brief survey of advanced structures - including wide-span, high-rise and lightweight structures.

Construction: Integration and coordination of building materials, components and assemblies in the organization of building processes. Relationships between constructional assemblies, spatial and techtonic qualities. Functional and representational aspects of the architectural facade. Study of the building envelope and strategies for cladding. Dimensional coordination and allowances for different materials, components and assemblies in relation to structural and constructional issues. Implications for selection of appropriate constructional systems, design development and detailing. Construction documentation, drawings and specification. A series of workshop exercises, related to lecture material and/or design studio projects, will be jointly defined across the Environment, Structures and/or Construction discipline areas.

ARCH1471
Building Services 1
Staff Contact: Steve King
UOC3 HPW6 S1
Prerequisite/s: ARCH1371

Sources and distribution of water, wastes and energy supplies, application of electrical power, hydraulics, vertical transport, fire protection in buildings, security, telecommunications. Equipment selection and space allocations for these services. Students will be able to undertake preliminary selection and sizing of systems, and to translate them into space and planning requirements for complex buildings. Assignments include tutorial projects and field investigations.

ARCH1472
Building Services 2
Staff Contact: Steve King
UOC3 HPW6 S2
Prerequisite/s: ARCH1371, ARCH 1471

Air conditioning, heating and ventilating of buildings. Design of systems, selection of equipment and allocation of space. Assignments include tutorial projects and field investigations.

RESEARCH AND PRACTICE STREAM

ARCH1282
Research Practice
Staff Contact: Catherine de Lorenzo
UOC3 HPW2 S2

A core course which introduces students to the basic empirical and interpretive research methods, explains some research tools and referencing requirements, and presents a range of research fields currently undertaken within the program. Classes are normally by lecture and small group teaching. Assignments are designed to lead students through the processes of research, and to encourage a self-critical evaluation of the appropriateness of methodologies used and the value of the conclusions to be drawn. Work must be written in concise and clear English, apply a consistent and acceptable referencing system, include an up-to-date bibliography, and be word processed in A4 format.

ARCH1382
Practicum
Staff Contact: Ann Quinlan
UOC3 HPW2 S2

This course is concerned with preparing students for a learning experience outside of UNSW. It has two components the first is

concerned with student preparation of a professional portfolio and the development of capabilities necessary for professional practice employment and academic study overseas. Topics in this component include writing letters of application, preparing resumes, interview and oral presentation techniques, working in teams, developing an understanding of your capabilities and strengths, practice ethics, working in cross cultural environments, negotiating, workplace issues and personal management skills. Students will receive instruction in documenting practice placement diaries and journals. A series of guest lectures and workshop activities will complement the assessable task, which is to complete a well-presented portfolio of student work. The second component of the course is concerned with an introduction to law and ethics relevant to architectural practice - including the architect-client agreement; agency and employment law; appointment of and liaison with consultants; professional codes of conduct; the Architects Act; land use controls; the Building Code of Australia; Local Government Act; Environmental Planning and Assessment Act and the Heritage Act.

BENV1381
Professional Practice 1
Staff Contact: John Cooke
UOC3 HPW2 S1, S2

An introduction to the legal system. Aspects of the law of contract, torts, agency, trade practices, property and agency. Contract documentation and specification writing techniques. Estimating, cost planning, bills of quantities and budgeting.

ARCH1581
Politics, Community and Practice
Staff Contact: Desley Luscombe
UOC3 HPW2 S1, S2

The course will examine the production of architecture as a social event, it will analyse a series of explanations of the relationships between society and space and will look at both Asian and Western cultures as examples. The focus of this analysis will include issues such as: the role of economics and politics, urban administration, cultural difference, social theory etc, to architecture. This will be carried out by examining questions such as what is the relationship between architecture and urban politics? What part does architecture play in the political economy of cities? How does architecture as a commodity reflect commodity producing society as a whole? What basic social theories inform what we might call a social theory of architectural production? How do investors, developers, industrialists and others view architecture and building? What is the administrative environment for the production of architecture? (Government policy at national, regional and local levels, development planning, planning legislation, structure and local plans etc). How does architecture relate to the reproduction of culture - what theories of cultural production exist, and how do they interface with urban politics? What part does architecture play in the sustainability of cities and urban environments as a whole?

ARCH1582
Professional Practice 2
Staff Contact: John Cooke
UOC3 HPW2 S1, S2
Prerequisite/s: BENV1381

Legal implications of architectural practice. Liabilities of architects. The architect/client agreement. Types of building contract and methods of building procurement. Tendering and negotiating. Contract administration procedures. Professional defensive measures and crisis management. Introduction to management theory. The structure and organization of an architectural office. Aspects of company and partnership law and insurance. Business principles and management procedures relevant to an architectural practice.

ARCH1583
Work Experience
Staff Contact: Ann Quinlan
UOC24 S1, S2
Prerequisite/s: BENV1101 ARCH1102

Each student is required to take 24 weeks of off-campus activity in the pursuit of architectural practice experience; the preferred activity being to work for a single period of 24 weeks under the supervision of a registered architect. This activity may be started after the successful completion of Year 1 studies and completed before enrolling in Graduation Project of the Bachelor of Architecture Program. The minimum single period of approved activity shall be eight weeks which must be taken outside of Semester such as during the summer breaks. Students undertaking this activity during session shall not be enrolled in any other courses. In exceptional circumstances students may be able to carry a repeat course during their professional experience session. Students shall have the option of providing evidence of working under the supervision of a registered architect using the accepted form of log-book provided by the professional bodies or other suitable documentation of approved activities such as an annotated and illustrated diary in accordance with the guidelines issued by the Head of Program. Where students wish to undertake other activities such as an architectural study tour or employment on construction projects or other related architectural activity, approval must be obtained from the course authority. The Faculty reserves the right to disallow any activities as meeting the requirements for this course, for which prior approval has not been sort and obtained in writing.

Bachelor of Science (Architecture)

ARCH1398
Research Project 1
Staff Contact: Stephen Peter
UOC6 S1, S2
Prerequisite/s: ARCH1282 and Program Coordinator s approval

Introductory project on a topic area selected by the student in accordance with his or her field of specialization. This project provides the opportunity to practice research methods, planning, organising and conducting and documenting study in the chosen field. The topic must be approved by the Program Coordinator and the research supervised by an appropriate member of staff.

ARCH1399
Research Project 2
Staff Contact: Stephen Peter
UOC9 S1, S2
Prerequisite/s: ARCH1398 or equivalent and Program Coordinator s approval

Advanced project on a topic area selected by the student in accordance with his or her field of specialization. This project represents the culmination and integration of knowledge and skill gained in the student s field of specialization, and should include social, environmental and ethical aspects. The research project report is to be presented in a thesis format and be supervised by an appropriate member of staff.

BENV1382
Social Responsibility and Professional Ethics
Staff Contact: Jim Plume
UOC3 HPW2 S1

The aim of this course is to expose students in the Faculty to issues of social responsibility in their future professional activities. This is done by selecting for analysis case studies. The exchange of information and affirmation and contestation of values by students is considered as imporant a part of the learning process as the professional input through lectures. Instruction includes common lectures and small seminar groups made up from students from all schools in the Faculty. Assessment will include individual and collaborative submissions.

ARCH1498
Honours Project 1
Staff Contact: Stephen Peter
UOC24 S1, S2
Prerequisite/s: ARCH1399 or equivalent and Program Coordinator s approval

This project represents a major research-based investigation into a subject related to the student s area of specialization. It should represent an original contribution to work in that area which

demonstrates a high level of scholarship and an understanding of good research methods. It can appropriately be seen as stage one of a two-part project linked to the second honours project, but must be complete in and of itself. The work is to be closely supervised by a member of the academic staff. On rare occasions, permission may be sought from the Program Coordinator s to have this project supervised by someone outside the University, but there must always be an internal co-supervisor in that event. The intended topic must be lodged as a fully-worked research proposal, and must be approved by the Program Coordinator prior to its commencement. The submitted work must be properly bound and will be assessed internally by at least two readers.

ARCH1499
Honours Project 2
Staff Contact: Stephen Peter
UOC24 S1, S2
Prerequisite/s: ARCH1498 and Program Coordinator s approval

This project represents a major research-based investigation into a subject related to the student s area of specialization. It should represent an original contribution to work in that area which demonstrates a high level of scholarship and an understanding of good research methods. It can appropriately be seen as stage two of a two-part project linked to the first honours project, but must be complete in and of itself. The work is to be closely supervised by a member of the academic staff. On rare occasions, permission may be sought from the Program Coordinator to have this project supervised by someone outside the University, but there must always be an internal co-supervisor in that event. The intended topic must be lodged as a fully-worked research proposal, and must be approved by the Program Coordinator prior to its commencement. The submitted work must be properly bound and will be assessed internally by at least two readers.

Bachelor of Interior Architecture

DESIGN STUDIO STREAM

Each Design Studio course deals specifically with a range of *Core Considerations*. These will be included but will not generally be the full extent of the considerations in the design projects in that course. The Design Studio courses are arranged in a sequence commencing with simple design tasks of a general nature in the first semester of first year developing through ever-more complex applications of the principles of design to the design of large-scale interior projects at the end of the course. Irrespective of scale, each Design Studio project will: encourage a 'whole' view of the architectural endeavour; focus on the 'human life events' to be catered for and these will be examined in the widest, most inclusive inquiry; seek ways to approach design in an ordered, rational rather than a discursive, irrational or haphazard manner. The series will seek to promote the development of a personal approach to design based on the individual's unique way of seeing the world.

BENV1101
Design Fundamentals: Studio 1
Staff Contact: Desley Luscombe and Lisa Turbitt
UOC8 HPW7 S1
Corequisite/s: BENV1141

Introduction to design as fundamental to coherent thought and action in your discipline. Exploration of the influences on design thinking and practice, including the philosophical, historical, social and environmental. Critical thinking and expression in different forms. Studio projects and assignments to develop skills and understanding of design elements and principles. Introduction to a basic vocabulary of representation techniques used by designers to facilitate the development and communication of design ideas including: colour, freehand drawing, sketching, painting, construction, mixed media, desktop publishing, photomontage techniques, technical drawing and drafting.

INTA1102
Design Studio 2
Staff Contact: Harry Stephens
UOC8 HPW6 S2
Corequisite/s: BENV1122; BENV1172; INTA1142

An introduction to the design of space for human habitation. Design projects culminating in the design of a small-scale habitat. Core Considerations: ergonomics and anthropometrics; domestic scale construction systems; principles of structural stability; environmental and energy issues.

INTA1201
Design Studio 3
Staff Contact: Lisa Turbitt
UOC6 HPW5 S1
Prerequisite/s: INTA1102
Corequisite/s: INTA1241; INTA1271

Design projects centering on the design of small-scale interiors for relatively simple patterns of life. Core Considerations: exploration of the life-event as the origin of human aims in design; clarification of design aims; number, geometry and spatial ordering systems; inside/outside relationships; connections and transitions; the central idea - concept; formal presentation of the concept; ideas as ordering principles in design; translation of ideas into architectural space; the physics and poetics of natural and artificial lighting; construction detailing as a design activity.

INTA1202
Design Studio 4
Staff Contact: Harry Stephens
UOC6 HPW5 S2
Prerequisite/s: INTA1102
Corequisite/s: INTA1272

Design projects related to residential patterns of life. Core Considerations: public/private realms; home as hearth; dwelling; sense of place; appropriate materials in the domestic context; sustainability as a general principle; responsible energy use; passive energy systems; construction detailing as a design activity.

INTA1301
Design Studio 5
Staff Contact: Bill Macmahon
UOC6 HPW5 S1
Prerequisite/s: INTA1202

Design projects dealing with medium scale commercial, retail or public facilities having, amongst other things, a need for good acoustic design. Core Considerations: materials and meaning in architecture; furniture and fitments; connections, junctions, mediating elements and tolerances; acoustics; building services, regulations and codes; access and egress; air conditioning and ventilation systems.

INTA1302
Design Studio 6
Staff Contact: Bill Macmahon
UOC9 HPW5 S2
Prerequisite/s: INTA1202

Design projects dealing with medium scale commercial, retail or public facilities. Core Considerations: preparing finishes selections; incorporation of textiles into the design; preparing sample boards; space analysis and feasibility of facility and the user requirements; designing through the contract documents; estimating, cost planning and budgeting.

INTA1401
Design Studio 7
Staff Contact: Madeline Lester
UOC9 HPW6 S1
Prerequisite/s: INTA1302

Design projects dealing with medium to large-scale commercial facilities. Core Considerations: the design concept as an expression of a developed personal theoretical position on design; needs analysis and preparation of client briefs; innovation with technical and pragmatic programs; professional verbal presentation skills; best

professional practice and quality assurance measures; health and safety issues; space planning and facilities planning and management; skills for designing to a budget.

INTA1402
Graduation Project
Staff Contact: Harry Stephens
UOC15 HPW2 S2
Prerequisite/s: INTA1401; INTA1421

An approved self-selected large-scale project carefully chosen and executed to demonstrate proficiency in every aspect of the course. The project, though hypothetical, must be based on a real situation with site, client and brief and be carried out under the guidance of an external professional mentor and an internal academic supervisor. It will be examined in a personal presentation made to a jury of professional designers and academics. The Graduation Project is to be done in parallel with a Dissertation that will examine an approved aspect of the project.

DESIGN STUDIES STREAM

A series of subjects investigating specific design issues centrally related to interior architecture which are not of necessity covered within the Design Studio stream. Delivered as lectures with associated practical assignments in a studio setting.

INTA1211
Design Studies 1
Staff Contact: Lisa Turbitt
UOC4 HPW3 S1
Prerequisite/s: INTA1102
Corequisite/s: INTA1241

Furniture Design 1. Through a series of lectures, tutorials, demonstrations and practical design projects, this course addresses issues of design philosophy, ecology, scale, context, spatial relationships, materials, technologies and resources appropriate to the design of furniture and fittings - the decorative arts for interiors.

INTA1212
Design Studies 2
Staff Contact: Harry Stephens
UOC3 HPW3 S2
Prerequisite/s: INTA1102

Furniture Design 2. A guided research-based course concerned with the design and manufacture of furniture and fitments for mainly commercial applications. A research project and practical design assignment will focus on specific case studies.

INTA1311
Design Studies 3
Staff Contact: Bill Macmahon
UOC3 HPW3 S1
Prerequisite/s: INTA1202

Interior Materials. The role of material as medium and message in interiors. The symbolic language of materials. The relationship between material and idea in the works of significant designers and architects. Research project(s) investigating the sources, manufacture, properties, characteristics and uses of a wide variety of materials. Excursions.

INTA1312
Design Studies 4
Staff Contact: Bill Macmahon
UOC3 HPW3 S2
Prerequisite/s: INTA1202
Corequisite/s: INTA1342

Fabric Design. A study of textiles and fabrics and their applications in interiors and architecture. The course will examine in some detail origins, structures, properties and manufacturing processes dealing with fibres, yarns and materials: woven, non-woven and knitted materials. Patterning, including structural and non-structural ornamentation. Further treatments and applications of materials. Standards of use and durability. New directions, concepts and future implications.

HISTORY AND THEORY STREAM

This stream enables the endeavours of the student to be placed within an historical context informed by critical theoretical issues and to provide a general education in both history and theory related to interior architecture, art and design. Culminating in the production of a dissertation, it also attempts to provide the most focussed opportunity for scholarly research and writing in the course.

BENV1121
Architectural History and Theory 1
Staff Contact: Paul-Alan Johnson
UOC4 HPW3 S1
Corequisite/s: BENV1101

Module 1: Theory: Design and its parameters. This Module reviews the built environment design disciplines as discursive practices including: frames of reference for key values and attitudes invoked within the design disciplines; psychological and philosophical understandings of imagination and creativity and their impact on design thinking; implications of the preceding for modelling design and establishing design processes; some basic concepts, terminology and language used in design, aesthetics and form; typological and figural aspects of architecture and equivalents in allied design disciplines; some conceptual frames and performative tools for thinking and doing theory-eg. how to read design and architecture texts critically and strategically; how to spot lacunae and inconsistencies in terminology, thought, doctrine, etc; how to ask useful theoretical questions for design; how to delimit and then open a field of discourse; how to initiate and develop a theoretical argument; how to maintain rigour, discipline, responsibility, etc. as part of a discourse or discipline; how to front an audience and take up a voice or position. Material to be presented as one- and/or two-hour lectures and occasional tutorials supplemented with readings and analyses of selected texts in architectural theory.

Module 2, Part 1: History: European architectural and design history. This Part of the Module begins with an examination of history and historiography at large and their implications for design and architectural history writing, then addresses issues attendant upon architectural and design history written as chronology, thematics, narrative, stylistics, heroes and great works. This is followed by a chronological outline of European architecture from the break-up of the Roman Empire to the Industrial Revolution in the eighteenth century. Lectures and supporting teaching aids concentrate upon individual buildings, particularly religious buildings that are indicative of the dominance of religion in pre-modern culture. While stylistic issues are important, this Part will focus in particular on questions of use, symbolism, and technology. This Part is intended as an introduction, and no knowledge is assumed of antique, Medieval, or Renaissance architecture and design, its aim being to familiarise students with key pre-modern architectural techniques and images and to inspire further investigation.

BENV1122
Architectural History and Theory 2
Staff Contact: TBA
UOC4 HPW3 S2
Corequisite/s: ARCH1102 or INTA1102

Module 1: History: Art and Visual Culture. This module will introduce a range of practices by visual artists of the late nineteenth and twentieth centuries generated at times of critical social and artistic change. The aim is to develop skills of visual analysis in relation to contested theories of intent, criticism and art history and in so doing to show that images and ways we view them are mediated. Strategies for visual analysis (formal, cultural, contextual, intentional) as well as conflicting theoretical interpretations (representation, functionality, identity, gender, place, ecology) will be used and critiqued. This module will make use of a variety of teaching strategies designed to empower and skill the participants and to enable them to pursue their future interests in the history of art. Teaching mode will be face to face as well as independent study by individuals and groups. Assessment will include individual and group work.

Module 2: History: The crisis of representation in architecture. This Module strengthens our understanding of the present by studying the past. Firstly, classes on the architecture of antiquity, the Middle Ages and the Renaissance will show how buildings were conceived

as representations of religious beliefs and cultural values. Of particular importance are the sacred meanings of proportion, geometry and number. Secondly, we will study the questioning of this kind of symbolic representation and its replacement by more narrowly focused theories based on instrumental reason. Thirdly, we will consider several twentieth-century architects who have questioned the dictates of instrumental production, creating buildings that engage the emotions and imagination of their users. Material is presented as two-hour lectures supplemented with readings and analyses of selected texts in architectural history and architectural theory.

INTA1221
History of Interior Architecture and Design
Staff Contact: Lisa Turbitt
UOC3 HPW2 S1
Prerequisite/s: BENV1122

A chronological survey of the design of interiors and decorative arts from ancient times to now. Correlation with contemporary themes and movements in art, architecture and the sciences. The changing role of craft in the decorative arts - in the making of materials, furnishings and fittings for interiors. Some heroes of interior architecture. Noteworthy immediate past and present interior architecture. Interior architecture in Australia.

INTA1421
Project Research
Staff Contact: Madeline Lester
UOC3 HPW3 S1
Prerequisite/s: INTA1302

This course is devoted to laying the foundations for the Graduation Project and its associated Dissertation. It incorporates: the development of the design brief; a report on the context of the project and the impact of all regulations and standards; a literature search and compilation of a bibliography; an outline of the dissertation. The whole to be submitted in the form of a report.

INTA1422
Dissertation
Staff Contact: Harry Stephens
UOC9 HPW2 S2
Prerequisite/s: INTA1421

To be written in conjunction with the Graduation Project, the Dissertation is an 8000 word document on an approved topic which takes as its departure point the theoretical basis of the project either broadly or in detail. A formal scholarly piece of writing, it will endeavour to demonstrate the student s ability to thoroughly research the approved topic and present a well reasoned argument in support of a clearly stated hypothesis. Whilst it is to be intimately associated with the Graduation Project, it will not be merely a descriptive piece but will illustrate the student s philosophical stance in relation to the project. A precis of the Dissertation will be submitted as part of the final presentation of the Graduation Project to assist the examining jury in its deliberations.

COMMUNICATIONS STREAM

The ability to be innovative and effective in the communication of every aspect of the discipline of Interior Architecture is crucial both in its study and practice. This stream is concerned with developing in the student an expertise in a wide range of techniques and media employed in communicating both within the discipline – to oneself, one's peers and teachers - and from the discipline to the wider community – to clients, builders and civic authorities. The stream will deal with skills such as writing (in many modes), speaking, model making, graphic communication – observational drawing, technical drawing, lettering, calligraphy, colour theory and application – as well as a wide range of computing skills.

INTA1142
Communications 1
Staff Contact: Harry Stephens
UOC4 HPW3 S2
Corequisite/s: INTA1102

An introduction to the communication skills in writing, speaking and drawing necessary in the study and practice of interior architecture. Scholarly research and writing; report and letter writing. Skills for working with and making oral presentations to large and small groups. Observational drawing and freehand sketching in a variety of techniques and media. Technical drawing - parallel (orthographic, isometric and axonometric) projections; conic projections - perspective; rendering techniques; plane and solid geometry. Introduction to colour theory and practice: the value scale; primary, secondary and tertiary colour wheel; colour contrasts.

INTA1241
Communications 2
Staff Contact: Lisa Turbitt
UOC4 HPW2 S1
Prerequisite/s: INTA1142
Corequisite/s: INTA1201, INTA1211

Drawing as a design tool and as a means of communicating technical data. Construction and shop drawings. Freehand and technically constructed perspective. Rendering techniques. Collection and use of a wide range of source material and media for graphic communication. Colour theory and practice.

INTA1342
Communications 3
Staff Contact: Bill Macmahon
UOC3 HPW3 S2
Prerequisite/s: INTA1241

Colour and light. A series of lectures and projects examining the history, practice and theories of colour and light. Practical experience to enable students to: precisely identify and exactly recreate any hue; develop an understanding of the subjective nature of colour vision; develop an awareness of the difference between the additive and subtractive systems of light-projected and physical colour.

BENV1141
Computers and Information Technology
Staff Contact: Jim Plume and Ojars Greste
UOC3 HPW3 S1
Corequisite/s: BENV1101

An introduction to the technology of computing and information technology as it pertains to the disciplines of the built environment. The computer is presented as a tool for storing and manipulating information by means of application programs which model the real world needs and activities of professionals in these disciplines. Topics include basic operation of a computer, information handling, networks and communications, computer graphics, CAD technology and computational processes. Students engage in weekly hands-on computer exercises to provide knowledge and experience in the use of applications commonly used in their own discipline. Assessment is based on participation in the hands-on work, some written assignments and a final examination.

BENV1242
Computer-Aided Design
Staff Contact: Jim Plume
UOC3 HPW3 S1, S2
Prerequisite/s: BENV1141

An exploration of the variety of CAD and graphic tools available for modelling, understanding and presenting design proposals. This course has dual objectives to build skills and confidence in the operation of CAD and related graphic systems, while developing a deep understanding of the unique opportunities offered by computer-based modelling technologies. Applications explored include 2D and 3D CAD, simple visualisation, image editing and composition, and the crossovers possible between these various techniques. Conceptual modelling techniques and their relevance to the design disciplines will be discussed. Weekly one-hour lectures are supported by discipline-focussed laboratory classes where students gain hands-on experience in the use of a variety graphic applications. Assessment is based on satisfactory participation and the completion of staged CAD-based tasks.

BENV1341
Design Modelling and Visualisation
Staff Contact: Stephen Peter
UOC3 HPW3 S1
Prerequisite/s: BENV1242
Note/s: Excluded BENV2401

An exploration of computer graphic techniques for visualising design proposals. Information can be found on the Internet Web Page: http://www.fbe.unsw.edu.au/subjects/benv/1341/ The lectures cover the principles and techniques of 3D visualisation including lighting, reflection, transparency, surface shading, texture mapping and depth cues. Laboratory-based exercises explore these different techniques, along with a variety of presentation techniques such as rendered images, image editing, animation, Quicktime VR and VRML. Assessment is based on the earlier staged learning exercises and one major design presentation project.

TECHNOLOGY STREAM

An understanding of technology is fundamental to design for it is concerned with the methods whereby that which is designed is made possible. The subject matter in this stream may be subdivided into the four main areas of construction, structures, environmental science and environmental technology that will be dealt with in varying degrees across the courses. Wherever possible technology assignments will be based upon the work in the design studio.

BENV1171
Architectural Technologies 1
Staff Contact: TBA
UOC9 HPW5 S1
Corequisite/s: BENV1101

Environment: An introduction to concepts of social responsibility, environmental accountability and ecological sustainability. Implications for the urban/built and natural environments. Fundamentals of building physics, as they relate to the concepts of comfort and environmental control.

Structures: Introduction to principles of structures, and their relationships to construction, material and environmental aspects of design. Analysis of structural precedents in relation to human need and design practice. Structural elements of different scale, and their relationships within larger structural components and systems. Typological outline of structural elements and components: point, line, surface, solid; foundation, footings, floors, walls, ceilings, roof systems, stairs, windows and doors. Basic structural performance requirements - safety, strength, stability and stiffness. Relationships with associated constructional performance - protection from elements, construction process, security; environmental performance - human needs, sustainability, energy efficiency; legal issues -best practice, code compliance; and economic parameters - establishment and life-cycle cost.

Construction: Introduction to different ways of thinking about construction in relation to design practice. Investigation of the artifactual nature and materiality of buildings. Detailed studies of selected precedents. Outline of construction principles and their implications for the development of construction strategies in architectural design. Analysis of typologies and classification systems for building materials.

These issues will be explored through an emphasis on timber as a construction material, and small timber buildings as a construction type. A series of workshop exercises, related to lecture material and/or design studio projects, will be jointly defined across the Environment, Structures and/or Construction discipline areas. These may include manual and/or computer laboratory exercises defined across the Communications discipline area.

BENV1172
Architectural Technologies 2
Staff Contact: Peter Murray
UOC8 HPW5 S2
Corequisite/s: ARCH1102

Environment: Thermal comfort and building climatology: perception and comfort; the body's responses; bioclimatic classification and traditional buildings. Solar geometry and control of sunlight. The building envelope: thermal performance; principles of heat transfer; solar radiation effects; absorptivity, reflectivity, conduction, thermal gradients; condensation and thermal insulation; degree day concept and prediction of heating requirements.

Structures: Introduction to basic structural behaviour and its relationship to construction, material and environmental aspects of design. Analysis of structural precedents in relation to human need and design practice. Outline of key structural behaviour concepts: loading - including load transfer, forces at supports and connections; resistance to loads - including stability, strength and stiffness; stress - including axial, shear, bending and deformation. Focus on basic linear structural elements and systems - including cable and arch, strut and column, beam, truss, frame. Concept and techniques of modelling, predicting and incorporating structural behaviour in design. Basic structural modelling techniques and problem solving tools - physical, graphical, numerical, computer-assisted. Introduction to basic statics, properties and strength of materials. Introduction to basic building physics. Implications for structural, constructional and environmental issues in design.

Construction: Introduction to building material science. Basic structure, properties, manufacturing processes, use and performance of materials in building and artifact design. Durability, movement and moisture control. Implications for design. Research and use of resource material. Introduction to construction documentation, drawing and specification practices.

These issues will be explored through an emphasis on masonry as a construction material, and small masonry buildings as a construction type. A series of workshop exercises, related to lecture material and/or design studio projects, will be jointly defined across the Environment, Structures and/or Construction discipline areas. These may include manual and/or computer laboratory exercises defined across the Communications discipline area.

INTA1271
Interior Technics 1
Staff Contact: Bill Macmahon
UOC4 HPW2 S1
Prerequisite/s: BENV1172

Environment: Natural and artificial lighting. Quantitative and qualitative aspects of lighting design. Electric light sources, light control and prediction methods. Construction: Analysis of the relationship between theoretical and constructional agendas. Design themes and their implications for selection of materials and constructional systems. Building materials and materiality in architecture. Quantitative and qualitative design constraints, limits and opportunities posed by building materials, structural and constructional systems. Detailed analysis of junctions and connections between materials, components, assemblies and finishes. Implications of junctions and connections for spatial and techtonic articulation and modulation. Dimensional constraints and coordination. Construction drawing, detailing, modelling and design development as parallel practices.

INTA1272
Interior Technics 2
Staff Contact: Bill Macmahon
UOC3 HPW2 S2
Prerequisite/s: BENV1172

Environment: Integration of passive design strategies. Case studies. Introduction to thermal evaluation and design tools, correlation and simulation models. Interior detailing: Sourcing, evaluating, selecting and specifying interior materials. Design resolution at a fine scale. The practice and technology of detailing interiors. Detailing from the beginning of the design process. Case studies of recent examples of good detailing. Building methods and technologies and their impact on detailing in a range of materials including stainless steel, tiles, stone, glass, timber joinery, timber veneer, composite materials and plastic laminates. Specifying finishes stains and coatings.

INTA1371
Interior Technics 3
Staff Contact: Bill Macmahon
UOC3 HPW2 S1
Prerequisite/s: INTA1272

Environment: Acoustics and noise control: design of rooms, basic shape and volume, acceptable ambient sound levels. Acoustic performance: properties and behaviour of sound, sound transmission loss, external noise levels, structure-borne and impact sound, reverberation times, selection of building envelope elements, selection of interior building materials and elements. Building services, regulations and standards: Air-conditioning, plumbing, telecommunications, electrical and mechanical services. Implications for the design of interior space. Relationship to best practice principles of passive energy design and energy conservation. Fire protection systems and regulations. Working within the parameters of the Building Code of Australia, Standards Association of Australia standards and the requirements of other statutory bodies pertaining to buildings in general and to interiors specifically.

PRACTICE STREAM

BENV1381
Professional Practice 1
Staff Contact: John Cooke
UOC3 HPW2 S1, S2

An introduction to the legal system. Aspects of the law of contract, torts, agency, trade practices, property and agency. Contract documentation and specification writing techniques. Estimating, cost planning, bills of quantities and budgeting.

INTA1481
Professional Practice 2
Staff Contact: John Cooke
UOC3 HPW2 S1
Prerequisite/s: BENV1381

Legal implications of professional practice. Liabilities of design professionals. The agreement with the client. Types of building contract and methods of building procurement. Tendering and negotiating. Contract administration. Professional defensive measures and crisis management. Introduction to management theory. The structure and organization of the office. Aspects of company and partnership law and insurance. Business principles and management procedures.

Bachelor of Building Construction Management

YEAR 1

BLDG1010
Communications and Resource Usage
Staff Contact: Jinu Kim
UOC3 HPW2 S1
Note/s: Compulsory

Using the library. Accessing information: reading, summarising and report writing. Organization of and participation in meetings, seminars and lectures. Graphic communication: photography, drafting and detailing.

BLDG1091
Built Environment 1
Staff Contact: TBA
UOC3 HPW2 S1
Note/s: Compulsory

The intention is to develop an understanding of the relevance of man s culture (that thing which his social, economic, political, religious and physical environment gives rise to) to the nature of buildings and settlements which he devises, and an appreciation of the architecture and building (in particular in terms of materials and construction) of those cultures which can be seen to be providing the line to modern western building from as far back as the stone ages.

BLDG1111
Building Science 1 (Materials)
Staff Contact: Marton Marosszeky
UOC4 HPW4 S1
Note/s: Compulsory

Properties of materials; plasticity, elasticity, density, porosity, hardness. Optical, electrical, thermal and acoustic properties. Deterioration. Properties and manufacture of building materials; wood, wood products, cements, limes, concrete, bricks, metals, fibre cement, ceramics, plastics, sealants and mastics, stones.

BLDG1201
Construction 1 (Domestic Construction)
Staff Contact: Perry Forsythe
UOC4 HPW4 S1
Note/s: Compulsory

Functional requirements and methods of building single family dwellings: brick, brick veneer and timber frame; domestic joinery; staircase construction; finishes; plumbing, drainage and electrical services; methods of setting out and supervision, on site observation and report on house construction.

BLDG1210
Construction Mathematics
Staff Contact: TBA
UOC3 HPW2 S1
Note/s: Compulsory

Calculus: differentiation and integration; practical applications. Probability: sample spaces and probabilities; probability trees; distribution of random variables; expected value and decision analysis. Statistics: mean, mode, median, standard deviation and variance; normal and binomial distributions; linear regression.

BLDG1261
Management 1 (Management Principles)
Staff Contact: Martin Loosemore and Tom Uher
UOC4 HPW2 S1
Note/s: Compulsory

Basic management principles, scientific management, management objectives. Structure of building industry. Building Acts and Regulations, codes, local government authority powers.

BENV1141
Computers and Information Technology
Staff Contact: Jim Plume and Ojars Greste
UOC3 HPW3 S1
Corequisite/s: BENV1101

An introduction to the technology of computing and information technology as it pertains to the disciplines of the built environment. The computer is presented as a tool for storing and manipulating information by means of application programs which model the real world needs and activities of professionals in these disciplines. Topics include basic operation of a computer, information handling, networks and communications, computer graphics, CAD technology and computational processes. Students engage in weekly hands-on computer exercises to provide knowledge and experience in the use of applications commonly used in their own discipline. Assessment is based on participation in the hands-on work, some written assignments and a final examination.

BLDG1002
Construction 2 (Low Rise Residential)
Staff Contact: Perry Forsythe
UOC4 HPW4 S2
Prerequisite/s: BLDG1201, BLDG1111
Note/s: Compulsory

Small multistorey buildings from the functional and construction operation viewpoints. Quality control and supervision. Basement, ground floor and upper floor construction; methods of roofing, waterproofing; joinery; internal finishes; minor construction plant, formwork. Construction drafting, onsite observation and report on home unit building.

BLDG1051
Structures 1
Staff Contact: Ojars Greste
UOC4 HPW3 S2
Note/s: Compulsory

Loads on structures, external and internal forces; free body diagrams; conditions of force and moment equilibrium. Analysis of statically determinate structures; member forces in pin-jointed trusses. Beam section properties; bending moment, shear force and deflection diagrams for beams; beam stresses in bending and shear, qualitative structural behaviour of frame, arch, cable, membrane, plate and shell structures in supporting vertical and lateral loads.

BLDG1411
Building Economics 1 (Micro Economics)
Staff Contact: Goran Runeson
UOC4 HPW2 S2
Note/s: Compulsory

The theory of prices and allocation of goods and services; An introduction to welfare economics. The economic structure and function of the building and construction industry, illustrated with examples. An introduction to investment analysis.

PHYS1250
Physics 1 (Building)
Staff Contact: First Year Director
UOC3 HPW3 S2

Energy transfer: concepts of temperature and heat; calorimetry; gas laws; phase changes and humidity; heat transmission; refrigeration. Electrostatics and electromagnetism; electric and magnetic fields; DC circuits. Properties of matter: atomic bond types and their relation to elasticity, plasticity and fracture; pressure in stationary and moving fluids.

GMAT0411
Surveying in Building and Construction
Staff Contact: Bill Kearsley, School of Geomatic Engineering
UOC3 HPW3 S1, S2
Note/s: This is a servicing subject taught within courses offered by other schools and faculties

Overview of services provided by Surveyors/Geomatic Engineers. Linear and angular measurement. Setting out. Levelling; laser levelling. Electronic tacheometry. Earthwork surveys. High-rise building surveys; quality assurance. Basic land law and cadastral systems. Subdivision surveys.

BLDG2400
Research Methods
Staff Contact: Goran Runeson
UOC3 HPW2 S2
Note/s: Compulsory

An introduction to research methods, analytical techniques and presentation. Theories and philosophies of science and research. Research topics; collecting, generating and evaluating information. Structuring the study and presenting results.

BLDG1271
Law for Builders 1
Staff Contact: TBA
UOC3 HPW2 S2
Note/s: Compulsory

Law, including brief outline of sources of law in New South Wales and the system of judicial precedent. General principles of law of contracts. Contractual rights and obligation. Court structures; sale of goods; a general introduction to the law of bankruptcy. General principles of law of agency. Law of partnership.

YEAR 2

ACCT9001
Introduction to Accounting A
Staff Contact: School Office
UOC3 HPW1.5 WKS14 S1

This subject introduces non-commerce students to the nature, purpose and conceptual foundation of accounting: information systems including accounting applications, and analysis and use of accounting reports.

BLDG2003
Construction 3 (Framed Buildings)
Staff Contact: TBA
UOC4 HPW4 S1
Prerequisite/s: BLDG1002, BLDG1051
Note/s: Compulsory

Study of structural steel and concrete frames; large span factory roofing, precast concrete walling, welding techniques, fire requirements, cladding methods, installation of cranes and machine footings, site works, dewatering, shoring, piling on site observation and report on factory building.

BLDG2261
Management 2 (Planning and Control)
Staff Contact: Tom Uher
UOC4 HPW2 S1
Prerequisite/s: BLDG1261
Note/s: Compulsory

Operation Research techniques and their relevance to building, concept of planning and control, CPM, PERT, Line of Balance, Multiactivity Chart, computer applications of CPM. Principles and application of Work Study. Risk analysis, decision making process.

BLDG3272
Law for Builders 2
Staff Contact: Phillip Davenport
UOC3 HPW2 S1
Prerequisite/s: BLDG1271
Note/s: Compulsory

Commercial law; Corporations; Trade practices; Consumer protection; Torts; Remedies; Succession; Local government; Real property; Administrative law.

BLDG2411
Building Economics 2 (Macro Economics)
Staff Contact: Goran Runeson
UOC3 HPW2 S1
Prerequisite/s: BLDG1411
Note/s: Compulsory

The function of the national economy and the role economic policies and their impact on the building and construction industry. The national finance system. The role of the Australian economy in the world. Investment analysis.

BLDG3052
Structures 2
Staff Contact: Ojars Greste
UOC4 HPW3 S1
Prerequisite/s: BLDG1051
Note/s: Compulsory

Principles of structural design for strength, stability and serviceability. Load carrying mechanisms in various structure types. Failure modes in beams and columns: bending, shear, local crushing, lateral buckling. Design of beams and columns in steel. Bolted joints in steel structures. Plastic design. Ultimate strength design for reinforced concrete. Design of concrete beams and one way slabs for bending, shear, deflection. Bond and anchorage; durability and concrete cover; column behaviour; two way slabs; footings and other elements; reinforcement detailing.

BLDG1151
Building Services 1 (Hydraulics)
Staff Contact: TBA
UOC3 HPW2 S1
Note/s: Compulsory

Hydraulic services pertaining to small and medium size projects; hot and cold water reticulation; sewer and storm water drainage; sanitary plumbing, introduction to fire fighting equipment and services; regulatory authorities and requirements.

ACCT9002
Introduction to Accounting B
Staff Contact: School Office
UOC3 HPW1.5 WKS14 S2
Prerequisite/s: ACCT9001
Note/s: Compulsory for BBCM degree course students in the Faculty of Built Environment

This subject introduces non-commerce students to managerial accounting: long-range planning, budgeting and responsibility accounting; cost determination, cost control and relevant cost analyses.

BLDG2112
Building Science 2 (Concrete and Metals)
Staff Contact: B. Gleeson, School of Materials Science and Engineering
UOC4 HPW4 S2
Note/s: Compulsory

Concrete technology: cement, aggregates, water and admixtures; properties of fresh concrete; strength considerations; durability, shrinkage and creep; special concretes; nondestructive testing; mix design. Metals in building: structural ferrous alloys; structural and architectural nonferrous alloys; corrosion and protection; welding; types of failure, brittle fracture, fatigue, creep; impact resistance; tensile properties; hardness; strain hardening. Fire: behaviour of building materials and structures.

BLDG2152
Building Services 2 (Mechanical)
Staff Contact: TBA
UOC3 HPW2 S2
Prerequisite/s: PHYS1938, BLDG1151
Note/s: Compulsory

Ventilation theory; ventilation systems and equipment; refrigeration theory; air conditioning heat loads; air conditioning equipment; electrical equipment; telephones and security; lifts and escalators; detection and fire protection; garbage and incinerators.

BLDG2301
Quantity Surveying 1
Staff Contact: Paul Marsden
UOC4 HPW4 S2
Note/s: Compulsory

Quantity surveying; historical background; functions of the quantity surveyor; introduction to Australian Standard Method of Measurement of Building Works, its importance and application; methods of recording dimensions, checking and correlating plans and specifications; principles of measurement and billing; Bill of Quantities format; elementary billing and measurement of basic trades including finishes, brickwork, woodwork, roofing, concrete and groundwork.

BLDG2500
Construction Management Project 1
Staff Contact: TBA
UOC3 HPW2 S2
Prerequisite/s: All Stage 1 and Stage 2 Session 1 courses
Note/s: Compulsory

An integrated individual or team project that draws together material covered in all courses of the first three semesters of the Program. Simulation of construction conditions including technical, management, business and social aspects that have to be considered by the construction professional.

BLDG2264
Management 3 (Contracts)
Staff Contact: Tom Uher and Phillip Davenport
UOC4 HPW2 S2
Prerequisite/s: BLDG2261
Note/s: Compulsory

Introduction to Contracts management. Project life cycle. Options for project delivery and contract price. Competitive tendering. Analysis of standard forms of contract. Contract disputes, litigation, arbitration and mediation. Contract Insurance.

YEAR 3

BLDG3004
Construction 4 (High Rise Buildings)
Staff Contact: Roger Miller
UOC4 HPW4 S1
Prerequisite/s: BLDG2003, BLDG1051
Note/s: Compulsory

Functional requirements and building techniques of highrise buildings and major building projects; structural systems, enclosure systems and environmental control systems and their interrelation from a construction standpoint; various methods and materials commonly used to solve functional demands; comparison of systems of construction, selection of plant and equipment cranes hoists concrete pumps etc.; principles of fire protection in highrise projects; cladding in concrete, metal and glass; ceiling and partition systems; integration and coordination of services. On site observation and report on high rise building.

BLDG3266
Management 4 (People Management)
Staff Contact: Martin Loosemore
UOC3 HPW2 S1
Prerequisite/s: BLDG2264
Note/s: Compulsory

Definition of Personnel Management and Human Resources Management. Stages in the development of human resources management. The leadership/ management dialectic. Inter-personnel skill development. Team building. Performance management and continuous improvement.

BLDG3321
Estimating 1
Staff Contact: Paul Marsden
UOC4 HPW2 S1
Prerequisite/s: BLDG2301
Note/s: Compulsory

Introduction to techniques used by building estimators. Topics include the analysis of costs of material, plant and labour, and the estimation of unit rates; labour and plant scheduling, preliminary items, general and site overheads, the preliminary estimate.

BLDG3303
Quantity Surveying 2
Staff Contact: Paul Marsden
UOC4 HPW4 S1
Prerequisite/s: BLDG2301
Note/s: Compulsory

Advanced billing and measurement of substructure, structure and services and preliminaries in accordance with the Australian Standard Method of Measurement. Introduction to computerised measurement and billing. Introduction to elemental cost planning.

BLDG3280
Occupational Psychology, Health and Safety
Staff Contact: Roger Miller
UOC3 HPW2 S1
Prerequisite/s: BLDG3266
Note/s: Compulsory

History of Industrial Relations in Australia. Enterprise agreements. Restructuring Federal and New South Wales Government policies. State and Federal awards. EEO and OH&S. Proactive site safety management. Statutory safety requirements.

BENV1382
Social Responsibility and Professional Ethics
Staff Contact: Jim Plume
UOC3 HPW2 S1

The aim of this course is to expose students in the Faculty to issues of social responsibility in their future professional activities. This is done by selecting for analysis case studies. The exchange of information and affirmation and contestation of values by students is considered as imporant a part of the learning process as the professional input through lectures. Instruction includes common

lectures and small seminar groups made up from students from all schools in the Faculty. Assessment will include individual and collaborative submissions.

BLDG3005
Construction 5 (Techniques)
Staff Contact: Roger Miller
UOC4 HPW4 S2
Prerequisite/s: BLDG3004
Note/s: Compulsory

Specialised building techniques employed on major projects including the use of plant, equipment and various construction systems: excavation equipment, shoring, ground anchorage, pile drivers, formwork, slip form, cranage, concrete handling. Construction methods with minimal impact on the environment. Integrated construction systems. Students undertake onsite studies. Emphasis on method of construction rather than the attributes of the finished product.

BLDG3070
Geotechnical Engineering for Building
Staff Contact: B. Shackel, School of Civil Engineering
UOC3 HPW2 S2
Note/s: Compulsory

Engineering Knowledge for Construction Management graduates of geotechnical matters relating to investigations, design and construction of buildings enabling them to discuss and brief civil and geotechnical engineers to do the work; supervise personnel carrying out construction quality control; understand the advantages and limitations of types of foundations systems; design footings and simple retaining walls for temporary construction.

BLDG3275
Management 5 (Construction and Quality Management)
Staff Contact: Marton Marosszeky and Jinu Kim
UOC4 HPW2 S2
Prerequisite/s: BLDG3266
Note/s: Compulsory

Construction project management, concept and application. Role and functions of the project manager; management of all phases of construction projects. Construction strategy, planning and control. Project quality management; quality management in design and construction including QC, QA and TQM. Application of ITP based tools. Benchmarking.

BLDG3282
Computer Applications in Building
Staff Contact: Ojars Greste
UOC4 HPW2 S2
Prerequisite/s: BLDG2281 or BENV1141
Note/s: Compulsory

Practical use of spreadsheet programs for developing applications related to building construction and management. Practical use of CPM software for project planning and special purpose programs for estimating and cost management. Practical use of electronic mail and communication networks. Introduction to relational data base programs and computer aided drafting and design. Demonstrations of various software for quantity surveying, estimating and construction management.

BLDG3500
Construction Management Project 2
Staff Contact: Martin Loosemore and Denny McGeorge
UOC3 HPW4 S2
Prerequisite/s: All Stage 1 and 2 and Stage 3 Session 1 courses.
Note/s: Compulsory

An integrated individual or team project that draws together material covered in all subjects of the first five semesters of the Program. Projects are drawn from the field of Facilities Management (FM), with emphasis on the development of integrative and problem solving skills: communication skills; research and analytical methods and professional practice. The nature of the topic of FM encourages the exploration of some of the wider roles which construction managers can play in the modern construction environment.

OTHER SUBJECTS

BLDG4500
Thesis Foundation
Staff Contact: Denny McGeorge
UOC6 S1,S2
Prerequisite/s: All Year 1 to 3 courses
Note/s: Compulsory

This course is preparation for BLDG4501 Thesis and must be satisfactorily completed before enrolment in that course. Students are required to submit a developed thesis outline on an approved topic, including a full literature review and a justification of the proposed research methodology.

BLDG4501
Thesis
Staff Contact: Denny McGeorge
UOC9 S1, S2
Prerequisite/s: BLDG4500
Note/s: Compulsory

Thesis: for Honours Degree. Results of research on selected Thesis topic. Thesis requires the student to survey the literature on the chosen topic, develop an hypothesis, collect information and data, effectively process and document the research results and draw reasoned conclusions from them.

Project: for Pass Degree. An in depth structured study or state of the art study of a technical topic. It should rely strongly on recent authoritative information and should synthesise the knowledge embodied in the technical literature in a well structured manner seeking to address a significant technical question with rigour.

BLDG9998
Quantity Surveying Industry Program
Staff Contact: Paul Marsden
UOC12 S1, S2
Note/s: Compulsory

Students proposing to apply for membership in the Australian Institute of Quantity Surveyors after graduation should enrol in this course rather than BLDG9999. It must be completed before the start of the final year of the Program. The Industry Program is to be taken as a six months continuous employment with a professional Quantity Surveying firm or with a firm or building company where quantity surveying activities are undertaken. Students should be under the direct supervision of a corporate member of the Australian Institute of Quantity Surveyors or, where this is not possible, under the guidance of a mentor appointed by the Institute. Submission requirements are a daily diary, report and a completed form from the employer.

BLDG9999
Building Industry Program
Staff Contact: Paul Marsden
UOC12 S1, S2
Note/s: Compulsory

Eighty days of approved building industry experience at any time to the start of the final year of the Program. Submission requirements are a weekly diary, report and a completed form from the employer.

ELECTIVES

BLDG4314
Building Economics 3
Staff Contact: Goran Runeson
UOC6 HPW3
Prerequisite/s: ACCT9002
Note/s: Elective

The business environment; business structures; taxation, depreciation; operating costs; economics of building plant and materials handling systems; financial control in the erection, management and demolition of buildings.

BLDG4422
Estimating 2
Staff Contact: Paul Marsden
UOC6 HPW3
Prerequisite/s: BLDG3321
Note/s: Elective

Advanced estimating techniques, competitive tendering, contract cost adjustments; computer techniques applied to estimating.

BLDG4275
Dispute Avoidance and Resolution
Staff Contact: TBA
UOC3 HPW3
Prerequisite/s: BLDG2264
Note/s: Elective

Nature of claims, remedies, alternative dispute resolution, mediation, expert appraisal, litigation, moot arbitration.

BLDG4303
Quantity Surveying 3
Staff Contact: Paul Marsden
UOC3 HPW3
Prerequisite/s: BLDG3303
Note/s: Elective

Functions of the cost planner; liaison with consultants; cost planning techniques including practical exercises; cost control and design economics; professional practice.

BLDG4366
Management 6 (Corporate Strategy and Small Business)
Staff Contact: TBA
UOC3 HPW3
Prerequisite/s: BLDG4314
Note/s: Elective

Corporate strategy and the overall general management of an enterprise in the construction and development industry, derivation of policy by top management together with planning of policy implementation; tax planning. Small business management including uncertainty, entrepreneur-ship, risk and trading structures. Contrasting small business operations with the strategy, management and marketing etc. of large businesses in the Construction and Property industries.

BLDG4492
Property Development and Valuation
Staff Contact: TBA
UOC3 HPW3
Prerequisite/s: BLDG2411
Note/s: Elective

A total approach to the building process through the four stages of pre-design, design, construction and post-construction. Market research, establishing client's needs, site selection and analysis, feasibility studies and financing methods. General principles of valuation. Judicial valuation, legal precedent, land titles and rights. Depreciation assessment. Building maintenance cycles. Time value of money and equivalence. Methods and philosophies of determining market valuations. Preparation of development applications cost value analysis, value management LCC and services integration.

Bachelor of Industrial Design

DESIGN STUDIOS

BENV1101
Design Fundamentals: Studio 1
Staff Contact: Desley Luscombe and Lisa Tirbitt
UOC8 HPW7 S1
Corequisite/s: BENV1141

Introduction to design as fundamental to coherent thought and action in your discipline. Exploration of the influences on design thinking and practice, including the philosophical, historical, social and environmental. Critical thinking and expression in different forms. Studio projects and assignments to develop skills and understanding of design elements and principles. Introduction to a basic vocabulary of representation techniques used by designers to facilitate the development and communication of design ideas including: colour, freehand drawing, sketching, painting, construction, mixed media, desktop publishing, photomontage techniques, technical drawing and drafting.

IDES1031
Industrial Design Studio 1
Staff Contact: Rina Bernabei
UOC6 HPW4 S2
Prerequisite/s: BENV1101
Corequisite/s: IDES1021, IDES1041

To introduce students to basic aspects of Industrial Design in order to develop an ability to solve problems of very low complexity involving theoretical and project work to introduce design methodologies and their application to three dimensional design problems. At the same time the course assists in the final decision at the end of year 1 that industrial design is the appropriate professional career choice for each individual student.

IDES2161
Industrial Design Studio 2 A
Staff Contact: Jonathan Talbot
UOC6 HPW5 S1
Prerequisite/s: IDES1031

This course introduces students to design problems which require the application of the design process in order to arrive at creative and feasible solutions. The course is based around design projects as well as some critical review of design literature. The projects provide experience working with a restricted range of materials and manufacturing processes in the design and development of fully resolved product proposals. Students will be required to develop a good understanding of their own use of the design process. Skill development will emphasise the area of rapid exploration and communication of design ideas using a range of media.

IDES2162
Industrial Design Studio 2 B
Staff Contact: Rina Bernabei
UOC6 HPW5 S2
Prerequisite/s: IDES1031, IDES2161

This course builds on the knowledge and skills introduced in Industrial Design Studio 2A in order to further students understanding and command of the design process. The course is based around design projects as well as some critical review of design publications. Project work provides experience in investigating the requirements of particular groups of end-users and exploring the development of product form to meet these requirements. Students will develop skills in communicating highly resolved design concepts.

IDES3221
Industrial Design Studio 3 A
Staff Contact: Miles Park
UOC6 HPW5 S1
Prerequisite/s: IDES2161, IDES2162

The course Industrial Design Studio 3 is aimed at introducing students to more complex design problems in order to develop a thorough and responsible approach to the design of products. Projects are chosen that build up on the undertaken project work in Industrial Design Studio 2, and include projects of "real-life" complexity.

IDES3222
Industrial Design Studio 3 B
Staff Contact: Miles Park
UOC6 HPW5 S2
Prerequisite/s: IDES2161, IDES2162, IDES3221

This course develops the students understanding of the design process in its application to complex product development problems. The course is based around design projects and will include the compilation, by each student, of a portfolio of design work completed in the Bachelor of Industrial Design program. Project work completed

for this course will include the resolution of full design detail and will successfully address manufacturing and materials performance requirements tailored to particular markets and end-user needs. Design and communication skills will be at a level that would be acceptable in professional design practice.

IDES4291
Industrial Design Studio 4
Staff Contact: Michael Hort
UOC6 HPW4 S1
Prerequisite/s: IDES3221, IDES3222

Studies during this unit will be directed to prepare students to work as Industrial Design professionals. Each student is encouraged to direct his/her project program towards minimising any weaknesses that are evident in his/her knowledge and skills, or covering an area of design that they may not have worked in previously. Projects are orientated towards specific interests that each student has developed in Industrial Design. Each student will finalise their folio during the year, therefore, this requirement should be kept in mind throughout the year when selecting and undertaking projects. The folio should aim at being of professional quality and range.

IDES4301
Project Research
Staff Contact: Jonathan Talbot
UOC6 HPW4 S1
Prerequisite/s: IDES3221, IDES3222

Product research methodologies and their application to an individual project chosen in conjunction with the Program. This work provides the research basis for the Project.

IDES4311
Graphic Design
Staff Contact: Lance Green
UOC3 HPW3 S2
Prerequisite/s: IDES1031

The major graphic production processes, and their application in graphic design. Type and typesetting systems. Graphic design projects.

IDES4321
Environmental and Interior Design
Staff Contact: Lance Green
UOC3 HPW2 S2
Prerequisite/s: IDES2161, IDES2162

Understanding the nature of environmental space and spatial ambience, and the relationship of objects and products to the surrounding space. Environmental and interior design projects.

IDES4351
Project
Staff Contact: Michael Hort
UOC15 HPW12 S2
Prerequisite/s: IDES3221, IDES3222
Corequisite/s: IDES4301

A project within the practice areas of industrial design, chosen by the student in consultation with the program at the commencement of Project Research. The project is based upon the research base established in Project Research.

DESIGN SKILLS

IDES1011
Workshop Technology
Staff Contact: Jonathan Talbot
UOC4 HPW4 S1

Introduction to workshop techniques involved in the production of models and prototypes. Development of safe working practices using a range of hand tools and basic machining processes.

IDES1051
Geometrical and Mechanical Drawing A
Staff Contact: Lance Green
UOC3 HPW2 S1

Introduction to orthographic drawing with particular reference to the Australian Engineering Drawing Standard. Mechanical projections other than perspective. Descriptive geometry and the analysis and synthesis of form and spatial relationships.

IDES1052
Geometrical and Mechanical Drawing B
Staff Contact: Lance Green
UOC4 HPW2 S2
Prerequisite/s: IDES 1051

Applications of intersections and developments of solids. Introduction to pictorial drawing consists of isometric projection, exploded isometric projection and perspective drawing. Computer Aided Design (CAD) is introduced in the last 5 weeks to provide students with an application of commands, orthogonal drawing, dimensioning, handling text and drawing layout.

IDES2101
Perspective and Rendering Techniques
Staff Contact: Jonathan Talbot
UOC6 HPW4 S1
Prerequisite/s: BENV1101 and IDES1051

Review of the major mechanical perspective systems and rendering techniques with particular reference to their applications in product design. Project studies are undertaken within the range of systems and media.

BENV1141
Computers and Information Technology
Staff Contact: Jim Plume and Ojars Greste
UOC3 HPW3 S1
Corequisite/s: BENV1101

An introduction to the technology of computing and information technology as it pertains to the disciplines of the built environment. The computer is presented as a tool for storing and manipulating information by means of application programs which model the real world needs and activities of professionals in these disciplines. Topics include basic operation of a computer, information handling, networks and communications, computer graphics, CAD technology and computational processes. Students engage in weekly hands-on computer exercises to provide knowledge and experience in the use of applications commonly used in their own discipline. Assessment is based on participation in the hands-on work, some written assignments and a final examination.

IDES2171
Computer Aided Design
Staff Contact: Jonathan Talbot
UOC6 HPW4 S2
Prerequisite/s: BENV1141

Computer aided design and drafting systems and their applications in product development. Mathematical optimisation techniques.

IDES3231
Computer Graphic Applications
Staff Contact: Jonathan Talbot
UOC6 HPW4 S1
Prerequisite/s: IDES2171

Development of Computer Aided Drafting with particular reference to perspective and rendering techniques using computing equipment, as well as the application of computing to other graphic problems.

DESIGN THEORY

IDES1121
History of Industrial Design
Staff Contact: Miles Park
UOC3 HPW2 S1

This course is a chronological and focused study of the emergence and development of industrial design from 1800 to the present day. It includes products as an aspect of our culture/society/commerce/industry from 1750 to the present day and examines consumer products within the context of the changes taking place in industry and society.

IDES2091
Design Methodology
Staff Contact: Lance Green
UOC3 HPW2 S1
Prerequisite/s: IDES1031

Design methodology and its applications in the industrial situation, analysis of problems, strategy planning, the application of research methods. In addition the course describes the methodologies of Value Analysis, Quality Function Deployment, Design for X (manufacture, assembly, environment etc.).

IDES4371
Design Management for Industrial Design
Staff Contact: Lance Green
UOC3 HPW2 S2
Prerequisite/s: IDES2091

The problem of integrating innovative product design and development within the overall managerial, production and financial structure of industry. Australian and overseas case studies are given. Particular emphasis is placed on the development of appropriate design management structures and methods for the Australian situation.

ERGONOMICS

IDES2201
Ergonomics
Staff Contact: Jonathan Talbot
UOC6 HPW4 S1

Applied anatomy and kinesiology, anthropometrics and application in product and environmental design. Physiological and psychological aspects of ergonomics, work, environment effects, human/machine interface. Principles of ergonomics research methods. Analysis of ergonomic requirements within the context of product development. Ergonomic methodology and experimental methods and their application in the product research and development process.

INDUSTRIAL EXPERIENCE

IDES4391
Industrial Experience
Staff Contact: Jonathan Talbot
UOC12
Prerequisite/s: IDES2161, IDES2162
Corequisite/s: IDES3221

Students obtain 3 months of approved practical experience in a design office. The course may be taken from the end of the second year but at least half of the requirement must be taken from the end of the third year. The course cannot be taken in units of less than 1 month. The experience is to be recorded in a logbook to be signed by the employer.

SCIENCE AND ENGINEERING COURSES

IDES1082
Engineering Design Mechanics
Staff Contact: Lance Green
UOC4 HPW4 S2
Prerequisite/s: MATH1021 and PHYS1937

Equilibrium, Friction Systems of multiforce members, coplanar. Mass centre; centroid. Fluid statics. Plane particle kinematics; rectilinear, motion. Plane particle kinetics; equations motion; work, power, energy; impulse, momentum, impact.

IDES2182
Materials and Manufacturing Processes for Industrial Design A
Staff Contact: Lance Green
UOC3 HPW3 S2

Engineering materials including polymers and timbers and their application in manufacturing processes. The range of processes.

IDES3202
Materials and Manufacturing Processes for Industrial Design B
Staff Contact: Lance Green
UOC3 HPW2 S1
Prerequisite/s: IDES2182

Plastic materials and manufacturing processes are discussed together with the economics of production processes, design constraints alternate design and manufacturing strategies and test procedures.

ELEC0806
Electrical Engineering for Industrial Design
Staff Contact: Faculty Student Centre Office
UOC6 HPW4
Prerequisite: PHYS1937

A broad introduction to Electrical Engineering and Electronics for Industrial design. Ohm's law, concepts of AC and DC voltage and current. The basics of transformers, motors and electromechanical systems. Electromagnetic interference, shielding and earthing. Feedback systems and control elements. Analogue and digital electronics and instrumentation. Safety and design standards with case studies.

IDES3262
Production Design and Technology for Industrial Design
Staff Contact: Lance Green
UOC3 HPW2 S2
Prerequisite/s: IDES3202

Basic metrology and tolerancing, introduction to plasticity theory and its application to theories for machining and forming, economics of production processes; interaction of machines and tools; principles of process selection; review of major processes, interaction of design, production quantity, materials and processes; value analysis, design constraints. Quality assurance.

MATH1011
General Mathematics 1B
Staff Contact: School of Mathematics First Year Office
UOC6 HPW6 S1 or S2
Prerequisite/s: HSC mark range required: 2 unit Mathematics (60-100) or 2 and 3 unit Mathematics (1-150) or 3
Note/s: Excluded MATH1031, MATH1131, MATH1141, ECON1202, ECON2291

Functions (and their inverses), limits, asymptotes, continuity; differentiation and applications; integration, the definite integral and applications; inverse trigonometric functions; the logarithmic and exponential functions and applications; sequences and series; mathematical induction; the binomial theorem and applications; introduction to probability theory; introduction to 3-dimensional geometry; introduction to linear algebra.

MATH1021
General Mathematics 1C
Staff Contact: School of Mathematics First Year Office
UOC6 HPW6 S2 or SS
Prerequisite/s: MATH1011 or MATH1131 or MATH1141
Note/s: Excluded MATH1031, MATH1231, MATH1241, ECON1202, ECON2291

Techniques for integration, improper integrals; Taylor s theorem; first order differential equations and applications; introduction to multivariable calculus; conics; finite sets; probability; vectors, matrices and linear equations.

MATH2839
Statistics SM
Staff Contact: School Office
UOC3 HPW3 S2
Prerequisite/s: MATH1021 or MATH1231 or MATH1241
Note/s: Excluded MATH1041,MATH2841, MATH2870, MATH2801, MATH2901. Not available in the Science program unless specified as part of a combined degree program

Graphical data analysis. Review of probability, random variables and their properties. The normal and binomial distributions, the central limit theorem. Applications to statistical quality control. Theory of statistical inference including confidence intervals and hypothesis

testing with applications to one and two sample problems based on the t- and F- test. Simple and multiple linear regression including data transformations to normality. Design and analysis of experiments, analysis of variance, introduction to factorial designs. Applications will be drawn primarily from the fields of mechanical and mining engineering and industrial design.

PHYS1259
Physics 1 (Industrial Design)
Staff Contact: First Year Director
UOC4 HPW4 S2

Energy transfer: concepts of temperature and heat; calorimetry; gas laws; phase changes and humidity; heat transmission; refrigeration. Electrostatics and electromagnetism; electric and magnetic fields; DC circuits; electromagnetic induction. Sound: wave properties; absorption of sound. Properties of matter: atomic bond types and their relation to elasticity, plasticity and fracture; pressure in stationary and moving fluids.

COMMERCE COURSES

ACCT9003
Introduction to Accounting Principles
Staff Contact: School Office
UOC3 S1 or S2
Note/s: Exclusions: ACCT1501 or ACCT9001 or ACCT9002 or ACCT9062

This course will provide students with a basic understanding of the key financial statements and how transactions they are likely to be involved with will affect those financial statements. Students will learn about some of the internal controls and why they exist in organisations. They will learn to analyse financial statements and make decisions using those statements. The basics of management accounting will be introduced including cost behaviour, cost-volume-profit analysis, costing and budgeting.

MARK1012
Marketing Fundamentals
Staff Contact: School Office
UOC6 HPW4 WKS14 S2
Prerequisite/s: Prerequisites or Corequisities: ACCT1501, ECON1101, ECON1202

Major concepts and theories relevant to the study and practice of marketing are introduced. Topics include the changing global marketplace, marketing processes and planning, the use of market research, an understanding of consumers and customers, decision-making and the marketing mix, market segmentation, positioning and product differentiation. This introductory course prepares students for further study across the broad spectrum of product, service, consumer, business-to-business, industrial global and social marketing.

MARK2051
Consumer Behaviour
Staff Contact: School Office
UOC6 HPW4 WKS14 S1
Prerequisite/s: MARK1012
Corequisite/s: MARK2052
Note/s: Excluded MARK2032, MARK2042

The need for marketers to understand why consumers act as they do in the marketplace is the crux of this subject. Students are equipped with theoretical and conceptual knowledge of consumer behaviour, drawing heavily on both psychological and sociological viewpoints. This includes the psychology of individual decision-making and choice, patterns of behaviour exhibited by aggregate groups of consumers, and also the sociological and cultural influences on consumer attitudes and behaviour. This prepares students for making informed decisions about how to manage and respond to the needs and wants of consumers.

MARK3091
New Product and New Service Development
Staff Contact: School Office
UOC6 HPW3 WKS14 S1
Prerequisite/s: MARK1012, MARK2051, MARK2052

A subject focused on how to develop a business plan for a new product or service launch, having diagnosed a market opportunity. This involves an understanding of product-based competition and an appreciation of strategic options available to firms that are adept at development. Themes include: NPD processes, from setting a strategic framework for the development effort through to monitoring post-launch success; methods of market research and the use of analytical approaches such as perceptual mapping, benefit segmentation, trends unbundling and morphological analysis; screening and ranking processes to set priorities for development; converting concepts into prototypes; developing strategies and plans for the commercial launch. Some exercises may require flexibility with the timing of classes.

Bachelor of Landscape Architecture

BENV1101
Design Fundamentals: Studio 1
Staff Contact: Desley Luscombe and Lisa Tirbitt
UOC8 HPW7 S1
Corequisite/s: BENV1141

Introduction to design as fundamental to coherent thought and action in your discipline. Exploration of the influences on design thinking and practice, including the philosophical, historical, social and environmental. Critical thinking and expression in different forms. Studio projects and assignments to develop skills and understanding of design elements and principles. Introduction to a basic vocabulary of representation techniques used by designers to facilitate the development and communication of design ideas including: colour, freehand drawing, sketching, painting, construction, mixed media, desktop publishing, photomontage techniques, technical drawing and drafting.

BENV1141
Computers and Information Technology
Staff Contact: Jim Plume and Ojars Greste
UOC3 HPW3 S1
Corequisite/s: BENV1101

An introduction to the technology of computing and information technology as it pertains to the disciplines of the built environment. The computer is presented as a tool for storing and manipulating information by means of application programs which model the real world needs and activities of professionals in these disciplines. Topics include basic operation of a computer, information handling, networks and communications, computer graphics, CAD technology and computational processes. Students engage in weekly hands-on computer exercises to provide knowledge and experience in the use of applications commonly used in their own discipline.

Assessment is based on participation in the hands-on work, some written assignments and a final examination.

LAND1121
Introduction to Landscape Architecture
Staff Contact: James Weirick
UOC3 HPW2 S1

Introduction to the principles of design education. Overview of landscape architecture as a practice, as a profession and as an academic discipline. Study of contemporary landscape architecture as a design field and as a creative component of the environmental movement. Introduction to the art and technique of reading the landscape.

LAND1151
Horticulture
Staff Contact: Robin Simpson
UOC4 HPW3 S1

This course introduces students to a botanical understanding of plants, their structure and function, taxonomic classification. The relationship between plants and their environments, habitats, communities and life cycle. Introduction to horticultural practice and plant identification.

GEOG1701
Environmental Systems and Analysis
Staff Contact: Mr D Edwards, A/Prof M Melville, Dr S Mooney
UOC6 HPW5 WKS14 S1
Note/s: Excluded GEOG1721, GEOG1031, GEOG1073

An introduction to the role of environmental processes in shaping the patterns of the physical environment. The operation of global environmental systems. Emphasis on the interaction of humans with their environment and the causes of environmental crises. Topics include water resources, circulation of the atmosphere and oceans, weather and climate, the formation of the Earth, fluvial and coastal landforms, land degradation, the biosphere and ecosystems, Australian biotic patterns, human impact on natural systems. Instruction is given on methods used to analyse climatic patterns and climate change, soils and landform relationships, vegetation patterns, land degradation, and human impacts on the environment.

LAND1152
Landscape Analysis
Staff Contact: Robin Simpson
UOC8 HPW6 S2
Prerequisite/s: GEOG1701

Observation and interpretation of both physical, biological and cultural environments and their interrelationships. Landscape character through sensory inputs and historical understanding. Fundamental characteristics of a range of biological systems, with emphasis on relationships with the physical environment. Survey of Australian plant communities and associated fauna with particular emphasis on the Sydney Region. Recording and presentation techniques associated with landscape surveys, field excursions.

LAND1142
Design Communication
Staff Contact: Linda Corkery
UOC4 HPW3 S2

This course encourages students to develop a personal vocabulary of representation techniques to facilitate the development and communication of design ideas. Students develop a range of techniques including: perspective, freehand drawing and sketching, colour rendering, advanced creative drawing, the use of different media and graphic thinking.

LAND1102
Landscape Design 2: Design Process
Staff Contact: Linda Corkery
UOC4 HPW3 S2
Prerequisite/s: LAND1101
Corequisite/s: LAND 1142

An introduction to site design and design process. A number of small-scale projects will allow exploration of design process through site planning, the use of historical precedent and design generation. Studio based projects will be supported by theoretical readings.

LAND1171
Landscape Technology 1
Staff Contact: Linda Corkery
UOC4 HPW3 S2

Developing proficiency in site surveying and mapping techniques. Principles of grading and their application to a variety of site requirements and conditions. Land shaping, contour manipulation, drainage, earthworks.

LAND1122
History of Landscape Architecture
Staff Contact: James Weirick
UOC4 HPW2 S2

Critical analysis of cultural landscapes through the investigation of philosophical, aesthetic and social aspects of landscape architecture and garden art in Eastern and Western traditions.

LAND1221
Environmental Sociology for Landscape Architects
Staff Contact: Linda Corkery
UOC3 HPW2 S1

Students will be introduced to the study of people-place relationships and sociological techniques for understanding specific user-group requirements in the design of public spaces. Human perception of shared and personal space and the effect of environmental change on individuals and communities will be explored. Universal design and accessibility in design of public areas is also covered.

LAND1281
Professional Practice 1
Staff Contact: Robin Simpson
UOC3 HPW2 S1

An introduction to the practice of landscape architecture, its scope and potential. The framework of commercial and environmental law. Project stages and procedures. Contracts, consultancy and client relationships. Current issues in landscape practice.

LAND1201
Landscape Design 3: Site Planning
Staff Contact: Robin Simpson
UOC8 HPW6 S1
Prerequisite/s: LAND1152, LAND1102, LAND1171

Response to a specific site with a program of uses, in natural or urban settings. Emphasis is on gaining further skills in site design, effective communication of design concepts and integration of ecological issues with landscape design.

LAND1251
Advanced Horticulture
Staff Contact: Robin Simpson
UOC3 HPW2 S1
Prerequisite/s: LAND1151

Based on the knowledge gained in Horticulture, this course will provide students with the horticultural theory and practice necessary for supporting landscape design and documentation.

LAND1271
Landscape Technology 2
Staff Contact: Linda Corkery
UOC4 HPW3 S1

Description and selection of materials, their properties, origin and production. Understanding the relationship between materials and design. Use of Australian Standards. Construction principles and methods.

LAND1202
Landscape Design 4: Landform and Planting Design
Staff Contact: Robin Simpson
UOC8 HPW6 S2
Prerequisite/s: LAND1171, LAND1201, LAND1251

In this studio students undertake more sophisticated site research and analysis. They will develop an understanding of the relationship between natural systems, constructed environments and ecological sustainability. Focussing on planting and landform manipulation, students will explore techniques for developing and resolving design ideas.

LAND1222
History and Theory Elective
Staff Contact: James Weirick
UOC3 HPW6 S2

Students are required to select one of the landscape electives listed in the History and Theory elective courses section. These include: BENV2218, BENV2219, BENV2220 and BENV2221.

LAND1272
Landscape Technology 3
Staff Contact: Linda Corkery
UOC3 HPW3 S2

Preparation of documentation for landscape works including; grading, drainage, earthworks, roads and pavements, planting and structures. Critical analysis of design development and documentation. Design a development of construction documentation and detailing for a wide range of materials, elements and structures.

LAND1351
Landscape Management
Staff Contact: Robin Simpson
UOC4 HPW2 S2

Planning and management of both natural and cultural landscapes. Historical review of landscape planning and management in Australia and overseas. Overview of environmental policy and legislative framework. Examination of a range of landscape management methodologies and processes.

LAND1381
Landscape Practice 1
Staff Contact: Linda Corkery
UOC12 S1

Students are required to obtain a specified period of practical experience during enrolment in the program. This requirement for practical experience is a prerequisite for entry into the fourth year course LAND1402 Landscape Design 8.

LAND1301
Landscape Design 5: Design with a Complex Program
Staff Contact: Linda Corkery
UOC9 HPW6 S1
Prerequisite/s: LAND1202

This studio will introduce students to projects with more complex programs and different approaches to dealing with them. It will focus on developing skills in the manipulation of architectonic space and form.

LAND1371
Landscape Engineering
Staff Contact: Linda Corkery
UOC3 HPW3 S1

Understanding structural design and construction techniques for a range of elements including; earthworks, drainage, retaining and freestanding walls, pavements and roads, masonry, steel and timber structures. Structural design and construction techniques applied to a range of difficult site problems.

BENV1242
Computer-Aided Design
Staff Contact: Jim Plume
UOC3 HPW3 S1, S2
Prerequisite/s: BENV1141

An exploration of the variety of CAD and graphic tools available for modelling, understanding and presenting design proposals. This course has dual objectives to build skills and confidence in the operation of CAD and related graphic systems, while developing a deep understanding of the unique opportunities offered by computer-based modelling technologies. Applications explored include 2D and 3D CAD, simple visualisation, image editing and composition, and the crossovers possible between these various techniques. Conceptual modelling techniques and their relevance to the design disciplines will be discussed. Weekly one-hour lectures are supported by discipline-focussed laboratory classes where students gain hands-on experience in the use of a variety graphic applications. Assessment is based on satisfactory participation and the completion of staged CAD-based tasks.

LAND1302
Landscape Design 6: Design Resolution and Documentation
Staff Contact: Linda Corkery
UOC9 HPW6 S2
Prerequisite/s: LAND1301

This studio will focus on design resolution and documentation of one project. Students will develop skills in detailing, use of materials and CADD.

LAND1321
Research Methods
Staff Contact: James Weirick
UOC3 HPW2 S2

Investigation of various research methods with application to study in landscape architecture. Development of the critical logical and stylistic skills involved in researching, writing and presenting essays, theses, articles, papers and reports. Each student researches and prepares an approved thesis proposal including a bibliography, chapter outline and first draft chapter.

LAND1382
Professional Practice 2
Staff Contact: Robin Simpson
UOC3 HPW2 S2

Understanding of legal and professional responsibilities with specific reference to negligence and risk. Understanding of contract law and tender procedures. Application of specific statutes such as tree law, copyright, trademarks and patents.

LAND1481
Landscape Practice 2
Staff Contact: Linda Corkery
UOC12 S1

Students are required to obtain a specified period of practical experience during enrolment in the program. This requirement for practical experience is a prerequisite for entry into the fourth year course LAND1402 Landscape Design 8.

LAND1421
Landscape Thesis
Staff Contact: James Weirick
UOC15 S1
Prerequisite/s: LAND1321 (the proposed topic area and title must be approved by the Course Authority and the Program Head)

A specialised individual study, enabling each student to gain or extend knowledge and understanding in some aspect of landscape architecture. The thesis is essentially evidence of this individual study, under staff supervision and culminating in a written document deposited in the Faculty library. The course requires each student to carry out the required research, organization of material and writing in order to submit a complete draft of a written thesis in week 7. Each student then refines the draft and undertakes the preparation of illustrative material and completion of all necessary references and bibliography, before the submission of the final unbound manuscript for assessment in week 14. The unbound manuscript is assessed by at least two readers and returned with corrections noted (if necessary), so that a bound copy of the thesis can be lodged with the Faculty Student Centre. This one session course is graded in accordance with the normal University grading system.

LAND1401
Landscape Design 7: Urban Landscape Design
Staff Contact: James Weirick
UOC12 HPW8 S2
Prerequisite/s: LAND1302

An exploration of the relationships within the fabric of the urban environment including concepts of city functions and the analysis of disparate parts of the city with physical design being the primary focus. Context and place, history and theory are considered as well as analytical techniques. Design studios, lectures and seminars. This course generates the urban design context for the Graduating Project undertaken in LAND1402 Landscape Design 8.

LAND1402
Landscape Design 8: Graduating Studio
Staff Contact: James Weirick
UOC12 HPW8 S2
Prerequisite/s: , LAND1481
Corequisite/s: LAND1401

Students are called upon to employ all the knowledge, skill and understanding they have gained in previous years and to explore issues and approaches in design which are of particular interest to them. The graduating design project follows from LAND1401

Landscape Design 7 and involves sketch design and detailed design development. Graduating project is related to the natural, urban or rural environment. The studio will critically assess aspects of theory through design speculation.

Bachelor of Town Planning

CORE SUBJECTS

BENV1101
Design Fundamentals: Studio 1
Staff Contact: Desley Luscombe and Lisa Tirbitt
UOC8 HPW7 S1
Corequisite/s: BENV1141

Introduction to design as fundamental to coherent thought and action in your discipline. Exploration of the influences on design thinking and practice, including the philosophical, historical, social and environmental. Critical thinking and expression in different forms. Studio projects and assignments to develop skills and understanding of design elements and principles. Introduction to a basic vocabulary of representation techniques used by designers to facilitate the development and communication of design ideas including: colour, freehand drawing, sketching, painting, construction, mixed media, desktop publishing, photomontage techniques, technical drawing and drafting.

BENV1141
Computers and Information Technology
Staff Contact: Jim Plume and Ojars Greste
UOC3 HPW3 S1
Corequisite/s: BENV1101

An introduction to the technology of computing and information technology as it pertains to the disciplines of the built environment. The computer is presented as a tool for storing and manipulating information by means of application programs which model the real world needs and activities of professionals in these disciplines. Topics include basic operation of a computer, information handling, networks and communications, computer graphics, CAD technology and computational processes. Students engage in weekly hands-on computer exercises to provide knowledge and experience in the use of applications commonly used in their own discipline.

Assessment is based on participation in the hands-on work, some written assignments and a final examination.

GEOG1701
Environmental Systems and Analysis
Staff Contact: Mr D Edwards, A/Prof M Melville, Dr S Mooney
UOC6 HPW5 WKS14 S1
Note/s: Excluded GEOG1721, GEOG1031, GEOG1073

An introduction to the role of environmental processes in shaping the patterns of the physical environment. The operation of global environmental systems. Emphasis on the interaction of humans with their environment and the causes of environmental crises. Topics include water resources, circulation of the atmosphere and oceans, weather and climate, the formation of the Earth, fluvial and coastal landforms, land degradation, the biosphere and ecosystems, Australian biotic patterns, human impact on natural systems. Instruction is given on methods used to analyse climatic patterns and climate change, soils and landform relationships, vegetation patterns, land degradation, and human impacts on the environment.

PLAN1011
Urban Society and Sociology
Staff Contact: Robert Zehner
UOC3 HPW3 S1

A series of lectures and discussions on the social structure of urban areas with reference to both social theorists and empirical studies. The origins and concerns of the discipline of sociology and of urban sociology. Urban effects on living patterns. The relationships between different interest groups, including planners, in the urban context. Contrasting perspectives on the planner s role in contemporary society.

PLAN1041
The Language of Planning
Staff Contact: Stephen Harris
UOC4 HPW2 S1

This course aims to introduce students, commencing their planning studies, to the forms and languages used by planning: the vocabulary used by professionals, its explicit and implicit meanings and implications. Specifically, the aims are to ensure students understand the generalities and some detail of the relationship between politics, government and society; the forms and structures of Australian politics and government; the relationships between planning, politics and government; planning systems in theory and practice; the operation of development control systems; land ownership and titling; land uses and activities, and their definitions; density definition and its planning implications; planning associations and organizations and their significance; the language of urban design; methods of describing society and its structures.

PLAN1062
Effective Communication
Staff Contact: Stephen Harris
UOC3 HPW2 S2

The range of non-graphic techniques of planners information communication: reports and letters language, structure, style; audiovisual presentation, video and slide/tape; public speaking, telephone, one-to-one, small groups, large meetings, basic techniques and uses.

PLAN1012
Principles of Political Economy
Staff Contact: Greg Argyrous, School of Social Science and Policy
UOC3 HPW2 S2

This course is an introduction to political economy for non-economists. It establishes a foundation of concepts and viewpoints which are utilised in a number of courses. Topics include: the forms of capital; modes of production; global economic change and the new international division of labour; relationship between economy and state; politics and ideology; class structure; elementary price theory; factors influencing economic growth; the distribution of welfare.

PLAN1022
The Development Process
Staff Contact: Stephen Harris
UOC3 HPW2 S2

An introduction to real property law, the statutory requirements of the NSW planning system, environmental laws and land taxation. Also covered are small building construction issues, the nature of the housing market, commercial and industrial property markets, the funding of infrastructure and the roles of government agencies involved in the property market. Assignments are prepared in the form of consultant reports.

PLAN1042
Planning Processes
Staff Contact: Susan Thompson
UOC6 HPW4 S2
Prerequisite/s: PLAN1041, PLAN1061, PLAN1011

The course covers planning methodologies, with a focus on the strategic choice approach. A planning exercise is used as a case study to demonstrate the use of the method in practice. Applications are critically assessed. The emphasis is on cooperative work within the planning process framework.

PLAN1052
Quantitative Methods
Staff Contact: Robert Zehner
UOC6 HPW5 S2

Lectures, discussions and assignments on quantitative research methods and their use in applied planning contexts. Contrasts with qualitative approaches. Survey research methods: study design, survey sampling techniques, questionnaire design, data collection, strengths and weaknesses of survey methodology. Introduction to statistics and to data analysis using packaged computer software.

GMAT0753
Introduction to Spatial Information Systems
Staff Contact: Dr EG Masters
UOC3 HPW2 WKS14 S1
Prerequisite/s: CIVL2710, MATH2869, MATH2019

To provide Environmental Engineers with an overview of the available sources of information and technologies of Spatial Information Systems and an introduction to analysis and modelling of data, particularly of environmental data. Provide an understanding of the role of other professions in SIS. Introduction to coordinate reference systems, with particular reference to Australia. Overview and background of spatial information systems. Explanations of definitions and terminology of LIS and GIS. Introduction to remote sensing. Sources of spatial information, field surveys including GPS, maps, aerial photography, satellite imagery. Introduction to image analysis techniques for remote sensing. Introduction to geographical information systems for display, management and analysis of spatial information. Modelling and analysis techniques and software for GIS. Application of above to environmental engineering. A view of the future.

PLAN2011
Economy of Cities
Staff Contact: Peter Murphy
UOC3 HPW3 S1
Prerequisite/s: PLAN1012, PLAN1052

This course introduces how economic processes influence (1) the structure and performance of the economies of regions and urban centres; and (2) the structure and patterns of changes in land uses within urban centres, with specific reference to large urbanised regions. Topics covered include: factors driving regional and urban economic performance; urban hierarchies and inter-urban competition; economics of urban size; land rent, land uses, land prices; regional population densities; employment and service location. The basic theory is taught using Australian case studies.

PLAN2021
History of Urban Development
Staff Contact: Robert Freestone
UOC3 HPW2 S1

Introduction to patterns and processes of urbanisation and urban development at global, national, regional and local scales canvassing theoretical, conceptual and empirical issues. Surveys evolution of urban space in a societal context from the pre-modern to the post-modern eras with emphasis on understanding the form and evolution of the late twentieth century Australian city. The course involves lectures, presentations, fieldwork and applied research projects.

PLAN2032
Integrated Planning 1 - Urban Design
Staff Contact: Stephen Harris
UOC6 HPW6 S*

The built environment is constituted in specific, identifiable forms of buildings and spaces as well as their interrelationships. Furthermore, these typologies are not arbitrary. They reflect the historical progression of economy, society and culture. While the design and architectural merits of individual buildings remain important, the course is concerned with commonality rather than difference. It is focussed on the social organization of urban space and its adopted physical envelopes The design organization of the built environment is explored via lectures, seminars and a series of small scale practical projects.

PLAN2041
Critical Research Seminars
Staff Contact: Robert Zehner
UOC6 HPW2 S1

A series of student-led seminars on topics of importance to planning (e.g. sustainable development, urban consolidation, community design and crime, the new urbanism, planning for controversial land uses). Emphases are placed on research and seminar preparation, as well as on presentation and participation techniques.

PLAN2012
Economic Development Planning
Staff Contact: Peter Murphy
UOC3 HPW3 S2
Prerequisite/s: PLAN2011, PLAN1012

This course aims to show how, at the levels of both theory and practice, the planning system interlocks with socio-political pressures, the effects of which are to influence the shape and direction of development. Bodies of theory on planning and development are introduced and the relationship between them analysed. Planning is presented as a socio-political process the form of which shifts over space and time. The myth of rational, value free planning is exposed. The role of the state and the local state in managing conflicts intrinsic to a capitalist space economy is emphasised.

PLAN2042
History of Urban Planning
Staff Contact: Robert Freestone
UOC3 HPW2 S2

Emphasis on the evolution of metropolitan planning theories and practices in the late 19th and 20th century with special reference to the Australian experience. The material is covered through lectures, projects, seminars and fieldwork.

PLAN2051
Economics of Resource Management
Staff Contact: Peter Murphy
UOC3 HPW3 S2

This course introduces basic concepts and methods from resource economics. The aim is both to extend economic literacy and to cast the management of land use within a conceptually sound economic framework. Topics covered include: market failure; types of resources; valuation of resources; economic tools for resource management; principles of cost benefit analysis and its relationship to environmental impact assessment; and the precautionary principle for resource management. Contemporary Australian case studies are used.

PLAN3031
Integrated Planning 2 - Existing Areas
Staff Contact: Robert Freestone
UOC6 HPW4 S1

An applied focus on selected planning issues in an established urban area. Introduces the concept of the study brief and the role of the consultant planner. The course integrates group skills and knowledge to address multifaceted planning issues typical of central city, inner urban, suburban or regional centre environments. Examples would include environmental, town centre, open space, urban design, transportation, redevelopment, or heritage studies. The emphasis is on individual and team research, analysis, technical report production, and presentations, with a significant fieldwork component.

PLAN3041
Planning Law and Administration
Staff Contact: Peter Williams
UOC6 HPW4 S1
Corequisite/s: PLAN3051

The course comprises three parts, Planning Law, Planning Administration and Land Valuation. Planning Law: historical, conceptual / theoretical nature of the law; relationship between the environmental context, the Crown, the parliament and the judiciary; ways in which the laws are made and promulgated, relationship between laws and regulations, the legal concept of property in land, definition of various legal concepts of interests in land, Australian Constitution and legal relationship between Commonwealth and States, particularly in regard to matters affecting land, the place of administrative law. Planning Administration: administrative context within which planning operates as a function of government, especially the role and function of statutory bodies in the planning and environment area, the administration of the planning function at the national, state and local levels, the art of management, administrative theory, personnel administration, the role and responsibility of the professional planner in the public and private sector. Land Valuation: principles and practices of land valuation in Australia. Definitions of value, methods of valuation, the role of the valuer, compensation and betterment.

PLAN3051
Development Control
Staff Contact: Peter Williams
UOC6 HPW4 S1
Corequisite/s: PLAN3041

This course introduces students to the implementation of planning objectives in the NSW Planning System via this State s statutory development control system. various development control systems are examined, based on common law, statute and policy. Strategic planning at state and local government levels are examined in detail, as is the statutory planning (i.e., development application) process. Emphasis in this course is placed on familiarising students with the skills required by a professional planner in undertaking various planning tasks.

PLAN0081
Work Experience
Staff Contact: Peter Williams
UOC24 S2
Prerequisite/s: PLAN3041

During the program, students must undertake 48 weeks of approved employment related to the Program: for example, in private development companies or with planning consultants, in government planning and housing authorities, in local councils preparing or implementing Local Environment Plans. This is normally undertaken in the twelve months following Session 1 of Year 3. Work experience requirements must be completed prior to graduation. The type of employment proposed must be submitted to the Program Head for approval.

PLAN0082
Work Experience
Staff Contact: Peter Williams
UOC24 S1
Prerequisite/s: PLAN3041

During the program, students must undertake 48 weeks of approved employment related to the Program: for example, in private development companies or with planning consultants, in government planning and housing authorities, in local councils preparing or implementing Local Environment Plans. This is normally undertaken in the twelve months following Session 1 of Year 3. Work experience requirements must be completed prior to graduation. The type of employment proposed must be submitted to the Program Head for approval.

PLAN3012
Cultural Studies
Staff Contact: Susan Thompson
UOC3 HPW3 S2
Prerequisite/s: PLAN3011

This course explores contemporary issues facing the professional planner working in an increasingly diverse and complex society. Various cultural, social and environmental issues that challenge ethnic communities, children, the aged, women, Aborigines and homeless people are examined. Students are encouraged to question their own prejudices and values as they develop better understandings of the needs of these groups. The ability of the planning system to respond is explored, as are creative and inter-disciplinary approaches that can be facilitated by urban planners.

PLAN3032
Integrated Planning 3 - New Development
Staff Contact: Stephen Harris
UOC6 HPW4 S2
Prerequisite/s: PLAN3041, PLAN2032, PLAN1022

To demonstrate the process of planning as applied to an area undergoing urban development and give students the experience of carrying out such planning; to ensure that students can work competently as planners in urbanising areas; to show the inter-relationships between the planner and other professionals in release area planning.

PLAN3052
Qualitative Methods
Staff Contact: Susan Thompson
UOC6 HPW3 S2
Prerequisite/s: PLAN 3011

This course will cover the nature of qualitative research, its philosophical bases and applications in planning contexts. Basic instruction will be given in research methods, analysis and reporting findings. Students will undertake their own qualitative research projects, reflecting on and sharing experiences of their process.

PLAN4021
Metropolitan Policy
Staff Contact: Peter Murphy
UOC3 HPW2 S1
Prerequisite/s: PLAN2011, PLAN2012, PLAN2022, PLAN2051, PLAN3041

This course examines preoccupations in the management of large urbanised regions and the range of public policy measures available to influence structure and process. It is assumed that metropolitan policy provides a framework within which local government decisions on land use, and the work of agencies which supply urban infrastructure, is framed. Topics include: population densities; commercial centres; industrial land uses; transportation; environmental quality; tools for management of metropolitan growth and change; political and administrative systems and issues. The focus will be on Australian cities - especially Sydney - but some cross-national material will be used.

PLAN4031
Research Design
Staff Contact: Robert Freestone
UOC3 HPW2 S1
Prerequisite/s: All courses of years 1 to 3 inclusive

This course provides an introduction to issues of research design in urban and planning studies. It considers both fundamental epistemological questions and more pragmatic topics such as writing and presentation, as well as providing insights into the world of advanced research. The primary focus is on the written thesis required in the final year of the BTP Program. The course canvasses the relevant conceptual, methodological, and technical bases for the construction of the thesis. Lectures, tutorials and assessments guide students toward a developed thesis proposal and plan of study.

PLAN4032
Thesis
Staff Contact: Robert Freestone
UOC15 HPW1 S2
Prerequisite/s: PLAN4031

A specialized individual study taken under staff supervision with the object of allowing students either to gain knowledge in some aspect of Town Planning which is not covered in the program or to increase their knowledge of some aspect which has been covered. The study does not require original experimental research for the purpose of discovering new facts or the testing of an hypothesis; neither is it an essay permitting the student s unsupported opinion. A thesis proposal is developed in PLAN4031 for the approval of the Program Head. The completed thesis is submitted for examination towards the end of Session 2. Students are expected to participate in regular discussions with supervisors during this session to present progress reports on their theses. The course is not complete until a bound copy has been submitted.

PLAN4042
Professional Practice
Staff Contact: Peter Williams
UOC3 HPW2 S2

A final year course addressing key aspects of environ-mental management in practice. The focus is upon basic topics such as professional ethics, negligence, preparing / responding to a consultant s brief, preparing for Court work and appearing as a professional witness. Such hands-on skills are discussed in the broader context of philosophical positions, professionalism and

the social, political and industrial environment. Planning as a profession, professional standards, ethics, preparing studies and plans, preparing and giving evidence, briefing and consulting, management, corporate planning, continuing education.

Faculty Elective Courses

Design and Sustainability

BENV1072
Design for Energy Efficiency
Staff Contact: Deo Prasad
UOC6 HPW3
Prerequisite/s: ARCH1371

This course develops an understanding of solar efficient architecture and builds on this to develop skills in energy performance simulation. House energy performance rating is fast becoming an essential requirement for building applications and this requires specific skills. It targets core areas of efficiency in space heating and cooling and lighting design. Material is presented as lectures and seminars, supplemented with readings in architectural history and theory.

BENV1073
Sustainable Design and Practice
Staff Contact: Deo Prasad
UOC6 HPW3
Prerequisite/s: ARCH1371

This course develops a greater focus on holistic and sustainable approaches to design. Issues such as demand and supply of energy and water, and the generation of waste, will be covered. Principles of Reduce, Reuse and Recycle will be reiterated. Predominant emphasis will be on practical strategies directly applicable in design. Material is presented as lectures and seminars, supplemented with readings in architectural history and theory.

BENV2101
Adaptive Re-use
Staff Contact: Sue Serle
UOC3 HPW2

An examination of the trend to find new uses for existing buildings rather than demolish and rebuild. Issues of conservation, preservation and heritage value of buildings; the role of other interested parties (media, community groups) in determining options for re-use. The course will address such issues as: surveying and assessing buildings for their suitability for adaptive re-use; measuring adaptive re-use in terms of environmentally sustainable design (ESD); assessing building forms and finding suitable compatible new functions; working within the Burra Charter; building conservation techniques; writing a "Heritage Conservation Report". Case studies selected from recent local examples of adaptive re-use. A design exercise involving adaptive re-use.

BENV2103
Environmental Planning
Staff Contact: Linda Corkery
UOC3 HPW2

Students will be introduced to broad concepts and issues related to environmental planning through readings, lectures and case studies. They will become familiar with basic methods and techniques of resource data collection and analysis. Geographic Information Systems (GIS) will be introduced as a planning tool.

BENV2104
Building Conservation 1: Introduction
Staff Contact: Desley Luscombe
UOC6 HPW3

An introduction to building conservation as it is practised in the architectural profession in NSW. The course will cover the role of The New Heritage Council, local councils, the Historic Houses Trust, National Trust, and ICOMOS. It will cover the development of heritage legislation, conservation planning, traditional building materials and archaeology. The final project will be based around a facilities upgrading exercise at the Sydney Opera House.

BENV2105
Building Conservation 2A: Management Plans
Staff Contact: Desley Luscombe
UOC6 HPW3

This elective will introduce and develop an understanding of conservation planning. Students will work in teams to produce their own Conservation Management Plan of a historic site in Sydney. Research skills will be taught and developed.

BENV2106
Landscape Design 9: Integrated Studio
Staff Contact: Linda Corkery
UOC4 HPW6

Mixed studio groups are formed from different years and disciplines. The studio concentrates on significant current issues with an emphasis on design competitions.

BENV2107
Landscape Design 10: Elective Studio
Staff Contact: Linda Corkery
UOC9 HPW6
Prerequisite/s: LAND1302 or ARCH1202 or IDES2162

Investigation of the relationship between design and contemporary landscape theory through a series of critical design projects at site planning scale.

History & Theory

BENV1022
Designing as a Discursive Practice
Staff Contact: Paul-Alan Johnson
UOC6 HPW3
Prerequisite/s: ARCH1321

Module 1: This part of the course questions certain assumptions made by architects, namely: that technology is a generative force which has the power to shape an architecture appropriate to the spirit of the age (Zeitgeist); that accepting the Zeitgeist privileges the new over the old and throws doubt on building preservation and contextual fit as serious contemporary concerns; and that these and other issues, eg. The presence of anonymous or disenfranchised others in building procurement, or notions of difference so prominent in feminist understanding, mean the architect's design responsibility is primarily aesthetic and neutral rather than ethical and political. Material is presented as one- and/or two-hour lectures and occasional tutorials supplemented with selected readings in architectural theory, philosophy and ethics.

Module 2: This Module examines designing as a mediative and reflexive practice and explore the hermeneutical understanding of the world and its architectural equivalent wherein the designer is seen as embedded in the design process and not standing apart from it. The classes prompt ideas and provoke reactions that might not otherwise arise without thinking about designing in this way. This provocation raises matters of broad as well as finely tuned concern to designers and is intended to bring an 'edge' to concepts by marauding fertile rhetorical ideas and practices. The classes explore a series of themes related to both discourse and designing including language, meaning, figuration, catachresis, and the processes whereby these come into play as repertoire and suasion. Each theme has some bearing upon the way we think and design today and aims to assist students in consolidating an architectural position. Material is presented as lectures and seminars, supplemented by readings from architectural theory, literary theory, and philosophy.

BENV1023
Modernity and Modernisms in Architecture
Staff Contact: Paul Hogben
UOC6 HPW3
Prerequisite/s: ARCH1321

This course will examine the development and emergence of modernism in various national and institutional territories in the 20th Century, in response to the growing universality of the experience of modernity. It will describe how architects used the tenets of modernism to elevate themselves and gain new forms of authority in an increasing competitive marketplace. This involves looking at how architects appropriated concepts from foreign places and adopted representational techniques to promote a "culture" of the new. The course s aim is to deepen an understanding of the diversity of the manifestations of modernism, the complexity of its relations to specific cultural and institutional traditions, and to consider the question of its continuing relevance. Material is presented as lectures and seminars.

BENV1024
Post-Modernity and Architecture since the Sixties
Staff Contact: Paul Hogben
UOC6 HPW3
Prerequisite/s: ARCH1321

This course examines post-modernity via the exploration of the interplay between culture, criticism, and advanced capitalism, and the effects of these linkages on architecture since the 1960s. The fervour of counter-cultural and environmental movements, the rise of popular and mass-culture as objects of architectural symbolism and the search for meaning through models of critical regionalism are some of the sources that architects have used to react to the ideological purity of the modern. By focusing on these sources and key institutional and historical moments, this course will examine the various ways architecture can perform both as an instrument of capitalism and as a tool of resistance to capitalism s homogenising and commodifying forces. Material is presented as lectures and seminars.

BENV2201
Twentieth Century Australian Architecture
Staff Contact: Jeffrey Mueller
UOC3 HPW2

Detailed study of the theories and work of selected Australian architects. Issues of nationality and nationalism will be addressed as well as those of criticism in the architectural presses. Readings will be selected related to various twentieth century architects. They will include works of criticism as well as explanatory texts. One architect will be studied each week and readings will address one particular issue relevant to the architect s theoretical position. Material is presented as lectures or seminars.

BENV2202
Architects and Their Practices
Staff Contact: Paul Hogben
UOC6 HPW2

This course examines the different pressures, expectations and opportunities that architects face within the first ten years of professional practice. This involves recognising how the history of architectural education relates to various ideological conceptions of aesthetic and technical training. Students will be required to look at the early work of a selection of architects from the nineteenth and twentieth centuries, noting how that work captures the possibilities of experimentation and application of theoretical concepts and social ideals. The concrete forces of employment, financing and architect-builder-client relations will also be examined. Material is presented as lectures and seminars.

BENV2203
Japanese Architecture
Staff Contact: Peter Kohane
UOC6 HPW3

This course is an applied interdisciplinary history of Japanese architecture and landscapes. It explores the traditions of Japanese architecture and landscapes with an eye to their contemporary resonances, both within and outside Japan. The traditions of religious architecture, domestic architecture, urban form, and the Japanese garden are examined with the aid of readings from aesthetics, sociology, semiotics and other perspectives. Particular attention is given to the cultural dilemmas and opportunities arising from Japan s rapid modernisation, and how recent Japanese architects have handled these. The implications of the Japanese experience for other Asian countries recently experiencing rapid economic growth are explored, in particular the question of the relationship between modernisation and "westernisation." Material is presented as lectures with occasional seminars.

BENV2204
Architecture in the 1990s
Staff Contact: Paul Hogben
UOC6 HPW3

This course will look at current debates about the condition of architecture at the end of the twentieth century. The course will explore recent trends within architecture in relation to the global spread of corporate power, electronic information systems and the commodification of culture. Architecture(s) of the spectacle, counter-memory and commemoration will be discussed. Course reading will be taken from current literature within the fields of architectural history and theory, urban studies and cultural studies. Material is presented as a mix of lectures and seminars. Students will be asked to study a selection of recent buildings through a seminar presentation and major essay.

BENV2205
Classical Architecture
Staff Contact: Peter Kohane
UOC3 HPW2

Exploring the origins, vocabulary and grammar of the Classical Orders and their application in Greek and Roman architecture, in the Renaissance and the Baroque periods, through Academism and Neo-Classicism to the resurgence of Classical ideals in the twentieth century. Material is presented in both lecture and seminar format.

BENV2206
Theory of Form
Staff Contact: TBA
UOC3 HPW2

The ontological basis and the antinomical qualities of form in the causal sense, reflected in nature, art and architecture. Practical investigation of the antinomical qualities of form with special emphasis on the brief and on the built fabric of contemporary architecture, and practical; attempts to identify shortcomings and develop corrective measures. Material is presented as two-hour lectures.

BENV2207
Imagination
Staff Contact: TBA
UOC3 HPW2

Architecture built in the image of the cosmic order and of the ideas directing that order. The nature of imagination, analogy and proportion. The meaning of number, of the elements of space and time and of the geometrical order, and this image in architecture. Material is presented mainly as two-hour lectures and occasional tutorials comprising practical projects focusing on selected case studies.

BENV2208
Spirit in Architecture
Staff Contact: TBA
UOC3 HPW2

Spatial symbolism and intellectual intuition, principles, and methods of sacred architecture. Spiritual doctrine reflected in the layout of Judaeo-Christian architecture with reference to the architecture of sacred traditions. Material is presented mainly as two-hour lectures with occasional tutorials comprising practical projects focusing on selected case studies.

BENV2210
Architecture and Music: Parallels and Practices
Staff Contact: Michael Tawa
UOC6 HPW3

This course examines musical composition as metaphor for architectural design. It studies musical characteristics and motifs such as tonality, rhythm, harmonics, dynamics, sonority and timbre, order, harmony and articulation in musical composition. Themes of whole and part, fragment, limits, interval, altereity and representation will be explored. Architectural implications for geometry, space and spatial dynamics, tectonics. assemblage and materiality will be developed and explored. Material will be presented as lectures and developed in occasional seminars and design workshops. Projects may include one or more of the following activities: readings of selected texts in philosophy, architecture and music theory; listening to and analysing various kinds of music; preparing analytical drawings, process models, visual essays and audio-visual presentations.

BENV2211
Criticism and Evaluation
Staff Contact: Catherine De Lorenzo
UOC3 HPW2

Architectural criticism is as much about a discourse of ideas as it is about the attempt to clarify for the writer and reader the successes and failures of a particular building/built environment. The purpose of this course is to encourage students to think critically about the nature of criticism, particularly as it is affected by broader cultural criteria. Can criticisms give us useful information about a building s functional and symbolic achievements and its capacity to enhance the environment? What might a built environment and critique of it tell us about our society, about the values endorsed by the critic, and about our own criteria for excellence? How have visual artists engaged in critiques about the built environment? It seems that no two critics agree on the criteria for evaluating the built environment and it is anticipated that in the classroom evaluative criteria will be equally contested. For an informed discussion to take place it is necessary to know the current literature and debates. A bibliography has been prepared from which approximately two items have been selected as recommended reading for each class. All students are expected to have read something for each class and to substantiate their claims by keeping a critical diary of all items read. Material is presented as two-hour seminars in which all students are expected to participate actively. Assessment will include individual and group work.

BENV2212
Architecture and Culture
Staff Contact: Peter Kohane
UOC6 HPW3

Many architects and architectural theorists today are engaged in a critical questioning of widely held yet inadequate beliefs and processes, including unrestrained progress, instrumental reason and social control. These driving social forces have brought about a devaluing of human work and nature that courts ecological disaster and a degrading of our physical environment. Architects may formulate a resistance through careful reflection on: the role of the human faculties of imagination and memory in design and construction; the significance of decorum, of public and private realms and of boundaries in out buildings and cities; and the limits of the architectural profession s intrusion into all dimensions of life. The course will focus on several cultural critics, both writers and architects, assessing the value and limitation of their contributions. Investigation will be guided by a vigorous tradition of thought (extending through the nineteenth century to the present) which has defined the word culture as an idea of a whole way of life (and conflict) for individuals in a community. This is formulated as a challenge to the dominant values of society . Material is presented as two-hour lectures.

BENV2213
Critical Perspectives on Twentieth Century Art and Design
Staff Contact: Catherine De Lorenzo
UOC3 HPW2

This course introduces some of the key interpretive strategies used in art history and cultural studies over the last hundred years, with an emphasis on current lively debates. The classes will explore and question some of the layers of interpretation of artists works from the time they were made to the present. European, North American and Australian art and design will be examined through various filters such as modernism, post modernism, internationalism, nationalism, regionalism, gender and identity. In visual and cultural studies there is no single correct interpretation of a particular artwork or movement. This course has been designed to enable you to become aware of the plurality of interpretations and to appreciate if not always to endorse or adopt) the arguments for contesting interpretations of objects and events. Material is presented as two-hour lectures. Assessment will include individual and group work.

BENV2214
History, Theory and Interpretation: Art and Architecture
Staff Contact: Catherine De Lorenzo
UOC3 HPW2

This course aims to deepen an understanding of basic theoretical concepts in the history of art and design; to gain familiarity with some key writings by artists, art historians and art critics; to develop strategies for evaluating theoretical arguments against appropriate visual works; and to develop competence and confidence in evaluating works of art/design and interpretive strategies developed for our understanding of them. Key concepts to be investigated are: style, connoisseurship, formalism, iconography, sociological perspectives, semiotics, gender, sexuality, cultural studies, modernity and post modernity. The course has been developed around a seminar structure which will encourage students to learn through looking, reading, thinking, and informed arguing. All students will be required to purchase a reader. Material is presented as a mix of lectures and occasional tutorials.

BENV2215
Of Other Spaces: Architecture and Post-Colonialism/ Nationalism/Feminism
Staff Contact: Dijana Alic
UOC6 HPW3

Informed by post-structuralist debates and recent developments in disciplines such as literary theory, cultural studies and philosophy, critical historians of architecture have begun to highlight the role of the built fabric as a form of authority in establishing particular structures of power. By exploring questions of representation, difference, and identity as reflected within the built fabric, the scholars in this field have moved away from the traditional reading of architecture as an autonomous object to one where the built fabric becomes the signifier of certain hierarchies and power relations. It is this field of study that this elective will address. The lectures and seminars will focus on the reading of 20th century buildings and spaces, with specific references to three themes: Post colonialism, Nationalism and Feminism. While the argument common to the three approaches is the way in which differences and otherness inhabit architecture, each lecture will address the question from a specific angle and in relation to a particular architectural, cultural and historical context.

BENV2216
Interior Theory
Staff Contact: Bill Macmahon
UOC6 HPW3

A detailed exploration of the way we experience space. A study of how and to what extent this experience may be modified manipulated and determined by the application of various spatial, surface and lighting devices. The psychological implications of a range of different ways of designing interior space. Language of line; balance, visual weight, placement of objects; focal points; scale, shape and proportion. A series of lectures and studies/projects using drawings and simple models.

BENV2217
Contemporary Interior Design
Staff Contact: Sue Serle
UOC6 HPW3

A review of the history of interior design concentrating upon the period since the second world war. The course will draw upon significant practitioners to highlight trends in design. Students will be asked to select case studies to research the theoretical basis

for design. Aspects to be discussed include the evolving nature of the relationship between interior designers and other design fields. Relationship between interior architecture and the media.

BENV2218
The Vernacular Landscape
Staff Contact: James Weirick
UOC3 HPW2

This course critically examines everyday landscapes of the modern world, with an emphasis on the Australian vernacular landscape. Contemporary theories of place and landscape as text are reviewed. Students are introduced to the theory and practice of cultural landscape assessment and their skills in landscape documentation, critical analysis and essay writing are extended.

BENV2219
History of Australian Landscape Architecture
Staff Contact: James Weirick
UOC3 HPW2

The history of landscape architecture and garden art in Australia since European settlement is reviewed. Students develop a knowledge of planting design traditions in Australia. The history of plant introductions is analysed and the design qualities of Australian plants as the fundamental elements of landscape architectural expression in Australia. The inter-relationships between Australian landscape architecture, Australian architecture and the urban design of Australian cities are studied. Students are introduced to the theory and practice of heritage conservation for gardens, public parks and public spaces. Skills in historical, visual documentation, essay writing and report writing are extended.

BENV2220
The Culture of Nature
Staff Contact: James Weirick
UOC3 HPW2

Students are introduced to the philosophy of nature as a continuous thread in the history of ideas. Concepts of culture and nature are critically reviewed against the production of designed landscapes. Skills in philosophical analysis, essay writing and the formal presentation of seminar papers are extended.

BENV2221
State of the Art: Contemporary Landscape Design
Staff Contact: James Weirick
UOC3 HPW2

To develop knowledge in depth of contemporary landscape design through a detailed review of current projects, built works and writings. Students will investigate and test current theories of design in landscape architecture, through the critical analysis of recent work. Current concerns in landscape design will be reviewed against the trajectory of twentieth century modernism. Skills in project review, critical thinking and critical writing are extended.

BENV2222
Architectural Studies 1
Staff Contact: Catherine de Lorenzo
UOC2

An elective designed for students wishing to pursue an independent course of study in a field of architecture not falling within the domain of any existing elective. It requires the gathering of data, analysis of that material and reaching a conclusion. Descriptive summaries of published material are not an acceptable alternative to a well argued critical essay. Students are required to present a detailed program of study for approval by the Head of Program by the Friday of the first week of the session in which it is intended to enrol in this elective. For special conditions consult the Head of Program. The work must be written in concise and clear English, apply a consistent and acceptable referencing system, include an up-to-date bibliography, include only relevant and properly referenced illustrations, and be word processed in A4 format. Submissions will normally be about 2,000 words and be submitted by Friday of Week 13.

BENV2223
Architectural Studies 2
Staff Contact: Catherine De Lorenzo
UOC3

The intellectual and procedural requirements for this course are as described in BENV2222. The work must be written in concise and clear English, apply a consistent and acceptable referencing system, include an up-to-date bibliography, include only relevant and properly referenced illustrations, and be word processed in A4 format. Submissions will normally be about 3,500.

BENV2224
Architectural Studies 3
Staff Contact: Catherine De Lorenzo
UOC6

The intellectual and procedural requirements for this course are as described in BENV2222. The work must be written in concise and clear English, apply a consistent and acceptable referencing system, include an up-to-date bibliography, include only relevant and properly referenced illustrations, and be word-processed in A4 format. Submissions will normally be about 7,500.

BENV2225
Heritage Architecture in Practice
Staff Contact: TBA
UOC6

This course unit deals with aspects of heritage and conservation in architectural practice. The course is designed with a strong practical component. Guest lecturers will include heritage architects, heritage advisers, landscape architects, planners, conservators and historians. Lecture content will include documentation of heritage works, design of infill for heritage sites, heritage paint schemes, archival recording, and maintenance of heritage structures and identification of significance. At the completion of the unit students will have completed building measurement and recording exercises for a heritage structure. They will have learned how to prepare a heritage impact assessment for local council. They will design an infill structure for a significant site. The main assessment for the course is the preparation of a Conservation Management Plan on a selected site. Site visits and practical exercises will form an integral part of the course.

BENV2226
Chinese Gardens
Staff Contact: Stan Fung
UOC6 HPW3

Introduction to the study of Chinese gardens focussing on key documents and some extant gardens. Lecture topics include: key notions of design, concepts of space/time, role of designers and visitors, movement and the experience of landscape, the relationship between pictorial space, garden design and literary tradition, and imaginary gardens. There are two key concerns: (1) cross-cultural relevance (what can the study of Chinese gardens offer to a cross-cultural dialogue in architecture and landscape architecture?) and (2) interdisciplinary perspective (how is the study of Chinese gardens related to recent work in some other fields such as geography, cultural studies, philosophy and the visual arts?). The main assignment is an exercise in spatial composition developed from a 17th-century Chinese handscroll.

BENV2228
Twentieth Century Architecture: Modernity to Deconstruction
Staff Contact: Desley Luscombe
UOC3 HPW3

This course examines the history of architecture in terms of modernist attitudes to historical narrative as depicted in general histories and reinforced through journals and films. Rather than following the comprehensive story depicted in histories of architecture, this series examines particular examples of architecture and questions how architecture might represent the ideas and theories attributed to it. The first section focuses on material composition and the form making of early twentieth century architecture, examining the themes of 'Utopian Ideals', 'Technology', and 'Abstract and Classical Formalism' in relation to architects' work. The second focuses on the changing meaning of architecture in its

social setting examining the themes of 'Spatial Determinism', 'Politics, Image and the Profession', 'Popular Culture and Formalism' and 'Deconstruction as an Image'. The course will include films where pertinent, and discussions in seminars will focus on the impact of media on architecture as well as the work of particular architects..

BENV2229
Spectacles, Mardi Gras and Fascist Rallies: Use of Public Space
Staff Contact: Desley Luscombe
UOC3 HPW3

This course examines the history of public spectacles from the Renaissance to the late twentieth century. It analyses these as designed events and as political manipulations of cultural memories associated with public spaces. Some examples include the entry of Henri V into Paris, Louis XIV's use of the Gardens of Versailles, the 'Haussmann-isation' of Paris as boulevards for military parades, the World Exposition of 1851 at the Crystal Palace, 'E42' the Fascist plan of a Roman suburb for a World Fair, Leni Reifenstahl's documentation of the 1936 Berlin Olympics and the Nuremberg rallies. Las Vegas as a continuous spectacle of consumer excess, and the Sydney Mardi Gras.

BENV2230
Principles and Philosophy of Design
Staff Contact: Harry Stephens
UOC3 HPW3

The currently popular pseudo-elitist view of art and design is rejected in favour of the proposition that the artist is not a special kind of person but that every person is a special kind of artist. Design is not something which is practiced by the elite few who call themselves designers but by all of us all of the time. This course looks closely at the principles which underpin design in its broadest meaning and application, from the most simple, seemingly intuitive to the most complex of decision-making processes. These principles are studied within a philosophical framework strongly linked to the 'perennial philosophy' which may be found in all cultures and at all times and which has been particularly championed in our age by such writers as A.K. Coomaraswamy, Frithjof Schuon and René Guénon, and based heavily upon the work of our own Visiting-Professor Peter Kollar.

BENV2231
Process in Architecture and Landscape
Staff Contact: Stan Fung
UOC6 HPW3

This elective deals with ideas of process in architectural and landscape architectural writings. Recent developments on the east coast of the United States and in the Netherlands are the focus of this elective. (E.g. projects by Adriaan Geuze, MVRDV and West 8; writings by James Corner, Stan Allen, and Sanford Kwinter, etc.) The elective will explore the idea that these recent developments have, more than at any other time in this century, opened possibilities for fruitful engagement with Chinese cultural interests. Four weeks of the programme will be devoted to comparative work.

BENV2232
Thinking Through Drawings
Staff Contact: Stan Fung
UOC6 HPW3

This elective helps students develop a more focussed reading of architectural drawings and photographs through case studies from the 20th century. Emphasis is placed on reading in detail, reading for discrepancies, reading for temporal specifics, reading images in relation to what is written about them, reading for the students' current design projects. The architects to be studied include: Rem Koolhaas, Enric Miralles, Herzog and de Meuron, Tadao Ando, Ben van Berkel and MVRDV.

BENV2233
Architectural Images
Staff Contact: Stan Fung
UOC6 HPW3

This elective takes as its subject the current fascination in architectural discourse and practice with "the image". In order to develop an understanding of the diverse uses and effects of the image in contemporary architecture, this elective will relate them to the discourse on ornament in the early 20th century and to the interior as the site of an emerging architectural awareness about the image's role in architectural experience. From these historical studies, we will establish the ideas of image reproducibility and image exchange as crucial to the possibility of cross-cultural exchange in architecture.

In the second part of the elective, we shall test the usefulness of these Western studies of the architectural image for developing a vocabulary for discussing contemporary Chinese architecture. Chinese architects have not had much opportunity to see first-hand 20th-century architecture in the West, and their access to Western architectural developments has been largely dependent on images reproduced in print media. This highlights the role of architectural images in constructing a Chinese sense of what is "current."

BENV2234
A History of the Modern City
Staff Contact: Desley Luscombe
UOC6 HPW3

This course offers a brief introduction to the history of ideas that underpin the development of the city since the late nineteenth century. The dynamism of the modern city is much more than a series of fashions or styles and is generated by a range of powerful social, economic and cultural factors. This course therefore draws on discourses from areas such as sociology, cultural theory, planning and economics as well as those more familiar to architecture students. The subject matter is treated as a series of overlapping themes rather than attempting a strict chronological order. A formal lecture series will comprise approximately half the time. Each week, students will be given copies of material to read and will be required to write a short response to the given reading(s) to be discussed the following week.

Communication

BENV2301
Architectural Spatialisation
Staff Contact: Desley Luscombe
UOC6 HPW3

Investigation of the basic aesthetic, technical and conceptual aspects of drawing. The course is studio-based incorporating lectures and modified lectures with an emphasis on direct experience with the various media of drawing. Subject matter will include portrait, still life, landscape and the human figure. Media instruction will include pencil, conte, charcoal, ink, pen, wash, etc. Gallery visits and field trips will be incorporated.

BENV2302
Architectural Rendering Techniques - Wet Media
Staff Contact: TBA
UOC6 HPW3
Prerequisite/s: ARCH1201

Investigation into colour theory, the history of painterly rendering techniques and media as well as the various disciplines of still life, landscape, and figure painting. The course is studio-based with lectures, discussions and demonstrations. Gallery visits and field trips will be incorporated.

BENV2303
Drawing: Architectural Thematics
Staff Contact: TBA
UOC6 HPW3

Investigation of the basic aesthetic, technical and conceptual aspects of drawing. The course is studio-based incorporating lectures and modified lectures with an emphasis on direct experience with the various media of drawing. Subject matter will include landscape, the built environment, and the human figure. Media instruction will include pencil, conte, charcoal and ink.

BENV2304
Colour Theory in Architecture
Staff Contact: TBA
UOC3 HPW2

Investigation into colour theory in the histories of architecture and furniture design. Exploration of emotional response to colour mixing through practical exercises.

BENV2305
Graphic Design for Architects, Interior Architects and Industrial Designers
Staff Contact: TBA
UOC6 HPW3

The seamless integration of the products of graphic design into commercial and urban spaces, at both the intimate and public scales, is expected of architects and designers. This course aims to give students the skills to attempt a basic level of graphic design and to become familiar with the wide range of graphic techniques and materials available. At the end of the course the student should understand techniques for integrating graphic materials into buildings and be able to brief a graphic designer for the most complex of tasks. Material covered in the course would include the basics of typography, layout design and illustration. Techniques for printing, including those for incorporating images into a range of building materials would be introduced. In addition topics such as: digital reproduction technologies, digital and analogue colour systems, paper engineering and three-dimensional graphic representation will be included. Concepts of corporate imaging and marketing within the context of the retail/hospitality/corporate environment will be dealt with. Discussion in class will include topics such as Venturi s "Building as Duck". Students will be expected to undertake a range of activities including exercises in preparing graphic material and the presentation of case studies of successful graphic packaging.

Computing

BENV1042
World Wide Web in Presentation and Communication
Staff Contact: Stephen Peter
UOC6 HPW3
Prerequisite/s: BENV1341 and BENV1023

Web Page: http://www.fbe.unsw.edu.au/Subjects/WWWDesPres/ Introduction to the theory and practice of World Wide Web based multimedia and other computer technologies relating to the presentation of designs and/or other information. Assessment will be through the development of a series of Web pages.

BENV1043
Multimedia in Design Presentation
Staff Contact: Jim Plume
UOC6 HPW3
Prerequisite/s: BENV1341 or BENV1023

This course explores the use of an industry-standard multimedia authoring tool to develop design presentations. Students will develop skills in the integration of media objects including: edited scanned images, rendered images (produced using CAD technology), line drawings, animations (produced using CAD), video (captured off VHS) and sound. Students will be expected to apply these skills in a preliminary learning task and then in the production of one major design presentation.

BENV2401
Digital Design Techniques
Staff Contact: Stephen Peter
UOC6 HPW3
Prerequisite/s: BENV1141 or Equivalent
Note/s: Excluded: BENV1242, BENV1341

Web Page: http://www.fbe.unsw.edu.au/subjects/benv/2401/ This course is intended for students who wish to do any of the computing electives but have not done BENV1242 and BENV1341. The course is an exploration of the techniques that can be used to present designs digitally, including 2D and 3D CAD, modelling, animation and image editing. Assessment is based on a small number of simple exercises and one larger project (presenting a design).

BENV2402
Design Modelling - Time base Visualisation
Staff Contact: James McGrath
UOC6 HPW3
Prerequisite/s: BENV1341 or BENV2401

This elective will align design techniques with time based 3D digital environments. It will extend digital visualisation skills by introducing sequencing and storyboards into 3D digital environments. Computer Lab based exercises will cover 3D composition, time based form generation and narrative in digital 3D. Development of presentation techniques such as video editing, QuickTime VR, and VRML will be included in the final presentation. Assessment will be based on earlier staged learning exercises and one major design presentation project.

BENV2403
Information Technology in Design and Construction
Staff Contact: Jim Plume
UOC3 HPW2
Prerequisite/s: BENV1141 or Equivalent

This course introduces the issues, problems and solutions relating to the creation and distribution of information within the building industry. It includes topics such as: database systems; interaction with CAD system graphics databases; transmission of data; networking and communication technologies; shared technical databases; establishment of product information standards; conceptual modelling techniques; and design information systems. Assessment is by means of projects and student seminars.

BENV2404
CAD Management for Architects
Staff Contact: Stephen Peter
UOC3 HPW2
Prerequisite/s: BENV1141 or Equivalent

This course raises the issues relating to the implementation and management of CAD systems in architectural practices. Topics will include: CAD system selection and installation; cost issues (purchase, maintenance, upgrades); political implications within practices; software customization; resource management; office standards; and training. Assessment is by means of projects and student seminars.

BENV2405
Computer Graphics Programming
Staff Contact: Stephen Peter
UOC6 HPW3
Prerequisite/s: BENV1141 or Equivalent

Web Page: http://www.fbe.unsw.edu.au/subjects/benv/2405/ Introduction to the fundamentals of interactive computer graphics programming. Advanced techniques including mouse-based input, menu-based interfaces and colour manipulation. Assessment is be through a series of short exercise and one larger programming project.

BENV2406
Design and Computation
Staff Contact: Jim Plume
UOC3 HPW2
Prerequisite/s: BENV1141 or Equivalent

This course is based on extensive reading and group discussion, exploring a range of theoretical approaches to the use of computation techniques in support of the act and processes of architectural design. Topics include: traditional approaches to architectural computing including space planning, facilities management, building performance analysis, information systems and operations research; knowledge-based systems and knowledge representation techniques; shape grammars; expert systems; and design information systems. Assessment is based on participation in discussion, the preparation of regular reports on readings and one major essay task.

BENV2408
Building Information Systems
Staff Contact: Ojars Greste and Roger Miller
UOC6 HPW3
Prerequisite/s: BLDG3282
Note/s: Elective

The specification, development and use of computer based information systems in the management of building companies. Information system components, attributes and lifecycle. Data files structures and access modes; database systems. Information system response, distribution, size and controls; logical and physical design. Computer hardware; communications; local area networks. Case studies of computer systems in building construction and management companies. The course involves extensive use of a microcomputer database package.

Structure

BENV1074
Conceptual Structural Design
Staff Contact: Vinzenz Sedlak
UOC6 HPW3
Prerequisite/s: ARCH1371

Conceptual structural design of wide-span single storey structures. Conceptual design process selectively applied to bridges, halls for assembly, industry, exhibition and sports. Emphasis on complex lightweight systems - including surface, spatial and hybrid structures with cables, membranes, grid shells and transparent enclosures. Integration of constructional and structural issues related to design, manufacture and building processes. Material is presented as lectures and seminars, supplemented with readings in architectural history and theory.

BENV1075
Structural Systems: Advanced
Staff Contact: John Carrick
UOC6 HPW3
Prerequisite/s: ARCH1371

This course builds on prerequisite courses by considering in more detail the conception, analysis, design, and construction of more sophisticated structural systems, like shells and grid shells, space frames, cables, membranes, tall buildings and towers, prestressed structures, as well as more refined aspects of conventional material, systems and loading environments. It also considers the wider question of the role of structural engineering in architecture and its integration with other engineering disciplines, mainly through case studies. Material is presented as lectures and seminars, supplemented with readings in architectural history and theory.

BENV2602
Advanced Structural Design
Staff Contact: John Carrick
UOC3 HPW2

The behaviour and analysis of indeterminate structures. Computational techniques for indeterminate and other complex structural systems. Structural CAD applications. Architectural/ Structural design issues: envelope, structure interaction, structural detailing and structural expression; dynamic loads; new materials and systems; assembly and erection techniques etc.

BENV2603
Lightweight Structural Design
Staff Contact: Vinzenz Sedlak
UOC3 HPW2

Integrated architectural/ structural/ constructional/ environmental design of cable, cable-net, membrane, tensegrity, shell and folded surface structures in lightweight materials (concrete, timber, metals and composites). Current issues related to on-going research and development. Structural ideologies. Seminar and project(s). Model and computer laboratory work and occasional construction workshop.

BENV2604
Structural Systems: Basic
Staff Contact: Vinzenz Sedlak
UOC6 HPW3

Building upon a typical introductory structures course (such as Technology 1) this course deals in depths with basic systems such as arch, beam, cable, frame, truss, slab/plate, membrane, shell and several of their many variations. The subject is a useful basis for further elective study in structures and for design and construction: The fundamental requirement for any architectural designer embarking upon the structural design of buildings and objects is a basic understanding of structural systems and their structural behaviour under load. Equipped with such understanding the student/designer gains the necessary confidence to distinguish between different structural possibilities for any particular design and choose the appropriate one. Subsequently she/he is able to approach structural material choice and structural detailing of connections on a sound basis of proven structural relevance. The teaching approach to this subject is predominantly visual with only limited numerics. Basic structural systems will be discussed by means of readily understood graphical diagrams and will be illustrated with cases of typical structural applications. Short exercises accompany the lectures with typical solutions presented in class. Student learning occurs during exercise completion combined with study of practical examples and the relevant literature, peer discussion and feedback from the lecturer. Assessment will be by student engagement in class as witnessed by timely and successful completion of exercises, active participation in discussion and by attendance.

Construction and Manufacturing

BENV2701
Advanced Building Materials (Ceramics)
Staff Contact: Bill Lawson
UOC6 HPW3

Ceramic materials; the nature of cements, concrete and glass. Building products and techniques using these materials and their implications including construction, maintenance and deterioration. Examination of the environmental impacts and life cycle analyses of these materials. Industrial and site visits.

BENV2702
Advanced Building Materials (Organics)
Staff Contact: Bill Lawson
UOC6 HPW3

Organic materials; the nature of wood and synthetic polymers. Building products and techniques using these materials and their implications including construction, maintenance and deterioration. Examination of the environmental impacts and life cycle analyses of these materials. Industrial and site visits.

BENV2703
Advanced Building Materials (Metals)
Staff Contact: Bill Lawson
UOC6 HPW3

Metals, ferrous and non-ferrous, their nature and use. Building products and techniques using these materials and their implications including construction, maintenance and deterioration. Examination of the environmental impacts and life cycle analyses of these materials. Industrial and site visits.

BENV2704
Advanced Construction Systems
Staff Contact: Adam Kreisler
UOC3 HPW2

A review of recent developments, current trends and possible future directions in building design, construction systems, detailing and documentation. Case studies, projects, seminars.

BENV2705
Spatial Construction Studies
Staff Contact: Peter Murray
UOC6 HPW3

This course is a rigorous and disciplined examination of skilfully (ie. artfully) designed works of architecture. The course will require students to investigate the physical (spatial and constructional) orders of two buildings with the aim of interpreting/understanding what these orders are and why they are the way they are. The investigations will be based on drawings and models of the chosen buildings (to be made by the students), on appropriate texts and on lectures given during the session. The selection of buildings will be partly based on the availability of good documentation and critical writings. These are necessary in order to achieve the desired level of rigour. Students will be divided into two groups, each group focusing on one of the buildings. A comparison of the two buildings is an important means of initiating discussion and will be one of the aims of the investigation. Material is presented as a mix of lectures and tutorials.

BENV2706
Advanced Modelling for Manufacturing
Staff Contact: Lance Green
UOC3 HPW3

Development of three-dimensional models using ProEngineer Software. Applications to plastic flow, analysis, manufacture of rapid prototypes and other engineering based applications.

BENV2707
Advanced Landscape Engineering
Staff Contact: Linda Corkery
UOC3 HPW2

More complex landscape engineering problems particularly soft engineering solutions. Design and documentation of irrigation systems, external lighting, roads and car parks.

BENV2708
Interior Detailing
Staff Contact: Bill Macmahon
UOC6 HPW3

Design resolution at a fine scale highlighting issues of quality and the central role of detailing in achieving buildings and interiors which are original and coherent examples of good design. The practice and technology of detailing interiors seeking to enhance the designer s critical capacity when assessing options and extending their design vocabulary. The discipline of extending design concepts from the overall to the specific and planning strategies for detailing while at an early stage of the design process. Tutorials based upon recent examples of detailing will be supplemented by lectures dealing with techniques of documentation, structuring building contracts to support successful outcomes in building procurement. Lectures will cover material related to building methods and technologies: included will be detailing stainless steel, timber veneer, plastic laminates, timber joinery, specifying finishes such as polyurethane, epoxy, stains and coatings. The program will be centred about guest lecturers presenting examples of their work as case studies of successful detailing.

BENV2709
Construction 6 (Industrialisation and Technological Change)
Staff Contact: Marton Marosszeky
UOC3 HPW3
Prerequisite/s: BLDG3005
Note/s: Elective

Concept of industrialisation; historical trends. International experience. Effect of demand on construction technology. Tolerance in building; quality management, modular coordination. New technologies in manufacture and construction. Government policy. Internationalisation and future trends.

BENV2710
International Housing Practice
Staff Contact: Perry Forsythe
UOC3 HPW2
Prerequisite/s: BLDG1002 GMAT0411
Note/s: Elective

High, medium and low density housing development in terms of the entire procurement and production process. Factors directly involved in the process and other issues that impact on it including government housing policy, regulatory instruments, the commercial and social environment, land subdivision, property titling, urban planning, construction, financing and marketing. Current practices and future trends in various countries. International approaches to housing procurement. Quality in housing.

Law, Practice and Management

BENV2801
Project Management
Staff Contact: John Cooke
UOC3 HPW2

1. Principles of scientific management and organization, individual group behaviour, management functions, planning, organising, staffing, directing, coordinating, monitoring, appraisals and evaluation. 2. Operations research techniques; network analysis, multi-activity charting. 3. Decision theory and procedures. 4. Contract and contract documents. 5. Industrial relations, employment. 6. Industrial organization. 7. Seminars.

BENV2802
The Architect and the Law
Staff Contact: John Cooke
UOC3 HPW2

1. Arbitration and litigation. 2. Appeals to the Land and Environment Court. 3. Environment law. 4. Industrial Law. 5. Case studies.

BENV2803
Facility Planning
Staff Contact: Sue Serle
UOC6 HPW3

Facility planning is the practice of coordinating the physical workplace with its business objectives. It strategically integrates the principles of business administration, interior architecture and the behavioural and engineering sciences. This course covers material associated with facility, strategic and tactical planning with regard to: accommodation, occupational health and safety and security; environmentally sustainable design in the context of the workplace; space planning systems; integration of services and telecommunications within the office. Contemporary strategies for the design of the modern office.

BENV2804
Construction Planning and Management
Staff Contact: John Cooke
UOC3 HPW2

The role of the architect in construction planning and management. Preplanning and building technology design for improved performance and management of the building process. Recent developments in constructional and structural engineering. Erection methods and equipment. Construction management and co-ordination of the building process. Building economics and cost planning, case studies, reports, seminars.

BENV2805
Project Management and the Design Process
Staff Contact: TBA
UOC6 HPW3
Prerequisite/s: BLDG3275
Note/s: Elective

The nature of projects. Definition of project phases. The impact of procurement process on project outcomes. Project risk analysis and project organizational design. Client needs determination and managing the design process. Scope management.

BENV2806
Organizational Behaviour
Staff Contact: Martin Loosemore
UOC3 HPW3

Prerequisite/s: BLDG3266
Note/s: Elective

Organizational design. Types of organizations and fitting organizational structure to environment. Leadership. Reward processes. Expectancy Theory. Organizational change.

BENV2807
Management 7 (Marketing)
Staff Contact: TBA
UOC3 HPW3
Prerequisite/s: BLDG3275
Note/s: Elective

Marketing for builders and developers in the Australian and Pacific environment with particular emphasis on the marketing mix, the relationship between a marketing system and its environment, development of marketing, tactics and strategy, market segmentation and the buyer decision process. Listing, selling and the auction process

BENV2808
Law for Builders 3
Staff Contact: TBA
UOC3 HPW3
Prerequisite/s: BLDG3272
Note/s: Elective

Recognition of the significance of different land titles, tenures and interests in land; understand the construction and content of contracts, leases and other forms of agreement required for property dealings and use; develop a familiarity with public and private controls and restrictions on land use and development; appreciate the relationship between planning policies at all levels and the valuation process; a knowledge of the valuation review and determination processes of the Land and Environment Court and similar tribunals; appreciate the requirements for presentation of evidence as an expert witness; acquire a familiarity with major court cases, relevant to a valuer, which establish valuation principles; understand the major objectives of principal New South Wales Acts dealing with real estate or interests therein.

BENV2812
Documentation Techniques for Major Buildings
Staff Contact: Adam Kreisler
UOC6 HPW2

Students will learn what is involved in completing a comprehensive set of documents comprising Working Drawings, Details, Specification and Schedules required for tender and successful completion of the construction of major buildings. Students will also learn about construction design details and many aspects of the legal and technical implication in the documentation.

Urban Planning

BENV2901
Planning Perspectives
Staff Contact: Susan Thompson
UOC3 HPW2

Introduction to the purpose, scope, and application of planning. What is Town Planning and how does it impinge on the related professions of building, surveying and landscape architecture? The course will cover basic planning law and administration, urban processes, housing policy, social planning, environmental protection and heritage preservation. The future of cities, housing and transportation will also be canvassed.

BENV2902
The City: Sydney
Staff Contact: James Weirick
UOC3 HPW2

This course critically examines the pace, scale and dynamic transformation of Sydney at the end of the twentieth century. The physical form of the city, its environmental qualities and social patterns will be examined in terms of the theoretical literature on the culture of cities and techniques of reading the urban landscape. The study of Sydney s urban form and urban life will be based on a series of lectures, seminars and city walks.

BENV2903
Urban Design
Staff Contact: Jon Lang
UOC6 HPW3

Design studies in the integration of buildings and groups of buildings in their urban context, and of spaces between buildings, accommodation of pedestrian and vehicular movement, micro-climate. Material is presented as lectures and occasional tutorials.

BENV2904
Public Art
Staff Contact: Catherine De Lorenzo
UOC6 HPW3

This course examines recent Australian and overseas art that addresses ideas of place and context and that is situated in the public domain. Public art can be an individualistic exercise but more often it results from professional collaboration between artists, designers of the built environment, and the community. Art in public places provides opportunities for design professionals to grapple with historical, social, cultural, environmental and other issues in the creative process. Increasingly state and local governments are developing policies to encourage public art: in some overseas countries a fixed percentage of the costs of a public building must be spent on providing site/place-specific art. This elective has two objectives: one is to examine aspects of the current theoretical discourse on public art, and to debate these ideas in student-led seminars; the other objective is to enable students to conduct research into local recent public art and to write a critical appraisal of a particular work. It is hoped that the research will be incorporated (and acknowledged) in a wider Department-based project on public art, architecture and urban design in Sydney. Material is presented as a mix of lectures and seminars.

BENV2905
Multivariate Analysis for Planning
Staff Contact: Robert Zehner
UOC3 HPW3
Prerequisite/s: PLAN1052

The use of multivariate techniques to analyse medium to large survey-based data sets. The specific techniques covered in a given year depend in part on the data sets available for analysis, but will focus in any event on multiple regression, including approaches to the analysis of non-linear relationships, and on factor analysis.

BENV2906
Politics, Power and Policy
Staff Contact: Peter Williams
UOC3 HPW3

The aim of the course is to create an understanding of the complex forces and processes (political, ideological, economic, etc.) which operate in the management of urban areas. Issues covered include relationships between urban government, politics, planning, the community and various interest groups. Urban theory. The relationship between public policy and planning. The social context of planning. The different social needs within Australian society. The formulation and implementation of policy.

BENV2907
Planning Elective
Staff Contact: Stephen Harris
UOC3 HPW3

During each session, various planning electives are offered which allow students to pursue a topic of their interest in-depth. Electives are not standardized each year and are subject to the availability of individual staff members. In the past topics have included heritage and conservation, transport and environment, urban design, regional economic analysis, rural planning, cultural studies and post-modernist thought. A list of electives are proposed at the beginning of each session.

BENV2908
Planning Elective
Staff Contact: Stephen Harris
UOC3 HPW3

During each session, various planning electives are offered which allow students to pursue a topic of their interest in-depth. Electives are not standardized each year and are subject to the availability of individual staff members. In the past topics have included heritage and conservation, transport and environment, urban design, regional economic analysis, rural planning, cultural studies and post-modernist thought. A list of electives are proposed at the beginning of each session.

BENV2909
Planning Elective
Staff Contact: Stephen Harris
UOC3 HPW3

During each session, various planning electives are offered which allow students to pursue a topic of their interest in-depth. Electives are not standardized each year and are subject to the availability of individual staff members. In the past topics have included heritage and conservation, transport and environment, urban design, regional economic analysis, rural planning, cultural studies and post-modernist thought. A list of electives are proposed at the beginning of each session.

BENV2910
Planning Elective
Staff Contact: Stephen Harris
UOC3 HPW3 or S2

During each session, various planning electives are offered which allow students to pursue a topic of their interest in-depth. Electives are not standardized each year and are subject to the availability of individual staff members. In the past topics have included heritage and conservation, transport and environment, urban design, regional economic analysis, rural planning, cultural studies and post-modernist thought. A list of electives are proposed at the beginning of each session.

BENV2911
Land Economics
Staff Contact: TBA
UOC6 HPW3
Prerequisite/s: BLDG4314
Note/s: Elective

Ability to apply relevant valuation techniques to a broad range of common land use types; acquisition of knowledge of efficient property management techniques; identification of a range of unusual property types which require specialised valuation skills and knowledge and the means of developing such skills and knowledge; knowledge to develop novel valuation techniques for application to specific property types; ability to determine the highest and best use for nominated property types; the application of inspection techniques for broad property types; competency in the use of property valuation and inspection aids; familiarity with resource materials and information sources required to undertake specific types of valuation.

BENV2912
Property Management
Staff Contact: Jinu Kim
UOC3 HPW3
Note/s: Elective

Maintenance and obsolescence; economics of refurbishment; marketing; tenancy management; building control and security systems; management of commercial, retail, industrial and large scale residential complexes; legal aspects of tenancy management; energy conservation; taxation law and implications.

Faculty of the Built Environment Graduate Enrolment Procedures

All students enrolling in graduate programs should obtain a copy of the free booklet Enrolment Procedures 2000 available from Faculty Student Centre and the University Admissions Office. This booklet provides detailed information on enrolment procedures and fees, enrolment timetables by faculty and program, enrolment in miscellaneous courses, locations and hours of cashiers and late enrolment.

Higher Degrees – Research

Following the award of a first degree in Architecture, Building, Industrial Design, Landscape Architecture or Town Planning of the University of New South Wales or other approved university, graduates may apply to register for study leading to the award of the degree of:

1. Doctor of Philosophy
2. Master of Architecture
3. Master of Building
4. Master of the Built Environment
5. Master of Landscape Architecture
6. Master of Town Planning
7. Master of Science

For details concerning these degrees see Conditions for the Award of Higher Degrees later in this handbook or write to The Associate Dean - Research.

Higher Degrees – Coursework

In addition to the facilities available for the pursuit of higher degrees by research, formal programs are offered as follows:

1. Master of Architecture
2. Master of the Built Environment (Sustainable Development)
3. Master of Construction Management
4. Master of Industrial Design
5. Master of Real Estate
6. Master of Science (Industrial Design)
7. Master of Urban Development and Design
8. Graduate Diploma in Built Environment (Sustainable Development)
9. Graduate Certificate in Built Environment (Sustainable Development)

Duration

Most programs are programmed over one year full-time or two years part-time study, are located on the Kensington campus of the University, and may require evening and/or daytime attendance (refer to course descriptions for details). The Master of Urban Development and Design is programmed over one calendar year including a summer term.

Research Degrees

The Faculty of the Built Environment offers facilities for research and welcomes inquiries from students who wish to pursue programs for research as detailed below. Prospective students should consult the Associate Dean – Research to discuss their research interests prior to making a formal application.

The Faculty is home to the following research centres and units which provide opportunities for research students to participate to a focussed research endeavour:

- Australian Centre for Construction Innovation
- Solar Architecture Research

Research students are encouraged to join one of the Faculty's five Research Groups which provide a collegial environment for staff and students with similar research interests in the following areas:

- Design Theory
- Construction Management and Economics
- History and Theory
- Technology and Technological Studies
- Urban and Regional Studies

Associate Dean - Research
Professor Jon Lang

1120
Doctor of Philosophy

Doctor of Philosophy
PhD

This is a research degree requiring an original and significant contribution to knowledge in an approved course. Supervision is available for topics relevant to the discipline areas of the faculty (architecture, building construction management, industrial design, interior architecture, landscape architecture, urban design, and urban planning). Cross-disciplinary research is encouraged and collaborative supervision across these disciplines and with other disciplines within the University is available.

2200
Master of Architecture

Master of Architecture
MArch

This degree is available to full-time, part-time and external candidates. It requires the submission of a thesis embodying the results of an original investigation or design.

2206
Master of Science

Master of Science
MSc

This degree is available to full-time, part-time and external candidates. It requires the submission of a thesis embodying the results of an original investigation or design.

2210
Master of Building

Master of Building
MBuild

This degree is available to full-time, part-time and external candidates. It requires the submission of a thesis embodying the results of an original investigation.

2220
Master of Landscape Architecture

Master of Landscape Architecture
MLArch

This degree is available to full-time, part-time and external candidates. It requires the submission of a thesis embodying the results of an original investigation or design.

2230
Master of Town Planning

Master of Town Planning
MTP

This degree is available to full-time, part-time and external candidates. It requires the submission of a thesis embodying the results of an original investigation.

2240
Master of the Built Environment

Master of the Built Environment
MBEnv

This degree is available to full-time, part-time and external candidates. It requires the submission of a thesis embodying the results of an original investigation or design.

Coursework Degrees

The School of the Built Environment welcomes enquiries from students who wish to pursue graduate coursework programs as detailed below. Prospective students should consult the Associate Dean – Postgraduate Studies to discuss their interests prior to making a formal application.

Associate Dean – Postgraduate Studies
Professor Alexander Cuthbert

8125
Master of Construction Management

Master of Construction Management
MConstMgt

Program Director
A/Professor Thomas E Uher

Construction Management embraces the principles of project management and applies them across different phases of the project development cycle to achieve successful project outcomes.

This one year full-time or part-time full-fee program has been designed to provide opportunities for advanced study in construction project management and building economics. The program aims at improving proficiency of qualified practitioners in the construction industry to meet present and future challenges.

Admission Requirements and Fees

1. Applicants must hold degrees acceptable to the University of New South Wales in either building, civil engineering, architecture, quantity surveying or equivalent and must have appropriate industrial experience.
2. Applicants may proceed directly into the program, or be required to complete prerequisite or corequisite programs of reading or study, with assessed assignments.
3. Applicants from non-English speaking countries must supply a certified statement of results in the IELTS Test or another equivalent recognised test.
4. This is a full fee paying program. Contact the office of the Associate Dean – Postgraduate Studies or the Program Director for details.

Program Structure

The Master of Construction Management program is a formal one year full-time or a two-yearpart-time full-fee degree program. Entry into the program is possible in either session. To qualify for a degree, candidates are required to complete six (6) compulsory and two (2) elective courses to accumulate a total of 48 units of credit.

Program Outline

Compulsory Courses		UOC
CONS0007	Principles and Practice of Management	6
CONS0002	Human Resources Management	6
CONS0005	Computers in Construction Management	6
CONS0009	Construction Planning and Control	6
CONS0010	Contracts Management and Law	6
CONS0014	Project Management	6

Elective Courses		UOC
CONS0004	Economics in Construction	6
CONS0012	Quantitative Methods in Management	6
CONS0006	Property Management	6
CONS0008	International Construction Practice	6
CONS0011	Cost Planning and Analysis	6
CONS0013	Construction Management Applications	6
CONS0001	Project Finance	6
CONS0003	Project Quality Management	6
BENV7710	Planning Law and Administration	6

Note: Not all elective courses are available in any one year. Some elective courses may be selected from the School of Civil and Environmental Engineering subject to approval.

8128
Master of Real Estate

Master of Real Estate
MRE

Program Director
Mr Peter Williams

The Master of Real Estate program is offered in the multi-disciplinary Faculty of the Built Environment, which embodies architecture, building construction management, planning and urban development, landscaping architecture, and industrial design disciplines.

Program Philosophy

The aim of the Master of Real Estate program is to enhance analytical skills with respect to real estate investment and development. The program particularly aims at improving proficiency of qualified practitioners in the real estate industry to meet present and future challenges.

Admission Requirements

1. Admission to the program is available to a wide range of graduates from both construction and non-construction based disciplines. Applicants should hold undergraduate degrees acceptable to the University of New South Wales in building/construction management, quantity surveying, land economics, architecture, urban planning, engineering, or another appropriate discipline. In exceptional circumstances other academic qualifications may also be considered.
2. University graduates from non-construction disciplines who have appropriate experience in property may be admitted to the program depending on the individual case.
3. Eligible applicants may be required to complete a program of preparatory or concurrent study laid down by the Associate Dean – Postgraduate studies whose decision will be based on the education and experience of each applicant.
4. Graduate experience and involvement in the property industry is considered an advantage in the selection of candidates.

English Language Requirements

International applicants whose first language is not English, or who have not undertaken a previous degree where English was the primary language of instruction, are required to provide proof of their competence in English by presenting acceptable results in the IELTS Test or another equivalent test.

Fees

This is a full fee paying program for both local and international students. Contact the office of the Associate Dean – Postgraduate Studies for details.

Program Structure

To qualify for a degree, students will be required to complete six compulsory and four elective courses to accumulate a total of 48 units of credit. Full-time students will be required to complete the program over two, and part-time students over four academic semesters. Entry into the part-time program is now possible in either semester. Full-time students will be required to complete five courses in each semester, which represents approximately 15 contact hours per week with an expectation that additional 30 hours per week is devoted to private study and project work.

Program Outline

Courses are offered on a four-session cycle. Courses are normally timetabled on four evenings per week. Except in exceptional circumstances, a student is required to be concurrently enrolled in all courses in a given session to allow for syllabus integration between courses.

Compulsory Courses		UOC
REST0001	Real Estate Investment Analysis	6
REST0002	Information Technology and Data Analysis in Real Estate	6
ECON5103	Business Economics (Faculty of Commerce and Economics)	6
REST0003	Real Estate Market Forecasting	6
REST0004	Real Estate Finance	6
FINS5513	Security Valuation and Portfolio Selection (Faculty of Commerce and Economics)	6
	Total	**36**

Elective Courses		
REST0005	Real Estate Valuation*	3
REST0006	Real Estate Development*	3
REST0007	Facility Management	3
REST0008	Corporate Real Estate	3
BENV7720	Land and Environment Law*	3
BENV7721	Planning and Land Policy	3
BENV7714	The Economy of Cities and Regions	3
BENV7704	Principles of Political Economy	3

Other elective courses may be chosen subject to Program Director approval.

*: Courses should be completed together with an introductory course in Building to satisfy the academic requirements for Australian Property Institute (API) Associate membership of the Land Economy category.

8131
Master of Urban Development and Design Program

Master of Urban Development and Design
MUDD

Program Director
Professor A Cuthbert

A one year full-time or two year part-time multi-disciplinary coursework program for a wide range of graduates from both design and non-design based disciplines with both Session 1 and Session

2 intake. An advanced study program examines the crucial relationship between urban development and design from an international perspective, but with particular reference to the rapidly developing Asia-Pacific region. The intensive one calendar year program involves two academic sessions of study plus a summer term and includes a compulsory field project based in a major South East Asian city. Graduates of the program from a planning-related background are eligible for membership of the Royal Australian Planning Institute (RAPI). Students from a non-planning-related background may elect to take an additional 24 units of credit of approved planning course to become eligible for RAPI membership.

Admission Requirements

Admission to the program is available to a wide range of graduates in both design and non-design based disciplines. The minimum requirement is a four year undergraduate degree in fields such as architecture, landscape architecture, urban planning, urban studies, real estate economics, property development, or another appropriate discipline. In exceptional cases students may be admitted on the basis of professional experience. Applicants who do not meet these requirements may be permitted to gain admission via a qualifying program.

Fees

This is a full-fee paying program for both local and international students. The S E Asian Field Project costs are in addition to fees. Contact the office of the Associate Dean – Postgraduate Studies for details.

Program Structure

The content of the program is progressive, stressing theoretical knowledge of economic, social, environmental and physical design determinants at the beginning, and moving into more applied skills and applications toward the end of the year. Students will be allocated to one of two streams in (a) Design or (b) Development depending upon their background discipline and interest. The nature of contribution to studio-based design projects will be determined accordingly.

The program comprises nine core and two elective courses. The compulsory core includes five lecture/seminar based courses, three project based studio courses, and a case study course. The typical pattern for core and elective courses will be a two hour lecture/seminar format over 12 weeks, ie a total of 24 hours per session. The remaining two weeks per session will normally be reserved for visiting lectures and other special activities.

Students are encouraged to select electives from those recommended hereunder which have been specifically selected for the program. However students may be permitted, with the approval of the Associate Dean – Postgraduate Studies, to select electives from other programs offered within the faculty or other faculties of the University.

The final Summer Term will include case studies of major urban projects, the South East Asian field project, and the preparation of an exhibition and publication of the years work.

Students from a non-planning-related background may elect to take an additional 24 units of credit of approved planning course to become eligible for RAPI membership.

Program of Study for Full-Time Candidates

Core Course		**UOC**
Session 1		
UDES0004	History of Urban Development	3
UDES0007	Urban and Environmental Law	3
UDES0008	Real Estate Development	3
UDES0001	Urban Design Studio 1	12
	Elective Course	3
	Total	**24**
Session 2		CP
UDES0005	Critical Urban Theory	3
UDES0009	Urban Landscape	3
UDES0002	Urban Design Studio 2	12
	Elective Course	6
	Total	**24**
Summer Term		
UDES0006	Case Studies in Urban Development and Design	6
UDES0003	Urban Design Studio 3 (including S.E. Asian field project)	18
	Total	**24**

Nine units of electives are allocated.

Recommended Program of Study for Part-Time Candidates

Core Course		**UOC**
Year 1, Session 1		
UDES0004	History of Urban Development	3
UDES0007	Urban and Environmental Law	3
UDES0008	Real Estate Development	3
	Total	**9**
Year 1, Session 2		
UDES0005	Critical Urban Theory	3
UDES0009	Urban Landscape	3
	Elective Course	6
	Total	**12**
Year 2, Session 1		
UDES0001	Urban Design Studio 1	12
	Elective Course	6
	Total	**18**
Year 2, Session 2		
UDES0002	Urban Design Studio 2	12
	Total	**12**
Year 2, Summer Term		
UDES0006	Case Studies in Urban Development and Design	6
UDES0003	Urban Design Studio 3 (including S.E. Asian field project)	18
	Total	**24**
Total Units of Credit for Program		**72**

Recommended Elective Courses		
BENV7142	CAD and Visualization	
BENV7190	People and Urban Space	6
CONS0003	Project Quality Management	6
CONS0003	Principles and Practice of Management	6
CONS0014	Project Management	6
SUSD0001	Sustainable Development and the Urban Environment	6
SUSD0002	Resources, Materials and Sustainability	6
SUSD0005	Energy and the Built Environment	6
SUSD0004	Human Factors, Sustainability and Habitability	6
PLAN2051	Environmental Economics and Resource Management	3
PLAN2511	The Economy of Cities and Regions	3

Note: Most courses are offered in only one session per year. Some courses may not be offered every year. Students are advised to contact the Program Director prior to enrolment for information about the availability of courses in a particular session.

8132
Master of the Built Environment (Sustainable Development)

5132
Graduate Diploma in Built Environment (Sustainable Development)

7332
Graduate Certificate in Built Environment (Sustainable Development)

Program Director:
Associate Professor Deo Prasad

Buildings and urban environments represent a major source of human impact on natural ecosystems and sustainable development has now become a major concern of urban policy and development. There is an increased demand for built environment and related professionals to develop knowledge and skills appropriate to sustainable development, and an expansion of specialised career opportunities in both the public and private sector.

The programs are advanced interdisciplinary coursework programs which provide opportunities for graduates from a wide range of backgrounds (eg: architecture, landscape architecture, urban planning, building, property development, civil engineering, etc.) to improve their knowledge and skills in the application of the principles of sustainable development to the planning, design, construction and management of buildings and the urban environment. While approached from an international perspective, the program places special emphasis on the rapidly developing South East Asian region.

The programs are available to suitably qualified local and international students and provide opportunities for full-time or a part-time study.

Admission Requirements

MBEnv(SustDev): A minimum four year bachelor degree or equivalent in an appropriate discipline. Where an applicant's qualifications are not considered adequate, admission may be permitted to the Graduate Diploma or Graduate Certificate with the possibility of upgrading to the Masters, course to satisfactory performance.

GradDipBEnv and GradCertBEnv: A bachelor degree or equivalent in an appropriate discipline.

In exceptional circumstances other academic qualifications may also be considered.

Fees

These are full-fee paying programs for both local and international students.

Program Structure

The Masters program is comprised of four core courses, two electives and a graduate project for a minimum of 48 units of credit required to complete the program. The Graduate Diploma is comprised of four core courses and two electives for a minimum of 36 units of credit. The Graduate Certificate is comprised of four core courses for a total of 24 units of credit

Recommended Electives

		UOC
AGSM304	Resource Markets and Management	6
ARCH7206	CAD Management and Information Technology	6
ARCH7322	People and Urban Space	6
CONS0002	Human Resources Management	6
CONS0003	Project Quality Management	6
CONS0007	Principles and Practice of Management	6
CONS0014	Project Management	6
UDES0004	History of Urban Development	6
UDES0007	Urban and Environmental Law	3

Pattern of Study for Completion Over Two Sessions

Courses	Units of Credit	MBEnv	Grad Dip	Grad Cert
Session 1				
SUSD0001 Sustainable Development and the Urban Environment	6	•	•	•
SUSD0002 Resources, Materials and Sustainability	6	•	•	•
Elective Course (see list below)	6*	•	•	
Elective Course (see list below)	6		•	
Elective course (see list below)	6		•	
Session 2				
SUSD0003 Energy and the Built Environment	6	•	•	•
SUSD0004 Human Factors, Sustainability and Habitability	6	•	•	•
SUSD0005 Graduate Project	12	•		
Elective Course (see list below)	6		•	
Total units of credit (minimum)		**48***	**36***	**24**

* *Minimum units of credit – subject to variation depending on selection of elective course.*

Recommended Pattern of Study for Completion over Four Sessions

Courses	Units of Credit	MBEnv	Grad Dip	Grad Cert
Session 1, Year 1				
SUSD0001 Sustainable Development and the Urban Environment	6	•	•	•
Session 2, Year 1				
SUSD0003 Energy and the Built Environment	6	•	•	•
SUSD0004 Human Factors, Sustainability and Habitability	6	•	•	•
Elective Course (see list below)	6*	•		
Session 1, Year 2				
SUSD0002 Resources, Materials and Sustainability	6	•	•	•
Elective Course (see list below)	6*	•	•	
Session 2, Year 2				
SUSD0005 Graduate Project	12	•		
Elective Course (see list below)	6*		•	
Elective Course (see list below)	6		•	
Total units of credit (minimum)		**48***	**36***	**24**

**minimum units of credit – subject to variation depending on selection of elective course.*

UDES0005	Critical Urban Theory	6
LAND9213	Land Systems and Management	6
SCTS5312	Technology and Power in the Asia-Pacific	12*
SCTS5316	Environmental and Technological Risk Controversies	12*
GEOG9042	Environmental Impact Assessment	6
GEOG9240	Principles of Geographic Information Systems	6
GEOG1031	Environmental Processes	6
GEOG9230	Population, Health and the Environment	6
CIVL9402	Transport, Environment, Community	12*
CIVL9405	Urban Transport Planning Practice	6
CIVL9855	Water and Wastewater Analysis and Quality Requirements	6
CIVL9881	Hazardous Waste Management	6
CIVL9889	Environmental Economics and Law	6

* Electives of 12 or more units of credit are regarded as equivalent to two 6 units of credit courses.

Note: Some electives may not be offered every year.

Additional fees will apply for courses with more than the minimum required units of credit.

Advanced Standing

Where applicants have undertaken external courses equivalent to core courses, advanced standing may be permitted up to the following:

GradCert: 6 UOC
GradDip: 12 UOC
MBEnv: 12 UOC

Upgrading and Articulation

Upgrading from GradCertBEnv to GradDipBEnv or MBEnv(SustDev), or from GradDipBEnv to MBEnv(SustDev) may be permitted where a program is completed but the Degree has not been awarded. Students upgrading to the MBEnv(SustDev) will be required to complete a minimum of 12 additional units of credit of coursework. When upgrading, additional credit for advanced standing will not be permitted.

Where a GradDipBEnv or GradCertBEnv has been awarded, the maximum credit permitted toward a degree at a higher level will be as follows:

GradCert: 12 UC towards GradDip or MBEnv.
GradDip: 12 UC towards MBEnv.

For core or elective courses previously completed in a GradDipBEnv or GradCertBEnv, additional electives of at least equivalent units of credit value are required to be completed.

8142
Master of Architecture (by coursework)

with programs of study in:

Architectural Design (code 8142/1001)

Architectural Computing (code 8142/2001)

History and Theory of Architecture (code 8142/3001)

Program Director:
Dr P-A Johnson

Master of Architecture
MArch

This Program provides for graduate study and research in one of several specialised aspects of the discipline of architecture. At the present time, three programs of study are offered to prospective candidates: Architectural Design; the History and Theory of Architecture; and Architectural Computing. The School may, from time to time, adjust the specialist programs that are available, subject to both demand and available staff resources.

The Programs are primarily designed for graduates in architecture and other relevant disciplines who wish to advance their knowledge in these specialised areas as either practitioners, consultants or academics. They are also suitable for specialist members of multi-disciplinary teams in industry or architectural practice.

The degree is awarded as Master of Architecture with a statement on the testamur identifying the area of specialisation undertaken by the candidate.

Admission Requirements

The conditions governing registration as a candidate for the degree of Master of Architecture are described later in this handbook, but the attention of applicants is drawn to the following admission requirements.

Registration is offered to candidates who have been awarded an appropriate degree of Bachelor of minimum 4 years duration from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of the Built Environment (hereinafter referred to as the Committee). Candidates may, where considered appropriate (including insufficient background in the proposed area of specialisation) be required to undertake a qualifying programme as determined by the Committee.

Applicants to the MArch (Architectural Design) program are required to have a Bachelor of Architecture or equivalent degree in architecture at Honours level, or to have achieved a grade average across all courses equal to UNSW Honours level. Performance in design studio and design-related undergraduate course is expected to match or to surpass this Honours or overall grade average level. Prior to their final acceptance into the Program, applicants must submit a design portfolio demonstrating the range and quality of their design experience as well as a declaration as to their role in the work they present. Applicants are also to have a minimum of one year of professional architectural practice experience after graduation. Certain of these requirements may be varied at the discretion of the Committee.

Notwithstanding any other provisions of these conditions, the Committee may require an applicant to demonstrate fitness for registration by carrying out such work and sitting for such examinations, as the committee may determine.

Program Structure

Students undertaking the Program are required to select their program before commencement. They must then complete a set of prescribed core courses in that area of specialisation, supplemented by elective courses to bring their total units of credit to 48 for the degree. As part of the core component, the MArch (Architectural Computing) and the MArch (History and Theory of Architecture) each require the completion of a directed and supervised Graduate Research Project to the value of 12 UOC. The MArch (Architectural Design) Program requires the completion of two studio-based Architectural Design Projects totalling 24 UOC. Note that, except for these higher value Project courses all other core courses are of 6 UOC and elective course are either of 3 or 6 UOC.

The degree may be commenced in either Session of the academic year subject to the availability of places in the Programs as well as appropriate courses being offered at that time. It is normally undertaken over two full-time sessions or four part-time sessions. In general, candidates are required to complete as many core courses as possible before undertaking their elective options.

Candidates wishing to undertake the Architectural Design Program on a part-time basis must note that the studio design courses (Architectural Design Project 1 & 2) are each single session courses and must be completed in the session in which they are enrolled.

For each area of specialisation, candidates are required to take each of the prescribed core courses as listed in the programs given below. These generally make up the bulk of the requirements for the degree. The remaining units of credit are then earned by taking electives, generally selected from the recommended list provided for each Program. Notwithstanding, candidates may, with the approval of the Associate Dean - Postgraduate, undertake electives chosen from among other graduate course offered by the Faculty or University.

Notwithstanding any of the above, the courses offered in any one academic session will depend on student numbers and interests. Students must therefore plan their programs in consultation with Program Co-ordinators. As a guide, the following table shows the number of units of credit that would normally be taken in each Session for a full-time or part-time program, depending on the selected Program.

Fees

This is a fee paying program for both local and international students. Contact School for details.

Typical Patterns of Study

Architectural Design Program

Full-time	**UOC**	
	S1	**S2**
Architectural Design Project 1	12	
Architectural Design Project 2		12
Elective Courses	12	12
Total	**24**	**24**

Part-time	**UOC**	
	S1	**S2**
Year 1		
Architectural Design Project 1	12	
Elective Courses		12
Year 2		
Architectural Design Project 2		12
Elective Courses	12	
Total	**24**	**24**

Architectural Computing and History and Theory of Architecture Programs

Full-time	**UOC**	
	S1	**S2**
Graduate Research Project		12
Research Design and Methodology	6	
Core course	18	
Elective course		12
Total	**24**	**24**

Part-time	**UOC**	
	S1	**S2**
Year 1		
Research Design and Methodology	6	
Core courses	6	12
Total	12	12
Year 2		
Graduate Research Project	12	
Elective courses		12
Total	12	12

The following sections detail the required academic program for each of the specialisation strands available at the present time.

Master of Architecture
Architectural Design Program

Required Academic Program		UOC
ARCH7103	Architectural Design Project 1	12
ARCH7104	Architectural Design Project 2	12
	Elective courses	24
	Total	**48**

Recommended Electives

ARCH7304	Architecture and the City	6
ARCH7305	Theories in History	6
ARCH7306	Theory and Architectural Practice	6
BENV7140	Multimedia on the Web	6
BENV7141	Multimedia in Design Presentation	6
BENV7142	CAD and Visualisation	6
BENV7143	Advanced Visualisation	6
BENV7190	People and Urban Space	6
UDES0004	History of Urban Development	3
UDES0005	Critical Urban Theory	3
UDES0009	Urban Landscape	3
SUSD0001	Sustainable Development and the Urban Environment	6
SUSD0002	Resources, Materials and Sustainability	6
SUSD0003	Energy and the Built Environment	6
SUSD0004	Human Factors, Sustainability and Habitability	6

Note: Most course are offered in only one session each year. Some courses may not be offered every year. Students are advised to contact the Course Director prior to enrolment for information about the availability of course in a particular session.

Master of Architecture
Architectural Computing Program

Required Academic Program		UOC
ARCH7003	Graduate Research Project	12
BENV7001	Postgraduate Research Design and Methodology	6
ARCH7204	Design Computing Theory	6
ARCH7205	Computer Graphics Programming	6
ARCH7206	CAD Management and Information Technology	6
	Elective courses	12
	Total	**48**

Recommended Electives

BENV7140	Multimedia on the Web	6
BENV7141	Multimedia in Design Presentation	6
BENV7143	Advanced Visualisation	6
BENV7144	Building Virtual Precincts	6
CONS0005	Computers in Construction Management	6
GEOG9210	Computer Mapping and Data Display	6
SUSD0003	Energy and the Built Environment	6
SUSD0004	Human Factors, Sustainability and Habitability	6

Master of Architecture
History and Theory of Architecture Program

Required Academic Program		UOC
ARCH7003	Graduate Research Project	12
BENV7001	Postgraduate Research Design and Methodology	6
ARCH7304	Architecture and the City	6
ARCH7305	Theories in History	6
ARCH7306	Theory and Architectural Practice	6
	Elective courses	12
	Total	**48**

Recommended Electives

ARCH7204	Design Computing Theory	6
BENV7190	People and Urban Space	6
COFA8591	Postgraduate Seminars	6
UDES0004	History of Urban Development	3
UDES0005	Critical Urban Theory	3
UDES0009	Urban Landscape	3
UDES0001	Sustainable Development and the Urban Environment	6
SUSD0004	Human Factors, Sustainability and Habitability	6

Note: Most courses are offered in only one session each year. Some courses may not be offered every year. Students are advised to contact the Program Director prior to enrolment for information about the availability of course in a particular session.

8145
Master of Industrial Design Program

MID

The Master of Industrial Design program seeks to extend the knowledge of the industrial designer by emphasising the research of the consumer needs and management of the industrial design and product development process. The research design course introduces the principles of sourcing information and provides a basis for subsequent research of consumer needs, and other aspects of product development such as materials and manufacturing technologies. Industrial design history is revisited helping students to develop an appreciation of the historical influences upon the design process. The industrial design course provides students with an opportunity to pursue advanced product design work under the direction of talented designers. Students have the opportunity to develop further expertise in courses such as, marketing and ergonomics. The major project emphasises research, particularly of consumer needs, manufacturing and financial analysis.

8146
Master of Science (Industrial Design) Course

MSc(IndDes)

The Master of Science (Industrial Design) program introduces design thinking and knowledge to graduates of engineering, architecture and commerce. Initially the student studies basic design, industrial design A, and perspective drawing and rendering. These courses develop and appreciation of visual thinking, product presentation and the industrial design process. At the same time the history of industrial design is clarified and students start to appreciate the influences upon the design process. Studies in business are provided by the Faculty of Commerce, in courses such as, elements of marketing and consumer analysis. Principles of ergonomics introduces the student to human factors associated with the design process. Industrial design B challenges the student with advanced project work and consolidates understanding of the industrial design process. Finally a major project links the student's prior learning and showcases their design knowledge and capabilities.

These programs of graduate study have a similar common core of courses in the major areas of industrial design. They are designed for graduates in industrial and environmental design, architecture, engineering, and marketing and business studies who wish to make careers in industrial design or to be involved in industrial design as a part of their career activity, eg, mechanical engineering with industrial design.

The **MID** degree program is intended for holders of four year industrial design degrees who wish to specialise and develop expertise in particular areas of industrial design. In addition to the common core of coursework, MID degree students are also required to submit a major graduate project, a design theory report and have a greater choice of electives related to their field of specialisation.

The **MSc(IndDes)** degree program is intended for graduates from design fields related to industrial design, such as architecture or engineering, or for graduates from non-design areas, such as marketing, who have satisfactorily completed preparatory studies. The program is designed to adapt and apply the students' existing design knowledge and experience to the methodology and practice

of industrial design. The project work is less specialised and covers a broad range of industrial design problems. The students are required to submit a minor graduate project. There are additional compulsory courses in this program, with a more restricted range of electives, closely related to industrial design.

Admission Requirements

The conditions governing registration as a candidate for the MSc(IndDes) degree program are given later in this handbook: see below under Conditions for the Award of Higher Degrees. In summary, admission is open to applicants who have been admitted to an appropriate degree of at least four years' full-time duration, or its equivalent. For the MID degree program, admission is restricted to applicants who have been admitted to a degree with a major in industrial design of at least four years' full-time duration, or its equivalent. Candidates who have completed part or all of the requirements for the award of the degree of the MSc(IndDes) program may elect to apply for admission to the MID degree program, subject to the recommendation of the Associate Dean – Postgraduate Studies and the approval of the Higher Degree Committee of the Faculty of the Built Environment.

In certain cases, particularly for applicants from non-design undergraduate programs, it is necessary to complete a qualifying program of preparatory units in industrial design, as prescribed by the Higher Degree Committee of the Faculty. These units are selected from appropriate undergraduate programs. The Committee's decision is influenced by the academic and professional experience of each applicant.

Course Structure

The minimum duration of both programs is two sessions of full-time study or four sessions of part-time study. The availability of the full-time and part-time programs of study depends upon student demand and the University's resources at that time.

The MID degree and the MSc(IndDes) degree programs comprise 48 units of credit. Full-time study normally requires an attendance of approximately 18 hours per week, while part-time study normally requires approximately 9 hours per week for the duration of the program. The project work for both degree programs, part and full-time, is run simultaneously and is staffed according to the requirements of each project.

Most of the work is undertaken within the School, but industrial visits and experience forms an important component of the program. The program is so arranged that eminent visitors as well as guest lecturers and designers may participate.

To avoid duplication of classes for full-time and part-time students, courses are timetabled wherever possible on afternoons and evenings. In addition to timetabled commitments, the studios and laboratories are available during normal University hours for industrial design project work. Occasionally students are required to attend professional and industrial visits and lectures at other institutions.

The requirements for the program include an equivalent period of at least four weeks of approved professional or industrial experience. Part-time students with approved employment are exempt from this requirement.

Program Outlines

MID

Core Courses		UOC
IDES5131	Industrial Design	6
IDES4371	Design Management	3
IDES1121	History of Industrial Design	3
BENV7001	Postgraduate Research Design and Methodology	6
IDES6081	Graduate Project (MID)	12
	Total	**30**

Elective Courses		
BENV7140	Multimedia on the Web	6
BENV7141	Multimedia in Design Presentation	6
BENV7142	CAD and Visualisation	6
IDES3271	Form Theory	3
IDES5051	Plastics Materials and Processes	3
IDES5152	Manufacturing Technology	3
MARK5902	Elements of Marketing	6
MARK5901	Issues in Consumer Analysis	6
MARK5913	Marketing Management	6
SESC9421	Applied Ergonomics	6
SESC9441	Ergonomics and New Technology	6

MSc(IndDes)

Core Courses		UOC
IDES1021	Basic Design	6
IDES5091	Perspective Drawing and Rendering	6
IDES5141	Industrial Design A	6
IDES6161	Industrial Design B	6
IDES6181	Graduate Project	12
	Total	**36**

Elective Courses		
BENV7140	Multimedia on the Web	6
BENV7141	Multimedia in Design presentation	6
BENV7142	CAD and Visualisation	6
IDES1121	History of Industrial Design	3
IDES3271	Form Theory	3
IDES4371	Design Management	3
IDES5051	Plastics Materials and Processes	3
IDES5152	Manufacturing Technology	3
MARK5902	Elements of Marketing	6
MARK5901	Issues in Consumer Analysis	6
MARK5913	Marketing Management	6
SESC9411	Principles of Ergonomics	6
SESC9471	Industrial Ergonomics	6
SESC9421	Applied Ergonomics	6
SESC9441	Ergonomics and New technology	6

Approved electives*

*Approved electives may be taken from programs offered in other academic units of the University of New South Wales, subject to the approval of the Associate Dean – Postgraduate Studies.

MID electives may be chosen to increase specialist knowledge relevant to the student's theory studies, project report or planned career activities.

MSc(IndDes) electives are taken in approved courses directly related to the development of the student's industrial design knowledge and skill.

Depending upon program requirements, the availability of University staff and Faculty resources, it may be possible to substitute some existing graduate or undergraduate programs in other faculties for certain courses of the program. This development would be subject to the approval of the Higher Degree Committee of the Faculty of the Built Environment and the Associate Dean – Postgraduate Studies. Where the units of credit of courses is increased by substitution of courses from other academic units, the requirement for the stated number of credits in elective courses is correspondingly reduced.

5205
Town Planning Graduate Diploma

Graduate Diploma
GradDip

This programis designed as a qualifying program in order to provide training for graduates who wish to pursue a higher research degree (PhD or Masters by research). The content of the Graduate Diploma is tailored to meet the objectives of individual students. It is normally taken as a one year full-time program (or two years part-time) and includes a core of postgraduate coursework, together with an additional study program to meet the needs of particular students.

Performance in the course is considered when applications for entry into higher degree programs are reviewed.

Admission

An applicant for the Graduate Diploma shall have a degree of a minimum length of three years full-time from an approved institution or have such other qualifications as may be approved by the Higher Degree Committee of the Faculty of the Built Environment

Program Structure

The Program includes three compulsory core courses. The remaining content is designed to provide a foundation for postgraduate research in the field, and may include additional coursework and/or programs of independent study,

Core course

BENV7001	Postgraduate Research Design and Methodology
BENV7002	Quantitative Methods for Built Environment Research
BENV7705	Research Seminar 1
BENV7706	Research Seminar 2

Individual programs are defined in consultation with the academic staff of the School and are subject to approval by the Associate Dean (Postgraduate Studies). Application for exemption from BENV7002 may be considered by the Head of School for students with appropriate prior experience with statistical techniques and data analysis.

Course Descriptions

Faculty of the Built Environment Courses

ARCH7003
Graduate Research Project
Staff Contact: Dr P-A Johnson
UOC12 HPW8 WKS14 S1S2
Prerequisite/s: BENV7001
Note/s: Excluded: ARCH7001, ARCH7002

The project comprises research into the theory or practice of architecture in relation to the Program within which the student is enrolled and is nominated by the student and approved by the Program Director. The research should represent both a synthesis of and an extension to the knowledge and skills acquired during the Program and will be supervised by a member of the academic staff. Appropriate research methodologies and techniques are to be used in all aspects of the work leading to the preparation of a written research project and presentation of a graduate seminar. Assessment by written report and seminar.

ARCH7103
Architectural Design Project 1
Staff Contact: Dr P-A Johnson
UOC12 HPW8 WKS14 S1
Note/s: Excluded: ARCH7101

Theory, research and studio practice, in the form of graduate research projects in design, applied to general architectural themes of high priority in the contemporary context. After thorough theoretical foundation and research analysis, the theme is adapted to a specific and concrete situation to achieve an architectural synthesis of all relevant influences arising from the physical and human context. Assessment by major design studio project.

ARCH7104
Architectural Design Project 2
Staff Contact: Dr P-A Johnson
UOC12 HPW8 WKS14 S2
Note/s: Excluded: ARCH7102

Theory, research and studio practice, in the form of graduate research projects in design, applied to general architectural themes of high priority in the contemporary context. After thorough theoretical foundation and research analysis, the theme is adapted to a specific and concrete situation to achieve an architectural synthesis of all relevant influences arising from the physical and human context. Assessment by major design studio project.

ARCH7204
Design Computing Theory
Staff Contact: Mr J Plume
UOC6 HPW3 WKS14 S1
Note/s: Excluded: ARCH7201

This subject is based on extensive reading and group discussion, exploring a range of theoretical approaches to the use of computation techniques in support of the act and processes of architectural design. Topics include: traditional approaches to architectural computing including space planning, facilities management, building performance analysis; information systems and operations research; knowledge-based systems and knowledge representation techniques; shape grammars; expert systems and design information systems. Assessment is based on participation in discussion, the preparation of regular reports on reading and one major essay task.

ARCH7205
Computer Graphics Programming
Staff Contact: Mr S Peter
UOC6 HPW4 WKS14 S1
Note/s: Excluded: ARCH7203

A study of the principles and techniques of interactive computer graphics programming using a high-level procedural language. Topics include: procedural language concepts, computer graphics techniques, event driven programming, and world coordinate systems. Assessment is through a staged series of programming exercises.

ARCH7206
CAD Management and Information Technology
Staff Contact: Mr J Plume, Mr S Peter
UOC6 HPW4 WKS14 S2
Note/s: Excluded: ARCH7202, ARCH7222

This subject is divided into two discrete components: the first relates to the implementation and management of CAD systems; while the second reviews the current state of information technology. The CAD Management component will discuss the implications and impact of change within architectural practice as well as practical issues such as CAD system selection and installation; maintenance and upgrades; software customisation; resource management; office standards; and training. The Information Technology component includes topics such as: database systems; interaction with CAD system graphics databases; transmission of data; networking and communication technologies; shared technical databases; establishment of product information standards; conceptual modelling techniques; and design information systems. Assessment is by projects and student seminars.

ARCH7301
Architecture and the City
Staff Contact: Dr P Kohane
UOC6 HPW2 WKS14 S2

This subject investigates the historical formation of selected international cities, with attention focussed on past and present theories. Australian developments are studied. Classes also explore contemporary debates through the projects or writings of Le Corbusier, Kahn, Rossi et al. Assessment is by two essays.

ARCH7305
Theories in History
Staff Contact: Dr P Kohane
UOC6 HPW2 WKS14 S1
Note/s: Excluded: ARCH7302

This subject investigates the writings of architectural theorists from Vitruvius to the present. Authors to be studied include Alberti, Semper, Loos and Le Corbusier. Interpretations of the texts will be focussed around specific issues critical to modern practice. These will range from broad social concerns, such as the ethical role of the architect, to the qualities of architectural form, such as the relationship of structure to ornament. The aim of the subject is to provide a theoretical foundation capable of responding to the problems we now face. Assessment is by two essays.

ARCH7306
Theory and Architectural Practice
Staff Contact: Dr P-A Johnson
UOC6 HPW2 WKS14 S1
Note/s: Excluded: ARCH7303

Presents theoretical issues which have arisen in 20th-century practice and criticism, raises a number of ethical issues in relation to architectural practice and their impact on theory, examines the validity of certain architectural positions currently adopted within the architectural profession, and finally discusses prospects for a viable architectural future by reviewing ideas informing both visions

for and the projected context of the profession. Assessment is by two essays.

BENV7140
Multimedia on the Web
Staff Contact: Mr S Peter
UOC6 HPW3 WKS14 S2
Note/s: Excluded: ARCH9711

This subject will discuss the potential and limitations of the World Wide Web as a tool for the presentation of design information. The subject aims to help students develop an understanding of what constitutes a good web page as well as learning HTML. Students will learn to use a range of graphics applications (including Adobe Photoshop) as well as a Web Editor. Assessment will be through the development of a series of web pages.

BENV7141
Multimedia in Design Presentation
Staff Contact: Mr J Plume
UOC6 HPW3 WKS14 S2
Note/s: Assessment is by projects and student seminars.
Excluded: ARCH9714

This subject explores the use of an industry-standard multimedia authoring tool to develop design presentations. Students will develop skills in the integration of media objects, including: edited scanned images, rendered images (produced using CAD technology), line drawings, animations (produced using CAD), video (captured off VHS) and sound. Students will be expected to apply these skills in a preliminary learning task and then in the production of one major design presentation.

BENV7142
CAD and Visualisation
Staff Contact: Mr S Peter
UOC6 HPW3 WKS14 S1
Note/s: Excluded: ARCH7220, ARCH7221, students majoring in Architectural Computing.

Introduction to the concepts and techniques relating to the use CAD systems in architectural design. The courses deals with both 2D drawing and 3D modelling, rendering & animation; and will include extensive hands-on use of a CAD system and a modelling & rendering application. Assessment will be through a series of exercises and one major design presentation.

BENV7143
Advanced Visualisation
Staff Contact: Mr James McGrath
UOC6 HPW3 WKS14 S2
Prerequisite/s: BENV7142

This subject will align design techniques with time based 3D digital environments. It will extend digital visualisation skills by introducing sequencing and storyboards into 3D digital environments. Computer lab based exercises will cover 3D composition, time based form generation and narrative in digital 3D. Development of presentation techniques such as video editing, QuickTime VR, and VRML will be included in the final presentation. Assessment will be based on staged learning exercises and one major design presentation project.

BENV7144
Building Virtual Precincts
Staff Contact: Mr S Peter
UOC6 HPW3 WKS14 S2
Prerequisite/s: BENV7142

This subject will allow students who are already competent at building 3D computer models to use those skills to help build a computer model of a "lost" city precinct. Assessment will be based on one major project involving the creation of a computer model of part of the "lost city" precinct.

BENV7190
People and Urban Space
Staff Contact: Prof J Lang
UOC6 HPW2 WKS14 S2
Note/s: Excluded: ARCH7322

Urban design is concerned with improving the quality of the public realms of human settlements. As a basis for designing guidelines for the achievement of a high quality environment it is important to understand how different patterns of urban space are associated with specific behaviours and aesthetic effects within different cultures. The lectures/seminars focus on the empirical research on people (designers and users) and urban space uses and meanings. Assessment is by two essays.

CONS0001
Project Finance
Staff Contact: Dr G Runeson
UOC6 HPW3 WKS14 S1

Selected techniques of investment analysis, mainly using the discounted cash flow method. Quantitative methods applying statistical and regression analysis techniques for the purpose of forecasting time series and investigating other data series. Sources of finance.

CONS0002
Human Resources Management
Staff Contact: Dr M Loosemore
UOC6 HPW3 WKS14 S1
Note/s: Compulsory.

Job design, specialisation and decentralisation, basis of grouping, span of control and liaison devices. Self-directing work groups and flexible manufacture. Reward policies, motivation and commitment. Personal development and group skills. Parties to industrial relations in Australia. History of industrial relations in the building industry. Statutory responsibilities of employers. Restructuring and reform in Australian industrial relations. Development and management of conflict. Human resource management theories.

CONS0003
Project Quality Management
Staff Contact: A/Prof M Marosszeky, Dr J Kim
UOC6 HPW3 WKS14 S1
Note/s: Elective

T.Q.M. theories and application, alternative approaches to quality management, quality management plans, quantifying quality management and control. Analysis of ISO 9000.

CONS0004
Economics in Construction
Staff Contact: Dr G Runeson
UOC6 HPW3 WKS14 S1
Note/s: Elective

Economics of the construction industry; its interrelationship with national and transnational economics. The market for building; price formation.

CONS0005
Computers in Construction Management
Staff Contact: Dr O Greste, A/Prof. R. Miller
UOC6 HPW3 WKS14 S1
Note/s: Compulsory

Overview of computer hardware and software; operating systems; spreadsheet, data base and word processing programs and application areas; design of data base structures for relational data bases; data communication and networks; programs for cost estimating, network based project scheduling, cost monitoring, and project management; CAD systems; computer system specification, selection, installation and operation. The course involves practical use of leading spreadsheet, data base and word processing packages. Management and integration of information (including CAD); specific examples of networks such as LAN, WAN and project web sites.

CONS0006
Property Management
Staff Contact: Dr J Kim
UOC6 HPW3 WKS14 S2
Note/s: Elective

Property development process: evaluation, feasibility study; preparation, life cycle cost in building; disposal, marketing; property

investment analysis Building management: tenancy management; building maintenance; obsolescence; economics of refurbishment; commercial property management; strata title management; taxation in property management. Principles of sustainable development and their application.

CONS0007
Principles and Practice of Management
Staff Contact: Dr J Kim
UOC6 HPW3 WKS14 S1
Note/s: Compulsory

Introduces the general principles of management: basic management functions; planning process, organising; control of time, cost and quality. Organisation structure; concepts of management communication; motivation; delegation; team building. Strategic planning; external environment and ethics.

CONS0008
International Construction Practice
Staff Contact: A/Prof T Uher
UOC6 HPW3 WKS14 S2
Note/s: Elective

A comparison of construction practices in various nations. The impact of local economic, labour and technical parameters on construction management. Staffing for international projects. International best practice.

CONS0009
Construction Planning and Control
Staff Contact: A/Prof T Uher
UOC6 HPW3 WKS14 S2
Note/s: Compulsory

The concept of construction planning and control; planning and control techniques barchart, CPM, PERT, line of balance, multiple activity chart; computer based planning and control; applications of work study risk management. Theory of decision making; untility theory.

CONS0010
Contracts Management and Law
Staff Contact: A/Prof T Uher, Mr P Davenport
UOC6 HPW3 WKS14 S2
Note/s: Compulsory

Principles of administration of construction contracts; formation of construction contracts and subcontracts; contract administration of different phases of construction projects; options for project delivery; subcontracting; analysis of selected contracts; contract disputes, arbitration, mediation, litigation; contract claims; risk allocation in construction contracts; international contracting. Comparison of Australian and international construction contracts.

CONS0011
Cost Planning and Analysis
Staff Contact: Mr P Marsden
UOC6 HPW3 WKS14 S2
Note/s: Elective

Construction estimating, elemental cost planning, design variables, cost control procedures; feasibility studies. Case studies of selected sites.

CONS0012
Quantitative Methods in Management
Staff Contact: Dr G Runeson
UOC6 HPW3 WKS14 S1
Note/s: Elective

Statistical analysis and modelling methods in construction management. Forecasting methods.

CONS0013
Construction Management Applications
Staff Contact: A/Pro. T Uher
UOC 6 HPW 3 WKS 14 S2
Note/s: Elective

The objective of the course is to expose students to the realities of involvement with a large construction project. Detailed analysis of each stage of the project case study: Feasibility, Design and Documentation, Pre-construction, Construction and Commissioning. Case studies of major construction projects.

CONS0014
Project Management
Staff Contact: Dr M Loosemore, A/Prof T Uher
UOC6 HPW3 WKS14 S2
Note/s: Compulsory

Introduction to the concept of project management; Project delivery strategies; Organisation of projects from design to commissioning; Project planning strategies; Quality management; Management of information. Project management theory. Role of project manager in sustainable construction.

REST0002
Information Technology and Data Analysis in Real Estate
Staff Contact: Dr O Greste
UOC6 HPW3 WKS14 S1

This course provides students with a working knowledge of various commonly used information technology and statistical techniques in real estate economics. More specifically, the course focuses on nature and scope of information technology for real estate industry, and on practical aspects of statistical model building. The emphasis is on data communication and network, data measurement and presentation, descriptive statistics, probability theory and probability distributions, samples and populations, hypothesis testing, multiple regression, introduction to time series analysis, forecasting, and index numbers.

REST0004
Real Estate Finance
Staff Contact: P. Williams
UOC6 HPW3 WKS14 S2

This course provides a graduate level introduction to real estate finance and investment. The course focuses on the essential aspects of financial decision-making in real estate investment. Topics include real estate financing, the mechanics of the mortgage market, and application of modern financing theory to real estate investment.

REST0003
Real Estate Market Forecasting
Staff Contact: P. Williams
UOC 6 HPW 3 WKS 14 S2

This course provides students with current issues of economic forecasting in real estate market. The course focuses on analysing demand and supply forces of the real estate market and on underlying fundamentals of economic forecasting.

REST0001
Real Estate Investment Analysis
Staff Contact: Dr J Kim
UOC6 HPW3 WKS14 S1

This course focuses on the economic aspects of real estate investment market. The course incorporates relevant applications of statistical tools and the use of electronic information search. Topics include analysis of urban growth and change, and analysis of market segmentation. The course also emphasises a systematic approach to the real estate investment process, investment environment, financial analysis, and investment criteria and application.

REST0005
Real Estate Valuation
Staff Contact: Peter Williams
UOC3 HPW3 WKS14 S2

This course provides a graduate level introduction to valuation theory and practice. Topics include the concept and statutory definition of value, land ownership and tenure, basic principles and methods of valuation, valuation process, valuation mathematics and tables, rental valuation and determination, cash-flow analysis and advanced quantitative methods, and application of computer programs to the valuation process.

REST0006
Real Estate Development
Staff Contact: Dr. J. Kim
UOC3 HPW3 WKS14 S1

This course provides a graduate level introduction to urban land economics with emphasis on property development. The course focuses on a total approach to the development process; evaluation, preparation, implementation, and disposal. The course also emphasises projects and cases to give students skills in organising and solving feasibility analysis problems.

REST0007
Facility Management
Staff Contact: P. Williams
UOC3 HPW3 WKS14 S1

This course introduces the key issues in facility management. Topics include facility planning, financial forecasting, real estate considerations, property management, maintenance and operation, and general administrative services.

REST0008
Corporate Real Estate
Staff Contact: P. Williams
UOC3 HPW3 WKS14 S2

This course provides an overview of two important issues relevant to the needs of real estate of real estate/ property professionals, corporate managers, and companies with international activities. There are; (i) the role of real estate in corporate settings, and (ii) the relationship between corporate and real estate objectives. Globalisation of real estate markets and the increasing importance of international business is emphasised. General characteristics of various countries are examined, and students are required to develop in-depth knowledge of the real estate market of a country of their choice.

BENV7001
Postgraduate Research Design and Methodology
Staff Contact: Dr G Runeson
UOC6 HPW2 WKS14 S1

An introduction to the nature and purpose of research and its role in problem solving and theory in the built environment disciplines. Discussions of various approaches to research. Reliability, validity and other principles of research. A review of the principle research methods and examples of their use. Topic definition, research design, research planning and time management, literature review, data collection and analysis, thesis structure, writing, presentation of research seminars and research papers.

BENV7002
Quantitative Methods in Built Environment Research
Staff Contact: Faculty Student Centre Office
UOC6 HPW2 WKS14 S2

Deals extensively with the methodology of survey research and applications of basic and multi-variate statistical techniques in the analysis of data. Instruction in the uses of the Statistical Package for Social Sciences (SPSS), which aids students in the analysis of data , is also included.

UDES0001
Urban Design Studio 1: Urban Space
Staff Contact: Prof J Lang
UOC12 HPW6 WKS14 S1

In the first session, the lecture quota is higher in relation to studio projects. The object of this studio is to kick start the program by establishing a knowledge base upon which skills can be developed. Therefore studio projects will be limited to a series of smaller projects which investigate the concept of typologies - of streets, arcades, squares, religious precincts, parks and other elements in the urban landscape. On this basis a vocabulary will be generated, a language of urban space, upon which the larger projects in session 2 and the summer term can be built.

UDES0002
Urban Design Studio 2: The Residential Environment
Staff Contact: Prof. A. Cuthbert
UOC12 HPW9 WKS14 S2

Here we adopt the philosophy that to isolate housing from other aspects of life is to undermine the actual organisation of the life process and to degrade the quality of life in cities. While the project focuses on housing, it begins with a study of the historically changing relationship between the trilogy of work, home life and recreation. This will form the brief for a major housing project in one of Sydney s major development areas. It will involve the integration of a variety of housing types at medium to high density, along with their integration into the urban fabric by means of other urban functions - commercial and community facilities, open space, transport, etc. The emphasis will be on creating a socially responsible, environmentally sustainable and commercially feasible residential environment with reference to current urban design priorities such as urban consolidation and ecologically sound principles.

UDES0003
Urban Design Studio 3: The Central Business District
Staff Contact: Prof AR Cuthbert
UOC18 HPW12 WKS14
Note/s: Summer Session

Studio 3 will be devoted to the study of the central urban area. It will contrast a project in a major South East Asia city with a similar project in a major city in Australia. This may include developments for financial and commercial centres, tourism and recreation development, inner area housing and their implications for trasport, services, communications, and environmental management. Because of the complexity of the inner city, projects will invariably contain aspects of all of these functions. The South East Asian field trip will be incorporated into this studio.

UDES0004
History of Urban Development
Staff Contact: Prof AR Cuthbert
UOC3 HPW2 WKS14 S1

The History of Urban Development is designed to give the student an overview of the entire process of urbanisation from prehistory until today, in both Western and Asian contexts. It adopts the position that while a history of urban development and design is ideological - ie., there is no coherent development of urban development products in relation to each other - there is a coherent history of development in terms of economy and society. Urban design originates primarily in these conditions, although there is an arbitrary aesthetic continuity to some of the chosen details. The course therefore theorises the economic forces and social conditions driving development as a method of explaining how urban form comes about. It seeks to explain some of the fundamental differences between the forces - economic, physical, socio-cultural and environmental - that influence urban societies of Asian and European origin.

UDES0005
Critical Urban Theory
Staff Contact: Prof A Cuthbert
UOC3 HPW2 WKS14 S2

Critical urban theory has undergone a revolution in the last twenty years, where one dominant characteristic has been the abandonment of certainty implied in structuralist modes of thought congruent with the analysis of capital. Fundamental to this change has been the acceptance of space and its creation. As Isard has noted, social processes do not occur "in a wonderland of no dimension". Post structuralist theory, in deconstructing modernist concepts of place now look to the fragmented disprograms of gender, culture, ethnicity, community, language, and other phenomena. These interpretations take place within an increasing consciousness of the environment and environmental management, which must be considered in order to derive satisfactory explanations of the organisation of space in contemporary urban society.

UDES0006
Case Studies in Urban Development and Design
Staff Contact: Dr B Judd
UOC6 HPW4 WKS14
Note/s: Summer Session

Generic examples of urban development and design assembled from both Australia and the S.E. Asian region are presented and analysed in order to assess the validity of the objectives, the effectiveness of the process, and the costs and benefits of the results in improving the city and the welfare of its citizens. The object is to demonstrate through practical examples how major developments (eg Singapore s Bugis street, Hong Kong s international airport, Sydney s Circular Quay, the Ultimo-Pyrmont Peninsula and the Homebush Bay Olympic Site) are conceived, financed, designed and built. Those projects now operational will also be assessed as to their relative success or failure as urban projects on social, economic and environmental grounds.

UDES0007
Urban and Environmental Law
Staff Contact: Mr P Williams
UOC3 HPW2 WKS14 S1

The course comprises three parts: Planning Law, Planning Administration and Land Valuation. It deals with the theory and practice of techniques and administrative procedures needed to transform policies and details of urban development and design proposals into documents which have legal effect. While the concentration is upon the implementation of projects, these are set within a concern for the conceptual and theoretical nature of the law, and its relation to justice, equity and environmental concerns within the social formation.

UDES0008
Real Estate Development
Staff Contact: Mr P Williams
UOC3 HPW2 WKS14 S1

A major keystone of Western Civilisation is the private ownership of property. Within this context, the commodific-ation of social space in the form of building is critical to the economic development of all nations. Central to this process is what is termed the real estate industry, professional intervention focussing primarily on the exchange process in contradiction to urban planning whose prime purpose is organisation and control of land development. Within this context the capital investment strategies which shape urban development are of primary importance. This course will explore the operation of the real estate industry in terms of its political, economic and organisational functions and environmental effects within society.

UDES0009
Urban Landscape
Staff Contact: Prof J Weirick
UOC3 HPW2 WKS14 S2

This course attempts to integrate the concept of landscape within the built environment. While it distinguishes between nature and artifice (something created from human labour) it recognises that the earth is now both commodified and urbanised, and that concepts of landscape must accept this fact. Therefore a fundamental knowledge of the relationship between development impacts and environmental sustainability is critical to an understanding of contemporary urban sation. The course therefore explores the urban landscape in terms of historical, modernist and post modernist ideas, showing how theoretical constructs within the discipline have changed with the changing landscapes of production and consumption which now characterise the modern city

SUSD0001
Sustainable Development and the Urban Environment
Staff Contact: Prof J Weirick
UOC6 HPW3 WKS14 S1

A review of innovative approaches to the planning, design and management of the 'sustainable city', with an emphasis on techniques which seek to maintain and/or improve air quality, water quality and biodiversity. Topics include principles of urban ecology and sustainable development, the ecological 'footprint;' of the metropolis, water cycle management, urban design and transportation issues, urban forestry, parks systems and greenways, use of tools for assessment/evaluation. The course will be based on lectures, seminars and case studies.

SUSD0002
Resources, Materials and Sustainability
Staff Contact: Dr W Lawson
UOC6 HPW3 WKS14 S1

The life cycle of building materials from the availability and acquisition of the raw materials, through processing and manufacture to on-site construction and use, maintenance and refurbishment, and eventual demolition and reuse/recycling or disposal. Consideration of environmental impacts at each stage of the life cycle, such as embodied energy, wastes generated and their disposal, and ways in which design may minimise or eliminate such impacts. Economics and management of sustainable buildings.

SUSD0003
Energy and the Built Environment
Staff Contact: A/Prof D Prasad
UOC6 HPW3 WKS14 S2

Energy - definitions and terminology. Energy flows, balance, options, demand and supply solutions in the context of the Built Environment. Urban energy infrastructure impact, energy in transportation, global warming and environmental impact assessment. Use of tools for assessment/evaluation (performance simulation and benchmarking). Future technologies, architectural impact and regional development implications.

SUSD0004
Human Factors, Sustainability and Habitability
Staff Contact: Dr R Samuels
UOC6 HPW3 WKS14 S2

The impact of buildings and urban environments on quality of life or habitability, and of values and preferences on sustainability or quality of the environment, concentrating on five fundamental human factors: environmental responsibility, health and wellbeing, comfort and amenity, security, and equity. Responsibility focuses on practitioner and community environmental ethics. Health evaluations include sick building syndromes, light quality and performance, indoor air quality, and urban thermal- and air-pollution. Comfort and amenity concentrate on the influence of user knowledge and preference on energy use and environmental impact. Security evaluates the role of environmental design and territoriality in the experience of security in buildings and urban domains. Equity aspects include affordability, accessibility, and community participation in environmental design and management.

SUSD0005
Graduate Project
Staff Contact: A/Prof D Prasad
UOC12 HPW6 WKS14 S1, S2

A supervised research or design project from a selected field of interest will be identified in consultation with the Program Head. A research topic may exted to areas of interest in closely related disciplines if suitable arrangements can be made for supervision. In case of a research project, its design and methodology should be well resolved prior to proceeding with the other aspects of the research. In case of a design project, a suitable design brief should have been agreed to with the supervisor prior to entering the design phase. The outcomes in either case should demonstrate high level skills and communication. The research report should not exceed 20,000 words.

IDES1021
Basic Design
Staff Contact: Ruth McDermott
UOC6 HPW3 WKS14 S1

The basic elements of two and three dimensional design, and the development of the analytical and communication skills necessary for their understanding. Development of the creative processes concerned with the exploration and manipulation of the elements. Studies are undertaken within the context of art and design.

IDES1121
History of Industrial Design
Staff Contact: Miles Park
UOC3 HPW2 WKS14 S1

This course is a chronological and focused study of the emergence and development of industrial design from 1800 to the present day. It includes products as an aspect of our culture/society/commerce/ industry from 1750 to the present day and examines consumer products within the context of the changes taking place in industry and society.

IDES3271
Form Theory
Staff Contact: Ms Rina Bernabei
UOC3 HPW2 WKS14 S2
Prerequisite/s: IDES1021

Study of the nature of form and past and current theories. Understanding of the values of the visual language and the signals/ tools used to inform the visual language. Exploration of form typographies both theoretical and actual.

IDES4371
Design Management for Industrial Design
Staff Contact: Lance Green
UOC3 HPW2 WKS14 S2
Prerequisite/s: IDES2091

The problem of integrating innovative product design and development within the overall managerial, production and financial structure of industry. Australian and overseas case studies are given. Particular emphasis is placed on the development of appropriate design management structures and methods for the Australian situation.

IDES5051
Plastics, Materials and Processes
Staff Contact: Lance Green
UOC3 HPW2 WKS14 S1

Describes plastics materials and their specification in design. Plastics manufacturing processes such as injection moulding, blow moulding, extrusion and rotational moulding are covered. Also describes costing techniques for plastic assemblies and components.

IDES5091
Perspective and Rendering
Staff Contact: Lance Green
UOC6 HPW3 WKS14 S1

The major two and three dimensional media and computer techniques are analysed and demonstrated within the context of industrial design problem solving: orthographic techniques, the Australian Engineering Drawing Standard, graphic art processes, photography, current rendering and illustration techniques, modelling in automotive clay, plastic sheet and rigid foams, timbers and metals. The current state of computer aided design as well as its potential in design and the restructuring of engineering decisionmaking and drafting. Particular emphasis given to each method s role in problem analysis and communication at the concept, detail and final design stages. The social and physiological aspects of communicating design in industry are also examined.

IDES5131
Industrial Design
Staff Contact: Faculty Student Centre Office
UOC6 HPW3 WKS14 S2
Corequisite/s: IDES5071 or equivalent.

Industrial design project work intended to integrate the student s previous experience and the course units in preparatory work for the Graduate Project. A part of the course may be undertaken on a group basis.

IDES5141
Industrial Design A
Staff Contact: Chris Myers
UOC6 HPW4 WKS14 S1

Project work designed to introduce industrial design research and studio methodologies. Studies undertaken within a broad range of product areas and related to the concurrent course work.

IDES5152
Manufacturing Technology
Staff Contact: Lance Green
UOC3 HPW2 WKS14 S2

Industrial processes and materials, production costing and changing production economics. Objectives and structures of the engineering professions and their integration with industrial design in the product development process. Students assist in the development of a data bank.

IDES6081
Graduate Project (MID)
Staff Contact: Lance Green
UOC12 HPW8 WKS14 S1 or S2
Corequisite/s: IDES5131

A project within the practice areas of industrial design, selected by the student subject to the approval of the School; conducted within an approved methodology. Documentation of the methodology, research strategy and techniques, monitoring of the design process, resultant design, and evaluation of the methodology, research and final design. Students should give consideration to the School s specialist areas.

IDES6161
Industrial Design B
Staff Contact: Mr Adam Laws
UOC6 HPW3 WKS14 S2
Prerequisite/s: IDES5141

Advanced project work combining the research and practice methodologies of industrial design in product research, development and design, preparatory to undertaking the Graduate Project.

IDES6181
Graduate Project (MSc(IndDes))
Staff Contact: Lance Green
UOC12 HPW8 WKS14 S1 or S2
Prerequisite/s: IDES 5141, IDES6161, IDES5091, IDES1021

A project within the practice areas of industrial design, proposed by the student in consultation with the School and conducted within an approved methodology; documentation of the methodology, research strategy and techniques, monitoring of the design process, resultant design, and evaluation of the methodology, research and design.

LAND9001
Landscape Project
Staff Contact: Faculty Student Centre Office
UOC30

A project relating to the practice of landscape architecture selected by the student and approved by the academic staff of the Department. The project should represent a synthesis of the knowledge and skills that have been acquired during the course of study and will be supervised by a member of the academic staff. Appropriate methodologies and techniques will be used for assessment, analysis, and evaluation of project parameters.

BENV7605
Research Seminar 1
Staff Contact: Dr Bruce Judd
UOC3
Note/s: Students enrolled in the PhD (Course 1150), MTP (Course 2230), MSc(Town Planning) (Course 2235) and GradDip (Course 5205) are expected to enrol in this subject each year, starting with Research Seminar 1 in their first year, Research Seminar 2 in their second year

A program of supervised ,independent study in an area of planning in which the student is undertaking, or expects to undertake, research. Students present a seminar on their current or proposed research, take part in discussions at other student seminars, and may be asked to attend comparable postgraduate seminars within the University and at other institutions.

BENV7606
Research Seminar 2
Staff Contact: Dr Bruce Judd
UOC3
Note/s: Students enrolled in the PhD (Course 1150), MTP (Course 2230), MSc(Town Planning) (Course 2235) and GradDip (Course 5205) are expected to enrol in this subject each year, starting with Research Seminar 1 in their first year, Research Seminar 2 in their second year

A program of supervised ,independent study in an area of planning in which the student is undertaking, or expects to undertake, research. Students present a seminar on their current or proposed research, take part in discussions at other student seminars, and may be asked to attend comparable postgraduate seminars within the University and at other institutions.

BENV7704
Principles of Political Economy
Staff Contact: Office of Associate Dean Postgraduate Studies
UOC3 HPW3 WKS14 S2

This course is an introduction to politcal economy for non-economists. It establishes a foundation of concepts and viewpoints which are utilised in a number of courses Topics include: the forms of capital; modes cf production; global economic change and the new international division of labour; relationship between economy and state; politics and ideology; class structure; elementary price theory; factors influencing economic growth; the distribution of welfare.

BENV7707
Research Design
Staff Contact: A/Prof. R. Freestone
UOC3 HPW3 WKS14 S1
Prerequisite/s: All courses of previous years
Corequisite/s: PLAN4110, PLAN4150, PLAN4170, ARCH0002
Note/s: New name and descriptionPLAN4031/BENV7707

This subject provides an introduction to issues of research design in urban and planning studies. It considers both fundamental epistemological questions and more pragmatic topics such as writing and presentation as well as providing insights into the world of advanced research. The primary focus is on the written thesis required in the final year of the BTP Program. The subject canvasses the relevant conceptual, methodological, and technical bases for the construction of the thesis. Lecturers, tutorials and assessments guide students toward a developed thesis proposal and plan of study.

BENV7708
The Language of Planning
Staff Contact: Mr S Harris
UOC4 HPW4 S

This subject aims to introduce students, commencing their planning studies, with the forms and languages used by planning: the jargon of the profession and its explicit and implicit meanings and implications. Specifically, the aims are to ensure students understand the generalities and some detail of the relationship between politics, government and society; the forms and structures of Australian politics and government; the relationships between planning, politics and government; planning systems in theory and practice; the operation of development control systems; land ownership and titling; land uses and activities, and their definitions; density definition and its planning implications; planning associations and organisations and their significance; the language of urban design; methods of describing society and its structures.

BENV7709
Planning Processes
Staff Contact: Dr S Thompson
UOC6 HPW6 WKS14 S2

The subject covers planning methodologies, with a focus on the strategic choice approach. A planning exercise is used as a case study to demonstrate the use of the method in practice. Applications are critically assessed. The emphasis is on cooperative work within the planning process framework.

BENV7710
Planning Law and Administration
Staff Contact: Mr P Williams
UOC6 HPW6 WKS14 S1

The subject comprises three parts, Planning Law, Planning Administratiion and Land Valuation.

Planning Law: conceptual / theoretical nature of the law; relationship between the environmental context, the Crown, the parliament and the judiciary; ways in which the laws are made and promulgated, relationship between laws and regulations, the legal concept of property in land, definition of various legal concepts of interests in land, Australian Constitution and legal relationship between Commonwealth and States, particularly in regard to matters affecting land, the place of administrative law.

Planning Administration: administrative context within which planning operates as a function of government, especially the role and function of statutory bodies in the planning and environment area, the administration of the planning function at the national, state and local levels, the art of management, administrative theory, personnel administration, the role and responsibility of the professional planner in the public and private sector.

Land Valuation: principles and practices of land valuation in Australia. Definitions of value, methods of valuation, the role of the valuer, compensation and betterment.

BENV7711
City Planning Today
Staff Contact: Dr S Thompson
UOC3 HPW2 WKS14 S1
Note/s: New name and description

The way our cities look and operate, their cultural and community life are all considered by town planners. The course deals with the fundamentals of urban planning, its language; its rules and regulations; its controversial nature and the way it operates in practice. It looks at how and why urban planning came into being; how the legal and administrative system works; how the political system operates; and how planners deal with issues-from designing the city to balancing the many conflicts which arise over development projects. Lectures are given by staff of the Faculty of the Built Environment as well as planning practicioners. This course will give you the skills, the understanding and the enthusiasm to play an active role in shaping your city..

BENV7713
Development Control
Staff Contact: Mr P Williams
UOC6 HPW6 WKS14 S1

This subject introduces students to the implementation of planning objectives in the NSW Planning System via this State s Statutory Development Control system. Various Development Control Systems are examined, based on common law, statute and policy. Strategic planning at state and local government levels are examined in detail, as is the statutory planning (i.e., development application) process. Emphasis in this subject is placed on familiarising students with the skills required by a professional planner in undertaking various planning tasks.

BENV7714
The Economy of Cities
Staff Contact: A/Prof P Murphy
UOC3 HPW3 WKS14 S1

This course introduces how economic processes influence (1) the structure and performance of the economies of regions and urban centres; and (2) the structure and patterns of changes in land uses within urban centres, with specific reference to large urbanised regions. Topics covered include: factors driving regional and urban economic performance; urban hierarchies and inter-urban competition; economics of urban size; land rent, land uses, land prices; regional population densities; employment and service location. The basic theory will be taught using Australian case studies.

BENV7715
Cultural Studies
Staff Contact: Dr S Thompson
UOC3 HPW3 S2
Prerequisite/s: PLAN3011

This course explores contemporary issues facing the professional planner working in an increasingly diverse and complex society. Various cultural, social and environmental issues that challenge ethnic communities, children, the aged, women, Aborigines and homeless people are examined. Students are encouraged to question their own prejudices and values as they develop better understandings of the needs of these groups. The ability of the planning system to respond is explored, as are creative and inter-disciplinary approaches that can be facilitated by urban planners.

BENV7716
Politics, Power and Policy
Staff Contact: Mr P Williams
UOC3 HPW3 WKS14 S2
Note/s: Elective in the postgraduate and undergraduate programs

The aim of the subject is to create an understanding of the complex forces and processes (political, ideological, economic, etc.) which operate in the management of urban areas. Issues covered will include relationships between urban government, politics, planning, the community and various interest groups. Urban theory. The relationship between public policy and planning. The social context of planning. The different social needs within Australian society. The formulation and implementation of policy.

BENV7717
Metropolitan Policy
Staff Contact: A/Prof P Murphy
UOC3 HPW3 WKS14 S1

This subject examines preoccupations in the management of large urbanised regions and the range of public policy measures available to influence structure and process. It is assumed that metropolitan policy provides a framework within which local government decisions on land use, and the work of agencies which supply urban infrastructure, is framed. Topics include: population densities; commercial centres; industrial land uses; transportation; environmental quality; tools for management of metropolitan growth and change; political and administrative systems and issues. The focus will be on Australian cities - especially Sydney - but some cross-national material will be used.

BENV7719
Planning in Practice
Staff Contact: Mr P Williams
UOC6 HPW3 WKS14 S2
Prerequisite/s: PLAN3041
Note/s: Not offered in 2000

This subject consists of two components: environment law and dispute resolution, and professional practice. Environmental law and dispute resolution examines recent statutory and administrative changes to the planning system, environmental and natural resources law, the operation of the Land and Environment Court, the significance of the court and the roles of planners at court, and other means for the resolution of environmental disputation. Professional practice focuses on professional ethics and standards, planning as a profession, negligence, preparing and responding to a consultant's brief and preparing for court work. Such hand-on skills are discussed in the broader context of philosophical positions, 'professionalism' and the social, political and industrial environment.

BENV7720
Land and Environment Law
Staff Contact: Mr P Williams
UOC3 HPW3 WKS14 S1

Planning, Planning legislation, Environmental planning instruments, Environment - common law - statute - role of public and pressure groups, environmental planning control, environment assessment, heritage legislation. Land law - public and private, Estates and tenures, Co-ownership, Leases, Easements, Restrictive covenants, Licences, Residential tenancies tribunal. Old system title, Possessory title, Torrens title, Land Titles Office practice, Sale of land, Other methods of transferring land, Crown land tenures, Strata title, Community title. Alternative models including other countries, Critical perspective, Heritage Law.

BENV7721
Planning and Land Policy
Staff Contact: Mr P Williams
UOC3 HPW3 WKS14 S2
Prerequisite/s: Ni

The objectives of planning; The history of land use planning in Australia; The achievement of planning objectives; Planning authorities; Planning codes and development plans; Statutory powers of planning authorities; Planning procedures; Control of the development process; Retail development; Commercial development; Industrial and warehouse development; Special development; Environmental impact assessment. Government intervention in land use matters; Public finance and planning; Political considerations and planning and development; Government control and speculation - laissez-faire or public control; Planning and housing policy; Urban decay and renewal; The problems of the urban fringe; Conservation, preservation, redevelopment.

Core Courses Offered by Other Faculties

ECON5103
Business Economics
Staff Contact: School Office
UOC6 HPW3 WKS14 S1 or S2

An introduction to economic analysis and policy. Using a case study approach, students will examine government and business reports, magazine and newspaper articles, and monographs/journals dealing with contemporary economic issues. Reports or articles will be analysed using simple micro and macroeconomic tools and reasoning. The aim of the course is to improve the economic literacy of students.

FINS5513
Security Valuation and Portfolio Selection
Staff Contact: School Office
UOC6 HPW3 WKS14 S1 or S2
Prerequisite/s: ECON5103 and REST0002

The aim of this subject is twofold: (i) to introduce students to theoretical building blocks in the theory of finance; and (ii) to illustrate these by means of a combination of tutorial problems and case studies. Topics include: investment decisions under certainty; investment decisions under uncertainty (the portfolio selection problem); capital asset pricing model and arbitrage pricing theory: rudiments of theory and evidence; fundamentals of bond valuation; introduction to duration and the term structure of interest rates; valuation of equity shares; market efficiency: fads, bubbles, martingales.

Conditions for the Award of Degrees

First Degrees

Rules, regulations and conditions for the award of first degrees are set out in the appropriate **Faculty Handbooks**.

For the list of undergraduate programs and degrees offered see Table of Programs by Faculty (Undergraduate Study) in the *Calendar*.

Higher Degrees

For the list of postgraduate degrees by research and course work, arranged in faculty order, see *UNSW Programs (by faculty)* in the *Calendar*. The conditions for the award of postgraduate degrees, diplomas and certificates appear in the relevant Faculty Handbook.

Doctor of Philosophy (PhD)

1. The degree of Doctor of Philosophy may be awarded by the Council on the recommendation of the Higher Degree Committee of the appropriate faculty or board (hereinafter referred to as the Committee) to a candidate who has made an original and significant contribution to knowledge.

Qualifications

2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor with Honours from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee.

(2) In exceptional cases an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment as a candidate for the degree.

Enrolment

3. (1) An application to enrol as a candidate for the degree shall be lodged with the Registrar at least one month prior to the date at which enrolment is to begin.

(2) In every case before making the offer of a place the Committee shall be satisfied that initial agreement has been reached between the School* and the applicant on the topic area, supervision arrangements, provision of adequate facilities and any coursework to be prescribed and that these are in accordance with the provisions of the guidelines for promoting postgraduate study within the University.

(3) The candidate shall be enrolled either as a full-time or a part-time student.

(4) A full-time candidate will present the thesis for examination no earlier than three years and no later than five years from the date of enrolment and a part-time candidate will present the thesis for examination no earlier than four years and no later than six years from the date of enrolment, except with the approval of the Committee.

(5) The candidate may undertake the research as an internal student i.e. at a campus, teaching hospital, or other research facility with which the University is associated, or as an external student not in attendance at the University except for periods as may be prescribed by the Committee.

(6) An internal candidate will normally carry out the research on a campus or at a teaching or research facility of the University except that the Committee may permit a candidate to spend a period in the field, within another institution or elsewhere away from the University provided that the work can be supervised in a manner satisfactory to the Committee. In such instances the Committee shall be satisfied that the location and period of time away from the University are necessary to the research program.

(7) The research shall be supervised by a supervisor and where possible a co-supervisor who are members of the academic staff of the School or under other appropriate supervision arrangements approved by the Committee. Normally an external candidate within another organisation or institution will have a co-supervisor at that institution.

Progression

4. The progress of the candidate shall be considered by the Committee following report from the School in accordance with the procedures established within the School and previously noted by the Committee.

(i) The research proposal will be reviewed as soon as feasible after enrolment. For a full-time student this will normally be during the first year of study, or immediately following a period of prescribed coursework. This review will focus on the viability of the research proposal.

(ii) Progress in the course will be reviewed within twelve months of the first review. As a result of either review the Committee may cancel enrolment or take such other action as it considers appropriate. Thereafter, the progress of the candidate will be reviewed annually.

Thesis

5. (1) On completing the program of study a candidate shall submit a thesis embodying the results of the investigation.

(2) The candidate shall give in writing to the Registrar two months notice of intention to submit the thesis.

(3) The thesis shall comply with the following requirements:

(a) it must be an original and significant contribution to knowledge of the course;

(b) the greater proportion of the work described must have been completed subsequent to enrolment for the degree;

(c) it must be written in English except that a candidate in the Faculty of Arts and Social Sciences may be required by the Committee to write a thesis in an appropriate foreign language;

(d) it must reach a satisfactory standard of expression and presentation;

(e) it must consist of an account of the candidate's own research but in special cases work done conjointly with other persons may be accepted provided the Committee is satisfied about the extent of the candidate's part in the joint research.

(4) The candidate may not submit as the main content of the thesis any work or material which has previously been submitted for a university degree or other similar award but may submit any work previously published whether or not such work is related to the thesis.

(5) Four copies of the thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of theses for higher degrees.

(6) It shall be understood that the University retains the four copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the thesis in whole or in part, in photostat or microfilm or other copying medium.

Examination

6. (1) There shall be not fewer than three examiners of the thesis, appointed by the Committee, at least two of whom shall be external to the University.

(2) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the thesis and shall recommend to the Committee that one of the following:

(a) The thesis merits the award of the degree.

(b) The thesis merits the award of the degree subject to minor corrections as listed being made to the satisfaction of the head of school.

(c) The thesis requires further work on matters detailed in my report. Should performance in this further work be to the satisfaction of the higher degree Committee, the thesis would merit the award of the degree.

(d) The thesis does not merit the award of the degree in its present form and further work as described in my report is required. The revised thesis should be subject to re-examination.

(e) The thesis does not merit the award of the degree and does not demonstrate that resubmission would be likely to achieve that merit.

(3) If the performance in the further work recommended under (2)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to submit the thesis for re-examination as determined by the Committee within a period determined by it but not exceeding eighteen months.

(4) After consideration of the examiners' reports and the results of any further examination of the thesis, the Committee may require the candidate to submit to written or oral examination before recommending whether or not the candidate be awarded the degree. If it is decided that the candidate be not awarded the degree, the Committee shall determine whether or not the candidate be permitted to resubmit the thesis after a further period of study and/or research.

Fees

7. A candidate shall pay such fees as may be determined from time to time by the Council.

"'School' is used here and elsewhere in these conditions to mean any teaching unit authorised to enrol research students and includes a department where that department is not within a school, a centre given approval by the Academic Board to enrol students, and an interdisciplinary unit within a faculty and under the control of the Dean of the Faculty. Enrolment is permitted in more than one such teaching unit.

Master of Architecture by Research (MArch), Master of Building (MBuilding), Master of the Built Environment (MBEnv), Master of Landscape Architecture (MLArch), Master of Real Property (MRProp) Master of Town Planning (MTP)

1. The degree of Master of Architecture or Master of Building or Master of the Built Environment or Master of Landscape Architecture or Master of Real Property or Master of Town Planning by research may be awarded by the Council on the recommendation of the Higher Degree Committee of the Faculty of the Built Environment (hereinafter referred to as the Committee) to a candidate who has demonstrated ability to undertake research by the submission of a thesis embodying the results of an original investigation or design.

Qualifications

2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor of four full-time years duration (or the part-time equivalent) from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee.

(2) In exceptional cases an applicant who submits evidence of such academic and/or professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3) When the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant, before being permitted to enrol, to undergo such examination or carry out such work as the Committee may prescribe.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least one calendar month before the commencement of the session in which enrolment is to begin.

(2) In every case, before permitting a candidate to enrol, the program director in which the candidate intends to enrol shall be satisfied that adequate supervision and facilities are available.

(3) An approved candidate shall be enrolled in one of the following categories:

(a) full-time attendance at the University;

(b) part-time attendance at the University;

(c) external – not in regular attendance at the University and using research facilities external to the University.

(4) A candidate shall be required to undertake an original investigation or design on an approved topic. The candidate may also be required to undergo such examination and perform such other work as may be prescribed by the Committee.

(5) The work shall be carried out under the direction of a supervisor appointed from the full-time members of the University staff.

(6) The progress of a candidate shall be reviewed annually by the Committee following a report by the candidate, the supervisor and the head of the school in which the candidate is enrolled and as a result of such review the Committee may cancel enrolment or take such other action as it considers appropriate.

(7) No candidate shall be granted the degree until the lapse of three academic sessions in the case of a full-time candidate or four academic sessions in the case of a part-time or external candidate from the date of enrolment. In the case of a candidate who has been awarded the degree of Bachelor with Honours or who has had previous research experience the Committee may approve remission of up to one session for a full-time candidate and two sessions for a part-time or external candidate.

(8) A full-time candidate for the degree shall present for examination not later than six academic sessions from the date of enrolment. A part-time or external candidate for the degree shall present for examination not later than ten academic sessions from the date of enrolment. In special cases an extension of these times may be granted by the Committee.

Thesis

4. (1) On completing the program of study a candidate shall submit a thesis embodying the results of the original investigation or design.

(2) The candidate shall give in writing two months notice of intention to submit the thesis.

(3) The thesis shall present an account of the candidate's own research. In special cases work done conjointly with other persons may be accepted, provided the committee is satisfied about the extent of the candidate's part in the joint research.

(4) The candidate may also submit any work previously published whether or not such work is related to the thesis.

(5) Three copies of the thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of higher degree thesis.

(6) It shall be understood that the University retains the three copies of the thesis submitted for examination is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the thesis in whole or in part, in photostat or microfilm or other copying medium.

Examination

5. (1) There shall be not fewer than two examiners of the thesis, appointed by the Committee, at least one of whom shall be external to the University unless the Committee is satisfied that this in not practicable.

(2) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the merits of the thesis and shall recommend to the Committee that:

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

(b) the candidate be awarded the degree without further examination subject to minor corrections as listed being made to the satisfaction of the head of the school; or

(c) the candidate be awarded the degree subject to a further examination on questions posed in the report, performance in this further examination being to the satisfaction of the Committee; or

(d) the candidate be not awarded the degree but be permitted to resubmit the thesis in a revised form after a further period of study and/or research; or

(e) the candidate be not awarded the degree and be not permitted to resubmit the thesis.

(3) If the performance at the further examination recommended under (2)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to represent the same thesis and submit to a further oral, practical or written examination within a period specified by it but not exceeding eighteen months.

(4) The Committee shall, after consideration of the examiners' reports and the reports of any oral or written or practical examination, recommend whether or not the candidate may be awarded the degree. If it is decided that the candidate be not awarded the degree the Committee shall determine whether or not the candidate may resubmit the thesis after a further period of study and/or research.

Fees

6. A candidate shall pay such fees as may be determined from time to time by the Council.

Master of Architecture (MArch) by Coursework

1. The degree of Master of Architecture by course work may be awarded by the Council to a candidate who has satisfactorily completed a program of advance study.

Qualifications

2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of the Built Environment (hereinafter referred to as the Committee).

(2) In exceptional cases an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.

(2) A candidate for the degree shall be required to undertake such formal courses and pass such assessment as prescribed.

(3) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the committee may cancel enrolment or take such other action as it considers appropriate.

(4) No candidate shall be awarded the degree until the lapse of two academic sessions from the date of enrolment in the case of a full-time candidate or four sessions in the case of a part-time candidate. The maximum period of candidature shall be four academic sessions from the date of enrolment for a full-time candidate and six academic sessions for a part-time candidate. In special cases a variation to these times may be granted by the Committee.

Fees

4. A candidate shall pay such fees as may be determined from time to time by the Council.

Master of Construction Management (MConstMgt)

1. The degree of Master of Construction Management by formal course work may be awarded by the Council to a candidate who has satisfactorily completed a program of advanced study.

Qualifications

2. (1) A candidate for the degrees shall have been awarded an appropriate degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of the Built Environment (hereinafter referred to as the Committee).

(2) In exceptional cases of an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as it may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.

(2) An approved candidate shall be enrolled in full-time or part-time attendance at the University.

(3) A candidate for the degree shall be required to undertake formal courses and pass prescribed assessment.

(4) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the committee may cancel enrolment or take such other action as it considers appropriate.

(5) No candidate shall be awarded the degree at Pass level until the lapse of two academic sessions from the date of enrolment in the case of a full-time candidate or four sessions in the case of a part-time candidate. The maximum period of candidature shall be four academic sessions from the date of enrolment for a full-time candidate and six academic sessions for a part-time candidate. In special cases a ariation of these times may be granted by the Committee.

Fees

4. A candidate shall pay such fees as may be determined from time to time by the Council.

Master of the Built Environment (Building Conservation) (MBEnv), Master of Industrial Design (MID), and Master of Science (Industrial Design) (MSc(IndDes))

1. The degree of Master of the Built Environment (Building Conservation) or Master of Industrial Design or Master of Science (Industrial Design) may be awarded by the Council to a candidate who has completed a program of advanced study.

Qualifications

2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor of four full time years duration (or the part time equivalent) from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of the Built Environment (hereinafter referred to as the Committee).

(2) In exceptional cases an applicant who submits evidence of such academic and/or professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.

(2) A candidate for the degree shall be required to undertake such formal courses and pass such assessment as prescribed.

(3) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the Committee may cancel enrolment or take such other action as it considers appropriate.

(4) No candidate shall be awarded the degree until the lapse of two academic sessions from the date of enrolment in the case of a full-time candidate or four sessions in the case of a part-time candidate. The maximum period of candidature shall be four academic sessions from the date of enrolment for a full-time candidate and eight sessions for a part-time candidate. In special cases an extension of these times may be granted by the Committee.

Project Report

4. (1) A candidate shall also be required to undertake a project on an approved topic.

(2) The work shall be carried out under the direction of a supervisor appointed from the full-time academic members of the University staff.

(3) The candidate shall give in writing to the Registrar two months notice of intention to submit a report on the project.

(4) Three copies of the project report shall be presented in a form which complies with the requirements of the University for the preparation and submission of project reports for higher degrees.

(5) It shall be understood that the University retains the three copies of the project report submitted for examination and is free to allow the project report to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the project report in whole or in part, in microfilm or other copying medium.

Examination

5. (1) There shall be not fewer than two examiners of the project report, appointed by the Committee.

(2) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the project report and shall recommend to the Committee that:

(a) the project report be noted as satisfactory; or

(b) the project report be noted as satisfactory subject to minor corrections being made to the satisfaction of the head of the school; or

(c) the project report be noted as unsatisfactory but that the candidate be permitted to resubmit it in a revised form after a further period of study and/or research; or

(d) the project report be noted as unsatisfactory and that the candidate be not permitted to resubmit it.

(3) The Committee shall, after considering the examiners' reports and the candidate's results of assessment in the prescribed formal subjects, recommend whether or not the candidate may be awarded the degree. If it is decided that the project report is unsatisfactory the Committee shall determine whether or not the candidate may resubmit it after a further period of study and/or research.

Fees

6. A candidate shall pay such fees as may be determined from time to time by the Council.

Master of the Built Environment (Sustainable Development) (MBEnv(SustDev))

1. The degree of Master of the Built Environment (Sustainable Development) may be awarded by the Council to a candidate who has completed an approved program of advanced study.

Qualifications

2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor of minimum four years duration (or the part time equivalent) from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of the Built Environment (hereinafter referred to as the Committee).

(2) In exceptional cases an applicant who submits evidence of such academic and/or professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3)If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.

(2) A candidate for the degree shall be required to undertake such formal courses and pass such assessment as prescribed.

(3)The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the Committee may cancel enrolment or take such other action as it considers appropriate.

(4) No candidate shall be awarded the degree until the lapse of two academic sessions from the date of enrolment in the case of a full-time candidate or four sessions in the case of a part-time candidate. The maximum period of candidature shall be four academic sessions from the date of enrolment for a full-time candidate and eight sessions for a part-time candidate. In special cases an extension of these times may be granted by the Committee.

Fees

4. A candidate shall pay such fees as may be determined from time to time by the Council.

Master of Engineering or Master of Science by research

1. The degree of Master of Engineering or Master of Science by research may be awarded by the Council on the recommendation of the Higher degree Committee of the appropriate faculty (hereinafter referred to as the Committee) to a candidate who has demonstrated ability to undertake research by the submission of a thesis embodying the results of an original investigation.

Qualifications

2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee.

(2) An applicant who submits evidence of such other academic or professional attainments as may be approved by the Committee may be permitted to enrol for the degree.

(3) When the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant, before being permitted to enrol, to undergo such examination or carry out such work as the Committee may prescribe.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least one calendar month before the commencement of the session in which enrolment is to begin.

(2) In every case, before permitting a candidate to enrol, the head of the school* in which the candidate intends to enrol shall be satisfied that adequate supervision and facilities are available.

(3) An approved candidate shall be enrolled in one of the following categories:

(a) full-time attendance at the University;

(b) part-time attendance at the University;

(c) external – not in regular attendance at the University and using research facilities external to the University.

(4) A candidate shall be required to undertake an original investigation on an approved topic. The candidate may also be required to undergo such examination and perform such other work as may be prescribed by the Committee.

(5) The work shall be carried out under the direction of a supervisor appointed from the full-time members of the University staff.

(6) The progress of a candidate shall be reviewed annually by the Committee following a report by the candidate, the supervisor and the head of the school in which the candidate is enrolled and as a result of such review the Committee may cancel enrolment or take such other action as it considers appropriate.

(7) No candidate shall be granted the degree until the lapse of three academic sessions in the case of a full-time candidate or four academic sessions in the case of a part-time of external candidate from the date of enrolment. In the case of a candidate who has been awarded the degree of Bachelor with Honours or who has had previous research experience the Committee may approve remission of up to one session for a full-time candidate and two sessions for a part-time or external candidate.

(8) A full-time candidate for the degree shall present for examination not later than six academic sessions from the date of enrolment. A part-time or external candidate for the degree shall present for examination not later than ten academic sessions from the date of enrolment. In special cases an extension of these times may be granted by the Committee.

Thesis

4. (1) On completing the program of study a candidate shall submit a thesis embodying the results of the original investigation.

(2) The candidate shall give in writing two months notice of intention to submit the thesis.

(3) The thesis shall present an account of the candidate's own research. In special cases work done conjointly with other persons may be accepted, provided the Committee is satisfied about the extent of the candidate's part in the joint research.

(4) The candidate may also submit any work previously published whether or not such work is related to the thesis.

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

(6) It shall be understood that the University retains the three copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the thesis in whole or in part, in photostat or microfilm or other copying medium.

Examination

5. (1) There shall be not fewer than two examiners of the thesis, appointed by the Committee, at least one of whom shall be external to the University unless the Committee is satisfied that this is not practicable.

(2) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the merits of the thesis and shall recommend to the Committee that:

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

(b) the candidate be awarded the degree without further examination subject to minor corrections as listed being made to the satisfaction of the head of the school*; or

(c) the candidate be awarded the degree subject to a further examination on questions posed in the report, performance in this further examination being to the satisfaction of the Committee; or

(d) the candidate be not awarded the degree but be permitted to resubmit the thesis in a revised form after a further period of study and/or research; or

(e) the candidate be not awarded the degree and be not permitted to resubmit the thesis.

(3) If the performance at the further examination recommended under (2)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to represent the same thesis and submit to a further oral, practical or written examination within a period specified by it but not exceeding eighteen months.

(4) The Committee shall, after consideration of the examiners' reports and the reports of any oral or written or practical examination, recommend whether or not the candidate may be awarded the degree. If it is decided that the candidate be not awarded the degree the Committee shall determine whether or not the candidate may resubmit the thesis after a further period of study and/or research.

Fees

6. A candidate shall pay such fees as may be determined from time to time by the Council.

*Note: *Or department where a department is not within a school or schools or departments where the research is being undertaken in more than one school or department.*

Master of Real Estate (MRE)

1. The degree of Master of Real Estate by formal course work may be awarded by the Council to a candidate who has satisfactorily completed a program of advanced study. The degree shall be awarded at Pass or Honours level.

Qualifications

2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of The Built Environment (hereinafter referred to as the Committee). Candidates will be required to show that they have had adequate training in building construction and computers to cope with the program.

(2) In exceptional cases of an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as it may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.

(2) A candidate for the degree shall be required to undertake such formal courses and pass such assessment as prescribed.

(3) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the committee may cancel enrolment or take such other action as it considers appropriate.

(4) No candidate who undertakes the course part-time shall be awarded the degree at Pass level until the lapse of four academic sessions from the date of enrolment for a candidate undertaking the program at Pass level and six sessions for a candidate undertaking the program at Honours level. Those students who undertake the course full-time may complete at the Pass level in two sessions and at the Honours level in three sessions.

MRE (Hons)

4. (1) A candidate who obtains a grade average of Credit or better in the formal courses in 3(2) may undertake a thesis on a approved topic, to be considered for the award of the MRE with Honours.

(2) The work shall be carried out under the direction of a supervisor appointed from the full-time academic members of the University staff. The supervision will be vigorous. Candidates will be required to conduct at least one seminar on their work and have at least one paper published prior to the submission of their thesis. Candidates will be expected to participate in the academic life of the Faculty of The Built Environment.

(3) The candidate shall give in writing to the Registrar two months notice of intention to submit the thesis.

(4) Three copies of the thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of project reports for higher degrees.

(5) It shall be understood that the University retains the three copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the project report in whole or in part, in microfilm or other copying medium.

Examination

5. (1) There shall be not fewer than two examiners of the thesis, appointed by the Committee.

(2) Arrangements shall be made for oral presentation and defence of the thesis as part of the examination.

(3) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the project report and shall recommend to the Committee that:

(a) the thesis be noted as satisfactory, or

(b) the thesis be noted as satisfactory subject to minor corrections being made to the satisfaction of the head of the school, or

(c) the thesis be noted as unsatisfactory but that the candidate be permitted to resubmit it in a revised form after a further period of study and/or research, or

(d) the thesis be noted as unsatisfactory and that the candidate be not permitted to resubmit it.

(4) The Committee shall, after considering the examiners' reports and the candidate's results of assessment in the prescribed formal subjects, recommend that the candidate be awarded the degree at Pass or Honours level. If it is decided that the thesis is unsatisfactory the Committee shall determine whether or not the candidate may resubmit it after a further period of study and/or research.

Fees

6. A candidate shall pay such fees as may be determined from time to time by the Council.

Master of Urban Development and Design (MUDD)

1. The degree of Master of Urban Development and Design may be awarded by the Council to a candidate who has completed a program of advanced study.

Qualifications

2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor of four full time years duration (or the part time equivalent) from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of the Built Environment (hereinafter referred to as the Committee).

(2) In exceptional cases an applicant who submits evidence of such academic and/or professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Registrar at least four calendar months before the commencement of the session in which the enrolment is to begin.

(2) A candidate for the degree shall be required to undertake such formal courses and pass such assessments as prescribed.

(3) The progress of a candidate shall be reviewed at the end of each academic session/term of the program and the Committee may cancel enrolment or take such other action as it considers appropriate.

(4) No candidate shall be awarded the degree until the lapse of two academic sessions and one summer term from the date of enrolment. The maximum period of enrolment shall be five academic sessions and two summer terms) from the date of enrolment. In special cases an extension of these times may be granted by the Committee.

Fees

4. A candidate shall pay such fees as may be determined from time to time by the Council.

Graduate Diploma (GradDip)

1. A Graduate Diploma may be awarded by the Council to a candidate who has satisfactorily completed a program of advanced study.

Qualifications

2. (1) A candidate for the diploma shall have been awarded an appropriate degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the appropriate faculty (hereinafter referred to as the Committee).

(2) An applicant who submits evidence of such other academic or professional attainments as may be approved by the Committee may be permitted to enrol for the diploma.

(3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the diploma shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.

(2) A candidate for the diploma shall be required to undertake such formal courses and pass such assessment as prescribed.

(3) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the Committee may cancel enrolment or take such other action as it considers appropriate.

(4) No candidate shall be awarded the diploma until the lapse of two academic sessions from the date of enrolment in the case of a full-time candidate or four sessions in the case of a part-time candidate. The maximum period of candidature shall be four academic sessions from the date of enrolment for a full-time candidate and six sessions for a part-time candidate. In special cases an extension of these times may be granted by the Committee.

Fees

4. A candidate shall pay such fees as may be determined from time to time by the Council.

Graduate Diploma in Built Environment (Sustainable Development) (GradDipBEnv)

1. The Graduate Diploma in Built Environment (Sustainable Development) may be awarded by the council on the recommendation of the Higher Degree Committee of the Faculty of Built Environment (hereinafter referred to as the Committee) to a candidate who has satisfactorily completed a program of study.

Qualifications

2.(1) A candidate for the diploma shall have been awarded an appropriate degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of the Built Environment (hereinafter referred to as the Committee).

(2) In exceptional cases an applicant who submits evidence of such academic and/or professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.

(3)If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the diploma shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.

(2) A candidate for the diploma shall be required to undertake such formal courses and pass such assessment as prescribed.

(3)The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the Committee may cancel enrolment or take such other action as it considers appropriate.

(4) No candidate shall be awarded the diploma until the lapse of two academic sessions from the date of enrolment in the case of a full-time candidate or four sessions in the case of a part-time candidate. The maximum period of candidature shall be four academic sessions from the date of enrolment for a full-time candidate and eight sessions for a part-time candidate. In special cases an extension of these times may be granted by the Committee.

Fees

5. A candidate shall pay such fees as may be determined from time to time by the Council.

Graduate Certificate in Sustainable Development (GradCertBEnv)

1. The Graduate Certificate in Sustainable Development may be awarded by the council on the recommendation of the Higher Degree Committee of the Faculty of Built Environment (hereinafter referred to as the Committee) to a candidate who has satisfactorily completed a program of study.

Qualifications

2. (1) A candidate for the Certificate shall have been awarded a degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution

(2) In exceptional cases an applicant who submits evidence of other such academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the Certificate.

(3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to carry out such work as the Committee may prescribe, before permitting enrolment.

Enrolment and Progression

3. (1) An application to enrol as a candidate for the Certificate shall be made on the prescribed form which shall be lodged with the Registrar at least two calendar months before commencement of the session in which enrolment is to begin.

(2) A candidate for the Certificate shall be required to undertake such formal courses and pass such assessment as prescribed.

(3) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the Committee may cancel enrolment or take such other action as it considers appropriate

(4) No candidate shall be awarded the Certificate until the lapse of two academic sessions from the date of enrolment. The maximum period of candidature shall be six academic sessions from the date of enrolment. In special cases an extension of time may be granted by the Committee.

Fees

4. A candidate shall pay such fees as may be determined from time to time by the Council.

Scholarships

The scholarships listed below are available to students whose courses are listed in this book. Each Faculty Handbook contains in its scholarships section the scholarships available for study in that Faculty. Travel scholarships are shown separately. Applicants should note that the scholarships and their conditions are subject to review and the closing dates for awards may vary from year to year.

Scholarship information is regularly included in the University publication 'Focus' and updated on the UNSW Web site: http://www.infonet.unsw.edu.au/academic/schopriz/httoc.htm.

Students investigating study opportunities overseas should also consult "Study Abroad "which is published by UNESCO. The British Council (02 9326 2365) may be of assistance for information about study in Britain. The Australian-American Education Foundation (02 6247 9331) or the U.S. Consulate General Educational Advising Centre (02 9373 9230) can provide information about study in America. Information may also be obtained from the embassy or consulate of the country in which the study is proposed and from the proposed overseas institution. Details of overseas awards and exchanges administered by the Department of Education, Training and Youth Affairs (DETYA) can be obtained from the Awards and Exchanges Section, DEETYA, PO Box 826, Woden, ACT 2606.

KEY

L Students with Australian Citizenship or Permanent Resident status can apply.

I International students can apply.

Postgraduate scholarships for research or coursework are identified with the following codes:

R Available for study by research (normally Masters by Research or PhD).

C Available for study by coursework (normally Masters by Coursework or Graduate Diploma).

The scholarship information is normally provided in the following format:

- Amount
- Duration
- Conditions

Unless otherwise stated, application forms are available from the Scholarships and Student Loans Unit, c\- New South Q (Lower Ground Floor, Chancellery). Applications normally become available four to six weeks before the closing date.

Undergraduate Scholarships

Following are details of scholarships available to undergraduate students at UNSW. The scholarships are listed according to the year of study for which the scholarship is available (ie scholarships for first year students; scholarships for second or later year students; scholarships for Honours year students) or whether they are available to undertake travel, and then also by Faculty and course (eg scholarships in Science and Technology or Engineering). If students from more than one Faculty are able to apply the scholarship is listed in the General Scholarships section.

For further information contact:

The Scholarships and Student Loans Unit
The University of New South Wales
Sydney 2052 Australia

Tel: (02) 9385 3100/3101/1462
Fax: (02) 9385 3732
Email: scholarships@unsw.edu.au

Scholarships for students entering the first year of an undergraduate course

General

The Alumni Association Scholarships (I,L)

- Up to $1,500 pa
- 1 year renewable subject to satisfactory progress

The scholarships are available to students enrolled in any year of a full-time undergraduate course. Candidates must be the children or grandchildren of alumni of UNSW. Applications close early January.

The AUSIMM Education Endowment Fund (L)

- $2,500-$5,000 pa
- 1 year may be renewable subject to satisfactory progress

The scholarships are open to full-time undergraduate students enrolled in a course leading to the award of a Geoscience, Mining Engineering or Minerals Engineering (Minerals Processing or Extractive Metallurgy) degree related to the interests of the mineral industry. Further information is available from The Australian Institute of Mining and Metallurgy (AUSIMM), PO Box 660, Carlton South VIC 3053, Tel (03) 9662 3166.

The Australian Development Scholarships (ADS) (I)

- Tuition fees, medical cover, airfare and a stipend
- Duration of the course

This award is for international students from selected countries only. Information and applications can only be obtained from Australian Diplomatic Posts or Australian Education Centres in the home country. Applications normally close at least 12 months before the year of study.

The Australian Vietnam Veterans Trust Education Assistance Scheme (L)

- $3,500 pa
- Duration of the course subject to satisfactory progress

The scholarship is available to the children of Vietnam veterans who are aged under 25 at the time of application. The award is subject to the same income test as AUSTUDY. Applicants can be undertaking any year of a Bachelors course. Applications and further information are available from the Australian Vietnam War Veterans Trust National Office, PO Box K978, Haymarket NSW 1240, Tel (02) 9281 7077, Email: vvt@accsoft.com.au. Applications close 31 October.

The Ben Lexcen Sports Scholarships (I,L)

- $2,000 pa
- 1 year with possibility of renewal

The scholarships are available to students who are accepted into a course of at least two years duration. Prospective applicants should have an outstanding ability in a particular sport and are expected to be active members of a UNSW Sports Club. Applications close late January.

The Captain Reg Saunders Scholarship (L)

- $3,000
- Up to 4 years

Applicants must be Aboriginals or Torres Strait Islanders eligible to commence a university degree in the area of psychology, nursing, applied science, social work or education. Further information and applications are available from the Aboriginal Education Program, UNSW, Tel (02) 9385 3805.

The UNSW Co-Op Program (L)

- $11,150 pa, and between 9 and 20 months industry training
- Duration of the course subject to satisfactory progress

The scholarships are offered by industry sponsors through the University for some of the disciplines in the Faculties of Science and Technology, Commerce and Economics, and Engineering. Scholars are selected by interview with emphasis placed on achievements in community and extra-curricular activities as well as communication and leadership skills. A minimum UAI of 93.8 is expected. The UNSW Co-Op Program application form is available from school Careers Advisers or the Co-op Program Office on (02) 9385 5116. Applications close September 30 with interviews held at the end of November and beginning of December. Further information is available at the Co-Op program web page http://co-op.web.unsw.edu.au.

The Girls Realm Guild Scholarships (L)

- Up to $1,500 pa
- 1 year with the prospect of renewal subject to satisfactory progress and continued demonstration of need

The scholarships are available to female students under 35 years of age who are enrolling in any year of a full-time undergraduate course. Selection is based on academic merit and financial need. Applications close 25 March.

The Ian Somervaille Scholarships (I,L)

- Up to $3,000
- 1 year

The scholarships are available to immediate family members (ie. children, parents, brothers, sisters, spouses, de facto partners) of UNSW staff members. Applicants must be full-time students enrolling in any year of an undergraduate course leading to the degree of Bachelor at UNSW. Selection will be based on academic merit,

aptitude and commitment to the proposed course. Consideration may be given in cases of hardship or disadvantage. Applications close 31 January.

The John Niland Scholarships (L)

- $5,000
- 1 year

The scholarship assists rural students to undertake study at UNSW. Applicants will be students who complete the HSC (or its counterpart matriculation requirement) in the top five percent of their state-wide cohort, having been enrolled at a country high school in Australia. Selection will be based on academic merit, potential to contribute to the wider life of the University and consideration of social and/or economic circumstances which might otherwise hinder successful transition to UNSW. Applications close 30 October.

The Kensington Colleges Scholarships

Further information concerning the awards below is available from The Kensington Colleges, Tel (02) 9315 0000, Fax (02) 9315 0011, Email kenso-colleges@unsw.edu.au, Web: http:\\www.kensocoll.unsw.edu.au.

The Mathews Scholarship
The scholarship provides $1,500 credit towards accommodation costs and is awarded to a resident at the commencement of the second year of an undergraduate degree. Candidates will be assessed on their academic performance in the first year of their course.

The Access Scholarship
The scholarship provides up to half the accommodation fee for a limited number of first year ACCESS scheme students experiencing long term financial hardship. Nominations are forwarded by the UNSW ACCESS office.

The Malcolm Chaikin Scholarship (L)

- $15,000 pa
- Renewable for the duration of the course subject to satisfactory progress

The scholarship is available to students entering the first year of a Bachelor of Science or Engineering in the Faculties of Life Sciences, Science and Technology, or Engineering. Selection will take into account academic merit and interview performance. Applications close 31 October.

The Matthew James Reid Scholarship (L)

- $1,000
- one year only

The Scholarships are to be awarded to encourage students from interstate to undertake study in an undergraduate degree at UNSW. The Scholarship is available to a student who completed the HSC (or its equivalent) in the previous year. Applicants must normally be resident interstate. Selection will be based on academic merit, demonstrated ability, leadership qualities, and potential to contribute to the wider life of the University and community. Consideration may also be given to circumstances which might otherwise hinder successful transition to UNSW. Applicants will be required to submit a statement detailing their reasons for undertaking the course of study. Applications close 31 January.

The National Health and Medical Research Council (NHMRC) Training Scholarship for Aboriginal Health Research (L,R)

- $16,135 - $23,997 pa (depending on qualifications)
- Up to 3 years

Applicants must be undertaking an undergraduate or postgraduate degree which includes, or leads to, research relevant to Aboriginal health. Applications will be assessed in terms of previous qualifications and experience. Consideration will be given to prior knowledge and experience of Aboriginal culture and health. Applications close early August.

The New College Access Scholarship

The scholarship provides up to half of the accommodation fee for a first year ACCESS scheme student selected by the College. Nominations are forwarded by the UNSW ACCESS office. For further information contact New College, Tel (02) 9381 1999, Fax (02) 9381 1919, Email: admissions@newcollege.unsw.edu.au.

The New South Scholarships (L)

- $6,000
- 1 year

The scholarships are available to students commencing the first year of undergraduate study at UNSW in any discipline. Scholarships will be available only to those students who achieved a perfect score in the NSW HSC in the year prior to commencing study. No application form is required.

The Ngunnagan Club Scholarship (L)

- Up to $2,000
- 1 year

The scholarship is available to students enrolled at an Australian country high school who complete the HSC (or its counterpart matriculation requirement) in the top five per cent of their state cohort. Applicants should complete an official application form by 31 October in the year prior to their intended enrolment at UNSW. Final performance in the HSC (or its counterpart matriculation) examination should be reported to the Scholarships and Student Loans Unit once known.

Robert Riley Scholarships (L)

- $5,000

The Scholarships are awarded to promote the pursuit of justice and human rights for Aboriginal Australians through education. Applicants must be Aboriginals or Torres Strait Islanders up to the age of 25 and proposing to pursue studies in the fields of law, human rights or juvenile justice. Further information and applications are available from the Aboriginal Education Program, UNSW, Tel (02) 9385 3805. Applications close 1 November.

The Smith Family Tertiary Scholarship Scheme (I,L)

- Up to $2,000 for University fees, books, laboratory/field or practical fees
- 1 year

The scheme offers scholarships to first year undergraduate students from disadvantaged families who demonstrate high academic ability and the personal commitment to succeed in tertiary studies. Applicants must be economically disadvantaged, as assessed by The Smith Family, and have demonstrated consistently high academic results. Applications are available from The Education Support Co-ordinator, The Smith Family, Locked Bag 1000, Camperdown NSW 2050, Tel (02) 9550 4422, fax (02) 9516 4063. Applications close late July.

The St George Students' Association Lexcen Scholarship (L)

- $2,000
- 1 year only

Two Scholarships will be awarded annually to high achieving sports persons undertaking, or proposing to undertake, study at UNSW. To be eligible, applicants must be enrolled in, or proposing to enrol in, a course of at least two years duration at UNSW. Applicants

should possess an outstanding ability in a particular sport. It is desirable, but not essential, that an applicant's family home is located in the St George/Sutherland Shire region. Each applicant will be assessed on the basis of outstanding ability in a particular sport. Consideration may also be given to an applicant's leadership qualities, potential to contribute to the wider life of the University, any social and economic circumstances which may affect the applicant and academic merit. Application must be made using the Ben Lexcen Scholarship application form. An interview may be required. Applications will normally close on 31 January.

The Vice-Chancellor's Equity Scholarships (L)

- $1,500 pa
- 1 year

In 1999, a small number of scholarships were awarded for financially disadvantaged students commencing full-time undergraduate study. Consideration is normally given to academic merit and financial need. The conditions may change each year.

The W.S. and L.B. Robinson Scholarship (L)

- Up to $6,500 pa
- 1 year renewable for the duration of the course subject to satisfactory progress

Applicants must have completed their schooling in Broken Hill or have parents who reside in Broken Hill. Applicants should be undertaking a course related to the mining industry, for example courses in mining engineering, geology, electrical and mechanical engineering, metallurgical process engineering, chemical engineering or science. A letter of application should be sent to Pasminco Mining, PO Box 460, Broken Hill, NSW 2880. Applications close 30 September.

The UNSW Golden Jubilee Scholarships (I)

- Course fees for the minimum course duration less any advanced standing, subject to satisfactory progress

The Scholarships have been established to encourage outstanding Diplomates from Singapore and Malaysia to complete an undergraduate degree at UNSW. To be eligible, applicant's must be proposing to undertake an undergraduate qualification at UNSW in one of the Faculties of Arts and Social Sciences, the Built Environment, Commerce and Economics, Engineering, Life Sciences or Science and Technology or the College of Fine Arts. Successful applicants will be granted advanced standing on the basis of their studies in Singapore and Malaysia. The Scholarship is only available to graduands of specific institutions. Applicants must be Citizens or Permanent Residents of Singapore or Malaysia. Selection will be based on academic merit. Applications will normally close on 30 November for study commencing in Session One of the following year and 30 April for study commencing in Session Two of the same year.

Faculty Scholarships

Faculty of the Built Environment

The John Shaw Memorial Scholarship in Town Planning (L)

- $2,000
- 1 year

The scholarship is available to full-time students entering the first year of the Planning and Urban Development Program. Applicants will be assessed on the basis of academic merit, a statement outlining the reasons for undertaking the proposed course of study, and aptitude for the field. Consideration will also be given to financial need, demonstrated ability and leadership qualities. Applications close 31 January.

The Paul White/Concrete Constructions Scholarship (L)

- At least $1,000
- 1 year

The scholarship is available to students who will complete the HSC (or its equivalent) at an Australian high school and who are seeking to enrol in the Faculty of the Built Environment. Selection will be based on academic merit, potential to contribute to the wider life of the university and consideration of financial circumstances. Applications close 31 October.

Scholarships for students in their second or later year of study

General

The AITD-MMI Insurance- Mark Pompei Scholarship (L)

- $1,000

The Australian Institute of Training and Development and MMI Insurance offer an annual scholarship to a part-time student currently working in the field of Training and Development. Applicants should be completing their first accredited qualification to assist their development in this field. Applications are available from AITD NSW Division Administrator, PO Box 5452, West Chatswood NSW 2057, Tel (02) 9419 4966, Fax (02) 9419 4142, Email nswdivn@aitd.com.au. Applications close in May.

The Alumni Association Scholarships (I,L)

- Up to $1,500 pa
- 1 year renewable subject to satisfactory progress

The scholarships are available to students enrolled in any year of a full-time undergraduate course. Candidates must be the children or grandchildren of alumni of UNSW. Applications close early January.

The Australian Vietnam Veterans Trust Education Assistance Scheme (L)

- $3,500 pa
- Duration of the course subject to satisfactory progress

The scholarship is available to the children of Vietnam veterans who are aged under 25 at the time of application. The award is subject to the same income test as AUSTUDY. Applicants can be undertaking any year of a Bachelors course. Applications and further information are available from the Australian Vietnam War Veterans Trust National Office, PO Box K978, Haymarket NSW 1240, Tel (02) 9281 7077, Email: vvt@accsoft.com.au. Applications close 31 October.

The Ben Lexcen Sports Scholarships (I,L)

- $2,000 pa
- 1 year with possibility of renewal

The scholarships are available to students who are accepted into a course of at least two years duration. Prospective applicants should have an outstanding ability in a particular sport and are expected to be active members of a UNSW Sports Club. Applications close late January.

The Bill Pardy University Challenge Scholarship (I,L)

- $1,000
- 1 year only

The Scholarship is established to recognise Bill Pardy's achievement in winning the 1998 University Challenge on the television program Sale of the Century, and to encourage students to participate in and contribute to the cultural life of the University. To be eligible, applicants must be enrolled in the second or later year of an undergraduate degree at UNSW. Each applicant will be assessed on the basis of a personal statement detailing their previous and proposed contribution to the cultural life of the University. Consideration may also be given to academic merit. Applications will normally close on 31 March.

The Girls Realm Guild Scholarship (L)

- Up to $1,500 pa
- 1 year with the prospect of renewal subject to satisfactory progress and continued demonstration of need

The scholarships are available only to female students under 35 years of age who are enrolling in any year of a full-time undergraduate course. Selection is based on academic merit and financial need. Applications close 25 March.

The Dried Fruits Research and Development Council (DFRDC) Studentships and Student Awards (I,L)

- Up to $3,000 for Studentships, up to $1,000 for Student Awards

The Studentships assist students to undertake research projects in the final year of a Bachelors degree (applications close April 15), or to undertake a research project during the summer vacation (applications close October 15). The Student Awards are provided for excellence in student research projects related to the dried fruit industry. Further information and applications are available from the Executive Officer, Dried Fruits Research and Development Council, Box 1142, Mildura VIC 3502, Tel (050) 221515, Fax (050) 233321.

The Esso Australia Ltd Geosciences Scholarship (I,L)

- Up to $3,000
- 1 year

The scholarship is for a full-time student seeking to undertake study in the final year (Year 4) of a Bachelor of Science (AppGeol) or an equivalent Honours year, majoring in geology or geophysics. The successful applicant is expected to have an interest in petroleum related studies ie sedimentology, biostratigraphy, seismic/magnetic/gravity geophysical studies, basin studies, palynology or palaeontology. Selection is based on academic merit, the benefit the student will gain by being awarded the scholarship and can include consideration of financial need. Applications close 30 November.

The Ian Somervaille Scholarships (I,L)

- Up to $3,000
- 1 year

The scholarships are available to immediate family members (ie. children, parents, brothers, sisters, spouses, de facto partners) of UNSW staff members. Applicants must be full-time students enrolling in any year of an undergraduate course leading to the degree of Bachelor at UNSW. Selection will be based on academic merit, aptitude and commitment to the proposed course. Consideration may be given in cases of hardship or disadvantage. Applications close 31 January.

The Julian Small Foundation Annual Research Grant (I,L)

- Up to $5,000

Applications are open to postgraduate and undergraduate students undertaking research and involved in the study of law, or industrial relations. Selection will be based on a research proposal which outlines how the research will advance thinking and practice in the area of employment law and industrial relations in Australia. Applications close mid-August.

The Kensington Colleges Scholarships

Further information concerning the awards below may be available from The Kensington Colleges, Tel (02) 9315 0000, Fax (02) 9315 0011, Email kenso-colleges@unsw.edu.au, Web: http:\\www.kensocoll.unsw.edu.au.

The Fell Scholarship
The scholarship provides $650 credit for accommodation costs and is awarded to a returning resident in each College. Applicants will be assessed on their academic performance in the second or later year of their course.

Resident Assistant Scheme
The program provides subsidised accommodation, valued at up to $1,000, for 22 academically promising residents, and an apprenticeship in the collegiate Residential Academic Staff role. All residents who have successfully completed at least one year of university study are eligible to apply.

The National Health and Medical Research Council (NHMRC) Training Scholarship for Aboriginal Health Research (L,R)

- $16,135 - $23,997 pa (depending on qualifications)
- Up to 3 years

Applicants must be undertaking an undergraduate or postgraduate degree which includes, or leads to, research relevant to Aboriginal health. Applications will be assessed in terms of previous qualifications and experience. Consideration will be given to prior knowledge and experience of Aboriginal culture and health. Applications close late July.

The Nicholas Catchlove Scholarship in Flying (L)

- $10,000
- 1 year

The scholarship will be awarded to provide a final year student with the opportunity to undertake further flying training to prepare for a career in the aviation industry. Applicants must be proposing to undertake the final year of an appropriate course and hold a Commercial Pilot's Licence. Selection will be based on academic merit, reasons for undertaking the course, financial need, commitment to flying and to the course, demonstrated ability, leadership qualities and interview performance. Applications close in October.

The NSW Ministry for the Arts Scholarships (L,R C)

- $5,000 - $25,000 (depending on the award)

The NSW Government offers a number of scholarships and awards to writers, artists and scholars living in NSW. Further information is available from the New South Wales Ministry for the Arts, GPO Box 5341, Sydney NSW 2000, Tel (02) 9228 3533, Fax (02) 9228 4722.

The RGC Scholarship in Economic Geology (L)

- $5,000
- 1 year

The scholarship is available to a student entering Year 4 of the Applied Geology course or an Honours year in geology in the Science course and who is proposing to undertake a field project relevant to economic geology. Letters of application and requests

for information should be directed to RGC, Gold Fields House, 1 Alfred St, Sydney NSW 2000. Applications close 31 January.

The Rural Allied Health Placement Grants (L)

- Up to $500

Grants are available to students undertaking rural placements, who are in the final two years of an undergraduate course in dietetics, diagnostic radiography, occupational therapy, pharmacy, physiotherapy, podiatry, social work, speech pathology, psychology (honours) or any year of a postgraduate course in dietetics or psychology (Masters). Applications are available from the NSW Health Rural Health Support Unit. Tel (02) 6640 2302, Fax (02) 6640 2499, Email rhsu@nor.com.au, web: www.nor.com.au/community/rhsu. Session One applications close 15 May. Session Two applications close in August.

The Rural Allied Health Scholarships (L)

- $5,750

Scholarships are available to students who are in the final two years of a four year undergraduate course in Aboriginal health, dietetics, diagnostic radiography, occupational therapy, pharmacy, physiotherapy, podiatry, social work, speech pathology, or the final year of psychology (honours) degree or any year of a Masters qualification in dietetics or psychology. Applications are available from the NSW Health Rural Health Support Unit. Tel (02) 6640 2302, Fax (02) 6640 2499, Email rhsu@nor.com.au, web: www.nor.com.au/community/rhsu. Applications close late September.

The Sam Cracknell Memorial Scholarships (I,L)

- Up to $1,500
- 1 year

Applicants should have already completed at least 2 years of a degree or diploma course and be enrolled in a full-time course during the year of application. Selection is based on academic merit, participation in sport both directly and administratively and financial need. Applications close 31 March.

The St George Students' Association Lexcen Scholarship (L)

- $2,000
- 1 year only

Two Scholarships will be awarded annually to high achieving sports persons undertaking, or proposing to undertake, study at UNSW. To be eligible, applicants must be enrolled in, or proposing to enrol in, a course of at least two years duration at UNSW. Applicants should possess an outstanding ability in a particular sport. It is desirable, but not essential, that an applicant's family home is located in the St George/Sutherland Shire region. Each applicant will be assessed on the basis of outstanding ability in a particular sport. Consideration may also be given to an applicant's leadership qualities, potential to contribute to the wider life of the University, any social and economic circumstances which may affect the applicant and academic merit. Application must be made using the Ben Lexcen Scholarship application form. An interview may be required. Applications will normally close on 31 January.

The Spruson and Ferguson (Patent Attorneys) Scholarship for Innovation (L)

- At least $1,000
- 1 year

The scholarship is available to a student who is undertaking the final year of an undergraduate course in any school of the Faculty of Science and Technology or the Faculty of Engineering. Selection will be based on academic merit and the innovative nature of the proposed final year project. Applicants are required to submit an application and a 200 word outline of their proposed research topic. Applications close 7 March.

The Telstra Education Fellowships (L)

- $7,500
- 1 year

Applicants must be entering the final year of study in the disciplines of computer, electrical or electronic engineering, computer science or human factors. Students may also have the opportunity to undertake up to 12 weeks non-compulsary vacation employment. Further information is available from the Fellowship Applications Officer, Telstra Research Laboratories, PO Box 249, Rosebank MDC, Clayton Victoria 3169. Email c.zaman@trl.telstra.com.au. Applications normally close at the end of July.

Telstra Network Technology Group and Multimedia (NTG&M) EEO Scholarships (L)

- $10,000, plus summer vacation work and guaranteed employment
- 1 year

The scholarships are open to undergraduate students enrolled in the second last year in electrical/electronic engineering, computers systems engineering, communications or other degree related to telecommunications. Applicants must belong to one of the following EEO groups: women, people from a non-English-speaking background, Aborigines or Islanders, people with a disability. The successful candidates are expected to work for Telstra NTG&M in the summer break and for at least two years after the completion of study. Enquiries to Karen Stewart on (03) 9634 3448, Email kstewart@vcomfin.telstra.com.au. Applications close late June.

The W.S. and L.B. Scholarship (L)

- Up to $6,500 pa
- 1 year renewable for the duration of the course subject to satisfactory progress

Applicants must have completed their schooling in Broken Hill or have parents who reside in Broken Hill. Applicants should be undertaking a course related to the mining industry, for example courses in mining engineering, geology, electrical and mechanical engineering, metallurgical process engineering, chemical engineering or science. A letter of application should be sent to Pasminco Mining, PO Box 460, Broken Hill, NSW 2880. Applications close 30 September.

Faculty second year or later

Faculty of the Built Environment

The AIVLE- Albury -Wodonga Group Scholarship Scheme (L)

- $750

The Albury-Wodonga group of the Australian Institute of Valuers and Land Economists scholarship is open to a student from the Albury-Wodonga Region undertaking the Bachelor of Building (Land Economist) degree at UNSW. Applicants must have completed the first year of the degree. Applications close mid-May.

The John Haskell Scholarship (L)

- Up to $1,000
- 1 year

The scholarship is available to a student proposing to undertake Year 4 of the Bachelor of Architecture degree. Selection is based on academic merit. Applications close 31 October.

Honours Year Scholarships

General

The Alumni Association Scholarships (I,L)

- Up to $1,500 pa
- 1 year renewable subject to satisfactory progress

The scholarships are available to students enrolled in any year of a full-time undergraduate course. Candidates must be the children or grandchildren of alumni of UNSW. Applications close early January.

The Apex Foundation for Research into Intellectual Disability Studentships (I,L)

- $1,000

The studentships are available to students preparing a thesis related to intellectual disability. Applications should be in the form of a letter which includes a curriculum-vitae and thesis plan and must be supported by a letter from the Head of School/Department. Applications should be sent to the Honorary Secretary, Apex Foundation Studentships, PO Box 311, Mt Evelyn Vic 3796. Applications close 31 May.

The Australian and New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART) Student Award (I,L)

- $1,000 for attendance at the annual conference

Applicants can be Honours students from any discipline. The award provides assistance for a student to attend the annual conference. Applications are available from ANZCCART, PO Box 19 Glen Osmond, SA, 5064, Tel (08) 303 7325. Applications close in July.

The Australian Vietnam Veterans Trust Education Assistance Scheme (L)

- $3,500 pa
- Duration of the course

The scholarship is available to the children of Vietnam veterans who are aged uncer 25 at the time of application. The award is subject to the same income test as AUSTUDY. Applicants can be undertaking any year of a Bachelors course. Applications and further information are available from the Australian Vietnam War Veterans Trust National Office, PO Box K978, Haymarket NSW 1240, Tel (02) 9281 7077, Email: vvt@accsoft.com.au. Applications close 31 October.

The Ben Lexcen Sports Scholarships (I,L)

- $2,000 pa
- 1 year with the possibility of renewal

The scholarships are available to students who are accepted into a course of at least two years duration. Prospective applicants should have an outstanding ability in a particular sport and are expected to be active members of a UNSW Sports Club. Applications close late January.

The Esso Australia Ltd Geosciences Scholarship (I, L)

- Up to $3,000
- 1 year

The scholarship is for a full-time student seeking to undertake study in the final year (Stage 4) of a Bachelor of Science degree in Applied Geology or an equivalent Honours year, majoring in geology or geophysics. The successful applicant is expected to have an interest in petroleum related studies ie sedimentology, biostratigraphy, seismic/magnetic/gravity geophysical studies, basin studies, palynology or palaeontology. Selection is based on academic merit, the benefit the student will gain by being awarded the scholarship and can include consideration of financial need. Applications close 30 November.

The Girls Realm Guild Scholarships (L)

- Up to $1,500 pa
- 1 year with the prospect of renewal subject to satisfactory progress and continued demonstration of need

The scholarships are available only to female students under 35 years of age who are enrolling in any year of a full-time undergraduate course. Selection is based on academic merit and financial need. Applications close 25 March.

The Grains Research and Development Corporation (GRDC) Undergraduate Honours Scholarship (I,L)

- $6,000 (Ie $5,000 to the student and $1,000 to the host School/ Department).
- 1 year

Applicants must be undertaking a full-time Honours program. Study in an area of significance to the grains industry will be viewed favourably. A letter of application, including a curriculum-vitae, academic record, letter of support from the Head of School/ Department and two referees' supporting statements, should be sent to GRDC Undergraduate Honours Scholarship, PO Box E6, Queen Victoria Terrace, Canberra ACT 2600, Tel (02) 62725528. Applications close early November.

The Great Barrier Reef Marine Park Authority Research Support (I,L)

- $1,500

Applicants must be undertaking a full-time Honours year or PhD research project that could contribute to the planning and managing work undertaken by the Great Barrier Reef Marine Park Authority. Applications and further information may be obtained from the Executive Officer, Great Barrier Reef Marine Park Authority, PO Box 1379, Townsville QLD 4810, Tel (077) 818811. Applications close mid-December.

The Ian Somervaille Scholarships (I,L)

- Up to $3,000
- 1 year

The scholarships are available to immediate family members (ie. children, parents, brothers or sisters) of UNSW staff members or their married or de facto partners. Applicants must be full-time students enrolling in any year of an undergraduate course leading to the degree of Bachelor at UNSW. Selection will be based on academic merit, aptitude and commitment to the proposed course. Consideration may be given in cases of hardship or disadvantage. Applications close 31 January.

The National Health and Medical Research Council (NHMRC) Training Scholarship for Aboriginal Health Research (L,R)

- $16,135 - $23,997 pa (depending on qualifications)
- Up to 3 years

Applicants must be undertaking an undergraduate or postgraduate degree which includes, or leads to, research relevant to Aboriginal health. Applications will be assessed in terms of previous qualifications and experience. Consideration will be given to prior knowledge and experience of Aboriginal culture and health. Applications close late July.

The NSW Ministry for the Arts Scholarships (L,R,C)

- $5,000 - $25,000 (depending on the award)

The NSW Government offers a number of scholarships and awards to writers, artists and scholars living in NSW. Further information is available from the New South Wales Ministry for the Arts, GPO Box 5341, Sydney NSW 2000, Tel (02) 9228 3533, Fax (02) 9228 4722.

The RGC Scholarship in Economic Geology (L)

- $5,000
- 1 year

The scholarship is available to a student entering Stage 4 of the Applied Geology course or an Honours year in geology in the Science course and who is proposing to undertake a field project relevant to economic geology. Letters of application and requests for information should be directed to RGC, Gold Fields House, 1 Alfred St, Sydney NSW 2000. Applications close 31 January.

The River Basin Management Society Ernest Jackson Memorial Research Grants (I,L)

- Up to $2,000

The scholarship assists PhD and Masters students undertaking research in the field of river basin management. Fourth year Honours students are encouraged to apply. Further information is available from RBMS, PO Box 113, Forest Hill Vic 3131, Tel (03) 9816 6896. Applications close in April.

The RSPCA Alan White Scholarship (I,L)

- $2,500

Applicants should be undertaking original research to improve the understanding and welfare of animals. A letter of application should be sent to the Executive Officer, RSPCA Australia, PO Box E369, Queen Victoria Terrace, Canberra ACT 2600, Tel (02) 62311437. Applications close 31 March.

The Rural Allied Health Placement Grants (L)

- Up to $500

Grants are available to students undertaking rural placements, who are in the final two years of an undergraduate course in dietetics, diagnostic radiography, occupational therapy, pharmacy, physiotherapy, podiatry, social work, speech pathology, psychology (honours) or any year of a postgraduate course in dietetics or psychology (Masters). Applications are available from the NSW Health Rural Health Support Unit. Tel (02) 6640 2302, Fax (02) 6640 2499, Email: rhsu@nor.com.au, web: www.nor.com.au/community/rhsu. Session One applications close 15 May. Session Two applications close in August.

The Rural Allied Health Scholarships (L)

- $5,750

Scholarships are available to students who are in the final two years of a four year undergraduate course in Aboriginal Health, dietetics, diagnostic radiography, occupational therapy, pharmacy, physiotherapy, podiatry, social work, speech pathology, or the final year of psychology (honours) degree or any year of a Masters qualification in dietetics or psychology. Applications are available from the NSW Health Rural Health Support Unit. Tel (02) 6640 2302, Fax (02) 6640 2499, Email: rhsu@nor.com.au, web: www.nor.com.au/community/rhsu. Applications close late September.

The Sam Cracknell Memorial Scholarship (I,L)

- Up to $1,500
- 1 year

Applicants should be full-time students who have already completed at least 2 years of a degree or diploma course. Selection is based on academic merit, participation in sport both directly and administratively, and financial need. Applications close 31 March.

The St George Students' Association Lexcen Scholarship (L)

- $2,000
- 1 year only

Two Scholarships will be awarded annually to high achieving sports persons undertaking, or proposing to undertake, study at UNSW. To be eligible, applicants must be enrolled in, or proposing to enrol in, a course of at least two years duration at UNSW. Applicants should possess an outstanding ability in a particular sport. It is desirable, but not essential, that an applicant's family home is located in the St George/Sutherland Shire region. Each applicant will be assessed on the basis of outstanding ability in a particular sport. Consideration may also be given to an applicant's leadership qualities, potential to contribute to the wider life of the University, any social and economic circumstances which may affect the applicant and academic merit. Application must be made using the Ben Lexcen Scholarship application form. An interview may be required. Applications will normally close on 31 January.

The Ukrainian Studies Foundation of Australia Endowed Scholarship (I,L)

- $1,000 in 2000, $1,500 from 2001
- 1 year only

The Scholarship is available to students undertaking, or proposing to undertake, postgraduate or honours level studies at UNSW on a Ukrainian topic/theme, or comparative Ukrainian/Australian topic/theme. Selection will be based on academic merit and the reasons for undertaking the current and/or proposed studies. Applications will normally close on January 31.

The University Honours Year Scholarships (I,L)

- $1,000
- 1 year

A number of scholarships will be awarded on the basis of academic merit for students entering an 'add-on' honours year, ie the honours year in a degree course which is normally a pass degree but which has the option of a further year of study at Honours level. Applications close 30 November.

The W.S. and L.B. Robinson Scholarship (L)

- Up to $6,500 pa
- 1 year renewable for the duration of the course subject to satisfactory progress

Applicants must have completed their schooling in Broken Hill or have parents who reside in Broken Hill. Applicants should be undertaking a course related to the mining industry, for example courses in mining engineering, geology, electrical and mechanical engineering, metallurgical process engineering, chemical engineering or science. A letter of application should be sent to Pasminco Mining, PO Box 460, Broken Hill, NSW 2880. Applications close 30 September.

Travel Scholarships

General

The Arthur Anderson Study Abroad Scholarship (L)

- Up to $2,500

The scholarship provides financial assistance to undergraduate students to undertake a period of study/research in the Arthur Anderson offices in Singapore. Applicants must be full-time students undertaking study in law, commerce, or economics. Applicants must normally be intending to undertake the final year of study and to complete the travel prior to completion of the final year. Applications are also open to students undertaking an official exchange program with a university in Asia. Further information and application forms are available from the International Student Centre. Applications normally close 31 July in the year prior to the final year of study.

The Association of International Education Japan (AIEJ) Short-Term Student Exchange Promotion Program (Inbound) Peace and Friendship Scholarships (I,L)

- 50,000 yen (settling-in allowance), 100,000 yen per month, plus airfare
- Ten months to one year

Applicants must be accepted by a Japanese University under a student exchange program agreement with UNSW. Students must initially apply directly to a Japanese University through the International Student Centre at UNSW. The Japanese host university will recommend candidates to AIEJ and students must apply as directed by the host university. Applications close in February, May and September each year.

The Association of International Education Japan (AIEJ) Short-Term Student Exchange Promotion Program (Inbound) Scholarships (I,L)

- 50,000 yen (settling-in allowance), 80,000 yen per month, plus airfare
- Six months to one year

Applicants must be accepted by a Japanese University under a student exchange program agreement with UNSW. Students must initially apply directly to a Japanese University through the International Student Centre at UNSW. The Japanese host university will recommend candidates to AIEJ and students must apply as directed by the host university. Applications close in February, May and September each year.

The AT&T Leadership Award (I,L,R,C)

- US$5,000

The award is open to students who will be commencing full-time undergraduate or postgraduate study in the United States between January and September in the year of application. The scholarship is open to students from the following Asia/Pacific countries: Australia, China, Hong Kong, India, Indonesia, Japan, Republic of Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand. Information and applications are available from the U.S. Consulate General, USIS, Level 59 MLC Centre, 19-20 Martin Place, Sydney NSW 2000, Tel (02) 9662 3016. Applications close 15 September.

The Australia-Korea Foundation/National Korean Studies Centre Exchange Scholarships (L)

- Up to $2,500

The scholarships provide financial assistance to undergraduate students who have been accepted as exchange students by a Korean University. Information and applications are available from the Programs Co-ordinator, National Korean Studies Centre, PO Box 218, Hawthorn Vic 3122, Email nksc@swin.edu.au. Applications close early January.

The Australia-Korea Foundation Undergraduate Bursaries (L)

- $1,000
- 1 year

Bursaries are available for students commencing the first year of an undergraduate course intending to study the Korean language. Information and applications are available from the Programs Co-ordinator, National Korean Studies Centre, PO Box 218, Hawthorn Vic 3122, Email nksc@swin.edu.au. Applications close in December.

Churchill Fellowships (L)

- Tuition, travel and living allowances

Churchill Fellowships provide financial support for Australian Citizens to undertake study, training or projects overseas. Fellowships will not normally be awarded for higher academic or formal qualifications. Applicants must be over 18 years of age. Further information and applications are available from the Chief Executive Officer, The Winston Churchill Memorial Trust, 218 Northbourne Ave, Braddon ACT 2612, Tel (02) 6247 8333. Applications close late February.

DAAD - The German Academic Exchange Service Scholarships (L)

Application forms for the following scholarships are available from the Consulate General of the Federal Republic of Germany, PO Box 204, Woollahra NSW 2025.

One-Semester German Studies Scholarships

- DM1,000 a month living allowance, travel assistance of DM2,500 and the health insurance contribution
- One semester

Applicants must be in their third year of German Studies. Applications close 1 July.

Deutschlandkundlicher Winterkurs

- DM3,500 to assist with travel and living expenses and course fees

Undergraduate and postgraduate students from all fields with at least two years University level German (with a better than B average) may apply for this scholarship. The students should be aged from 19 to 32 and proposing to undertake the 8 week German studies course (in German) at the University of Freiburg. The course provides language instruction and concentrates on historical and cultural aspects of contemporary Germany for students with some knowledge of German and a background in German Studies. Applications close 1 August.

Greek Government Scholarships (L)

- Tuition fees, monthly subsidy plus other allowances

Scholarships are available for undergraduate and postgraduate study in Greece. Applicants must be Australian citizens. Further information is available from the Embassy of Greece, 9 Turrana St, Yarralumla ACT 2600, Tel (02) 6273 3011. Applications normally close late March.

The Harry Manson Scholarship (L)

- $4,000, payable on receipt of evidence that the travel will take place within three months
- 1 year only

Up to five Scholarships will be awarded annually to promote the growing international dimension of UNSW. Applicants should be enrolled in, or proposing to enrol in the first year of an undergraduate course at UNSW. The Scholarships are to be used either for an approved Study Exchange program or other overseas project in the second or later year of a course at UNSW. Each applicant will be assessed on the basis of academic merit, ability to contribute to the wider life of the University, and a statement detailing the benefits to be gained and/or the reasons for the proposed travel. Applications will normally close on 30 November of the year preceding the first year of study at UNSW. The scholarships will normally be awarded at the time students are enrolling at UNSW for the first time. Should awards become available later in the year a second selection may be undertaken with a closing date of 30 September of the first year of study at UNSW.

The Harvard Travel Scholarships (L)

- $15,000 contribution towards fees, travel and living expenses
- One-off payment

The scholarship will be awarded by the Vice-Chancellor on the basis of recommendations from the Deans of the Faculties. Candidates must have completed at least 2 years full-time (or the part-time equivalent) of an undergraduate course at the UNSW and have an impressive academic record. Award of the scholarship is subject to the recipient gaining entry to the Harvard-Radcliffe Visiting Undergraduate Program. Applications close mid-November for travel in the following year.

The International Exchange Travel Scholarships (L)

- Up to $1,500
- 1 year

The scholarships were established to encourage UNSW students to participate in the University's formal international exchange programs. Students must be undergraduates embarking on a period of study overseas which will count toward their UNSW degree. Awards will be granted on the basis of academic merit. Further information is available from the International Student Centre, Tel (02) 9385 5333.

Italian Government Scholarships (L)

- 1 million Italian lira per month
- 2-24 months

Scholarships are open to Australian citizens to undertake research and language studies in Italy. Applicants must be aged under 35 years. Further information is available from the Italian Embassy, 12 Grey St, Deakin ACT 2600, Tel (02) 6273 3333, Fax (02) 6273 4223. Applications close early March.

Japan Airlines Scholarships (L)

- Air travel, insurance, tuition, accommodation, textbooks and a daily allowance

The Scholarships are available for undergraduate students to participate in a summer session of Japanese language and cross-cultural studies, home stays in Tokyo and participation at a symposium featuring regional experts. A knowledge of Japanese is not necessary. Further information and applications are available from Level 14, 201 Sussex Street, Sydney NSW 2000, Tel (02) 9272 1151. Applications normally close mid-April.

The Japanese Government (Monbusho) Scholarships (L)

Scholarships are available to Australian Citizens for study in Japan for postgraduate research or five years of undergraduate study. Applicants must be willing to study the Japanese language and receive instruction in Japanese. Further information and applications are available from Monbusho Scholarships, Embassy of Japan, 112 Empire Circuit, Yarralumla ACT 2600, Tel (02) 6272 7268, Fax (02) 6273 1848. Applications close early July.

Learn Arabic in Cairo Scholarship (I,L)

- Course fees, AUD$70 per month living allowance
- 8 months

Scholarships are available to undertake the Arabic as a Foreign Language course in Cairo. Applications are available from the Embassy of the Republic of Egypt, 1 Darwin Avenue, Yarralumla ACT 2600, Tel (02) 6273 4437, Fax (02) 6273 4279. Applications close 1 July.

The Malcolm Chaikin Overseas Exchange Scholarship (L)

- $4,000
- 1 year

A scholarship is available for a third or later year student in a Science or Engineering degree program in the Faculty of Life Sciences, Science and Technology or Engineering. Applicants must have applied for the Malcolm Chaikin Scholarship for 1998 or later, and be undertaking an official overseas exchange program. It is expected that the first scholarship will be awarded for travel in 2000. Applications close 30 September.

The Mitsui Education Foundation Scholarship (L)

A three week scholarship to Japan is available to a young Australian national to help promote goodwill between the two countries. Candidates should be full-time undergraduate students in their first degree course who have not previously been to Japan. The successful student will travel to Japan during November and December. Further information regarding applications and participating institutions is available from info@mitsui.com.au. Application forms close mid-July.

The NSW Travelling Art Scholarship (L)

- $25,000

The scholarship is available to an emerging visual artist to undertake a course of study or training overseas for one or two years. Guidelines and applications are available from the NSW Ministry for the Arts, GPO Box 5341, Sydney 2001, Tel (02) 9228 5533. Applications normally close in July.

Queen's Trust Grants (L)

- Up to $15,000

The Queen's Trust provides grants to Australian Citizens aged 18-28 years, for the pursuit of excellence in their chosen fields. Projects are supported for the advancement of Australian youth, development of community leadership and/or other skills which will be of benefit to Australia. Information and applications may be obtained from the Queen's Trust, Tel 1800 033 625. Applications close late April.

The R.C. Sutton/ Jardine Matheson Scholarship (L)

- Up to $1,000

The scholarship is to provide financial assistance to undergraduate students to undertake a period of study/research in the R.C. Sutton/ Jardine Matheson offices in Asia. Applicants must be full-time students undertaking study in law, commerce, or economics. Applicants must normally be intending to undertake their final year of study and to complete the travel prior to completion of the final year. Applications are also open to students undertaking an official exchange program with a university in Asia. Further information

and application forms are available from the International Student Centre. Applications normally close 31 July in the year prior to the final year of study.

The Rotary Foundation Ambassadorial Scholarships (I,L)

The Rotary Foundation offers scholarships to study or train in another country where Rotary clubs are located. Applicants must have completed at least two years of a university or college course , or have completed high school and have been employed for at least two years. Applicants must also be Citizens of a country in which there is a Rotary club. Information regarding scholarship availability, closing dates and applications should be obtained from the applicant's local Rotary club.

The Russian Scholarships (L)

- Payment of an allowance and medical cover

Scholarships are available to Australian citizens to undertake undergraduate or postgraduate study in journalism, law, economics, international relations or medicine in Russia. Applications normally close in May.

The Ship for World Youth Program (L)

- Economy airfare, accommodation, local trips and meals
- Awarded every second year

The objective of this program is to promote understanding and mutual friendship between the youth of Japan and other parts of the world and to foster the spirit of international cooperation. The successful applicants will visit Japan to participate in the program for the period January to March. Students should be aged from 20 to 29, able to participate in the whole program, be in good physical and mental condition, able to speak English and Japanese, have an interest in and an understanding of Japan, and be engaged in youth activities. The next round of scholarships will be available in 2001. Applications close early July 2000.

The Sir Charles Mackerras / Australia-Britain Society Music Scholarship (L)

- 8,000 pounds sterling

The scholarship is open to outstanding young conductors, composers and repetiteurs, aged between 21 and 30 who are likely to be influential leaders in the field of music, to undertake study in the United Kingdom or the Czech republic for at least six months. Applicants must be Australian Citizens or Permanent Residents. Application forms are available from the British Council, PO Box 88, Edgecliff NSW 2027, Tel (02) 9326 2022, Fax (02) 9327 4868, Email bcsydney@sprint.com. Applications close early November.

The STA Travel Grant (I,L)

- Up to $3,000

Applicants must be undertaking study leading to a degree or diploma of the University and be members of the University Union. The grant is awarded on the basis of significant contribution to the community life of the University involving a leadership role in student affairs and the University Union and the relevance and merit of the proposed travel to the stucent's academic program or University Union activities. Applications close mid-April.

The Swedish Institute Guest Scholarships (I, L)

- SEK 7,100 per month living allowance
- 9 months (1 academic year)

The scholarships are open to students and researchers who wish to travel to Sweden for study or research which cannot equally well be pursued in countries other than Sweden. Applicants must establish contact with a Swedish University willing to accept the applicant for the proposed studies. Initial requests for application forms must be made in writing, and should include the applicant's name and address, nationality, educational background, work experience, knowledge of any languages, statement of the purpose of the study or research in Sweden, and a copy of a letter of invitation from a Swedish University Department. Applications are available from the Swedish Institute, Department for Exchanges in Education and Research, Box 7434, SE-103 91, Stockholm, Sweden. Email: grantinfo@si.se. Web: http://www.si.se. Requests for application forms must reach the Swedish Institute before 1 December.

Swiss Government Scholarships (L)

- Tuition fees, living allowance, medical insurance and assistance with airfares
- 1 academic year

One scholarship is available for art/music and two for other disciplines, to undertake postgraduate study or attend an art school/ conservatory in Switzerland. Applicants will be required to pass a language test in German or French. Applicants must be aged under 35. Applications close early October.

The Turkish Government Language & Culture and Higher Education Scholarships (I,L)

Scholarships are available to high school graduates to undertake study at a Turkish University. Students may be required to undertake a one year Turkish language course before commencement of the degree. The scholarships pay a monthly allowance for the duration of the course. Scholarships are also available to university graduates who would like to attend Turkish Language and Culture Summer Courses conducted by the Turkish Studies Centre. Further information is available from the Embassy of the Republic of Turkey, 60 Mugga Way, Red Hill ACT 2603. Applications close 30 May for Language and Culture Scholarships, and 15 July for Higher Education Scholarships.

Yokoyama Scholarship Awards (L)

Assistance may be available for undergraduate and postgraduate study at a Japanese University.

Information is available from Mr Masao Iwashita, Secretary-General, Yokoyama Scholarship Foundation, 6F Shiozaki Building, 2-7-1 Hirakawacho, Chiyoda-Ku, Tokyo 102 Japan, Tel (813) 3238 2913, Fax (813) 5275 1677.

Faculty Travel

Faculty of the Built Environment

The Ronald Lu Travelling Scholarship in Architecture (I,L)

- At least $3,000 for travel to Asia

Applicants must be undertaking Year 3 or 4 of the Bachelor of Architecture degree. Applicants will be assessed on the basis of academic merit coupled with a statement outlining the reasons for their proposed travel and study in Asia. The scholarship will normally close June 1 each year, for travel during the long vacation period.

Vacation Scholarships

Some Schools offer scholarships for the long vacation period from December to February each year. Students should contact the relevant School office for information.

General

The Australian Kidney Foundation Summer Vacation Scholarships (I,L)

- Up to $900
- 6 to 8 weeks

The scholarships are open to undergraduate students who have completed at least one year of full-time study in Medicine or a course related to Biological Science. The proposed research project must be related to the kidney and the urinary tract, and carried out at a university department during the summer vacation period. Applications are available from the Medical Director's Office, Australian Kidney Foundation, GPO Box 9993, Adelaide SA 5001, Tel (08) 8267 4555, Fax (08) 8267 4450, Email: ttaylor@terra.net.au. Applications close 15 September.

ANU Summer Research Scholarships (I,L)

- $130 per week, plus full board and travel
- 8-12 weeks

Scholarships are offered to undergraduate students for short research projects in Physics, Chemistry, Astronomy, Biological Sciences, Computer Sciences, Engineering, Medical Sciences, Earth Sciences, Pacific and Asian Studies, Social Sciences and Environmental Sciences, at the Institute of Advanced Studies, ANU. Further information and applications are available from Anna Weidemann, Summer Research Scholarship Program, The Australian National University, Canberra ACT 0200, Tel (02) 6249 3765, Fax (02) 6249 5995, Email: schlsec@rsc.anu.edu.au. Applications close late August.

Cooperative Research Centre for Food Industry Innovation Vacation Scholarships (I,L)

- Up to $2000
- 8 to 12 weeks between November and March

The scholarships are open to final year undergraduate students enrolled in courses in one or more of the following disciplines: biochemistry, biotechnology, bioprocess engineering, chemistry, food science, food technology, immunology, microbiology, or molecular biology. Research projects must be related to one of the research programs of the CRC. Application Kits are available from September, and further information is available from Ms M Romeo, Education Officer, CRC for Food Industry Innovation, c/- Department of Biotechnology, UNSW, Sydney NSW 2052, Tel (02) 9385 1298, Fax (02) 9385 1015, Email: m.romeo@unsw.edu.au. Applications close early October.

The CSIRO Division of Marine Research Vacation Scholarships (I,L)

- Up to $450 per week plus travel expenses
- 8 weeks between December and February

Applicants must be full-time undergraduate students who have completed not less than three years of their course. Research projects will be undertaken with the CSIRO Division of Marine Research at either Hobart, Cleveland or Marmion. Applications close early September.

The CSIRO Vacation Scholarships (I,L)

- $420 per week
- 8 to 12 weeks between December and February

The scholarships are open to postgraduate and undergraduate students who have completed no less than three years of a full-time course in Physics, Mathematics, Computer Science, Electrical Engineering, or a closely allied subject. Research projects are carried out under the individual supervision of a research engineer or scientist. Applications are available on the web at http://www.atnf.csiro.au/educate/summer_vacation.html. Applications close early August.

The Dried Fruits Research and Development Council (DFRDC) Studentships (I,L)

- Up to $3,000 for Studentships, up to $1,000 for Student Awards

The Studentships assist students to undertake research projects during the summer vacation period. Further information and applications are available from the Executive Officer, Dried Fruits Research and Development Council, Box 1142, Mildura Vic 3502, Tel (050) 221515, Fax (050) 233321. Applications close 15 October.

The Heart Foundation Vacation Scholarships

Scholarships are available during the long vacation period for research projects related to cardiovascular function and disease. Applicants should normally have completed at least two years of an appropriate degree course in the biological sciences. Preference will be given to applicants who have had little or no laboratory experience. Applications close early September.

Medical School Vacation Scholarship Scheme - John Flynn Scholarships

- $2,500 pa to cover travel, accommodation, mentor's honorarium, host practice costs, student stipend
- Two weeks per year for up to four years

Scholarships are available to undergraduate medical students to take up vacation placements in rural and remote communities, country towns or regional centres. Placements may be with a general practitioner, rural hospital, rural/remote Aboriginal Medical Service, or a combination of these. Further information may be obtained by telephoning 1800 801 454.

The National Multiple Sclerosis Society of Australia Summer Vacation Scholarships (L)

- $200 per week
- 6 to 8 weeks between November and March

The scholarships are open to undergraduate students completing three or four years of a full-time course leading to an honours degree in medicine, science, or the biological or health sciences. Research projects must be relevant to multiple sclerosis and carried out at a university department during the summer vacation period. Applications close mid-August.

The Novo Nordisk Student Research Scholarship (I,L)

- $1,000 to $1,500
- 6 to 9 weeks over the vacation period

The scholarship is available for diabetes-related research at the Department of Endocrinology, Prince of Wales Hospital and is open to students enrolled at any tertiary institution in Australia. Preference will, however, be given to students enrolled in an undergraduate degree in Science or Medicine at UNSW. Selection will be based on interest in research in diabetes mellitus and academic performance. Further information is available from Associate Professor Bernie Tuch, Prince of Wales Hospital, Tel (02) 9382 4814. Applications close 31 October.

Postgraduate Scholarships

Following are details of scholarships available to postgraduate students at UNSW. The scholarships are listed by Faculty and course (eg scholarships in Science and Technology or Engineering) or whether they are available to undertake travel. If students from more than one Faculty are able to apply the scholarship is listed in the General Scholarships section.

For further information contact:

The Scholarships and Student Loans Unit
The University of New South Wales
Sydney 2052 Australia

Tel (02) 9385 3100/3101/1462
Fax (02) 9385 3732
Email scholarships@unsw.edu.au

General Scholarships

Main programs of assistance for postgraduate study

The Australian Postgraduate Awards (APA) (L,R)

- $16,135 pa (1999 rate). Other allowances may also be paid.
- Up to 2 years for a Masters by Research, 3 years for a PhD degree. PhD students may apply for up to 6 months extension in certain circumstances

Applicants must have graduated, or be proposing to graduate in the current academic year, with Honours 1 or equivalent. Students with Permanent Resident status should normally have lived in Australia continuously for 12 months. Applications close 29 October.

The Australian Development Scholarship (ADS) (I)

- Tuition fees, medical cover, airfare and a stipend.
- Duration of the course

This award is for international students from selected countries only. Information and applications can only be obtained from Australian Diplomatic Posts or Australian Education Centres in the home country. Applications normally close at least 12 months before the year of study.

The International Postgraduate Research Scholarships (IPRS) (I,R)

- Tuition fees and medical cover only
- 2 years for a Masters by Research, 3 years for a PhD degree

Eligibility is confined to postgraduate research students who are Citizens of countries other than Australia or New Zealand. Applications close 30 September.

Other General Scholarships

Indigenous Researchers Development Scheme (L,R)

- At least $3,000
- Up to 3 years

The Scholarships are awarded to support research projects by Aboriginal and Torres Strait Islander researchers in the biological, mathematical, physical, chemical, engineering, earth and applied sciences and the humanities and social sciences, which are likely to lead to a significant conceptual advance in understanding of a subject or lead to the solution of an important practical problem. Further information and applications are available from the Research Office, UNSW, Tel (02) 9385 1074 or the Research Office Web site: http://www.ro.unsw.edu.au. Applications close mid-June.

The Anthony Rothe Scholarship (I,L,R)

- $28,000 pa plus allowances
- Up to 3 years

Applications are open to postgraduate students proposing to undertake a PhD in a field related to the causes, prevention, treatment or cure of leukaemia and allied blood disorders. Information and applications are available from The Secretary, Anthony Rothe Memorial Trust, c/- Brigden & Partners, GPO Box 2564, Sydney NSW 2001. Applications close late August.

The Apex Foundation for Research into Intellectual Disability Research Grants (I,L,R)

Grants may be awarded for new or existing research projects in any discipline concerned with the causes, diagnosis, prevention or treatment of intellectual disability and allied conditions. Applications can be obtained from the Hon. Secretary, Apex Foundation for Research into Intellectual Disability Limited, PO Box 311, Mount Evelyn VIC 3796. Applications close late July.

The Arthritis Foundation of Australia Research & Professional Education Awards (L,R)

- $5,000 - $32,000 pa
- 1 to 3 years

Scholarships, fellowships and grants are available to support research projects into arthritis, osteoporosis and other muskuloskeletal disorders. Applicants must be enrolled in studies leading to a Masters by Research or PhD. Further information and applications are available from The Arthritis Foundation of Australia, GPO Box 121, Sydney NSW 2001, Tel (02) 9552 6085, Fax (02) 9552 6078. Applications close early June.

The Asthma Foundation of New South Wales Research Scholarships (I,L,R)

- To be determined
- 1 to 3 years

The scholarships are available for research into asthma including the basic medical services or clinical and psychological investigations. Further information is available from The Asthma Foundation of NSW, Unit 1 "Garden Mews", 82-86 Pacific Highway, St Leonards NSW 2065. Applications close in early August.

The Australian Brewers Foundation Alcohol Related Medical Research Postgraduate Scholarships (I,L,R)

- Similar to the NHMRC (see NHMRC entry)
- 1 year

Similar to the NHMRC. The scholarships are available to support research into the medical, social and public health aspects of moderate, hazardous or harmful alcohol consumption. Information and applications are available from ABF-Medical Research Advisory Committee, Tel (02) 9552 6688, Fax (02) 9552 1369. Applications close mid-September.

The Australian Coral Reef Society (ACRS) Inc Student Grants (I,L,R,C)

- $1,000 (plus $1,500 Walker prize for the best proposal)

The grant is open to students who are enrolled at an Australian University in a PhD or MSc involving research on coral reefs. Recipients must be a member of, or willing to join the ACRS. Applications normally close late November.

Australian Food Industry Science Centre (AFISC) Scholarships (I,L,R)

- $25,000 pa plus allowances
- Up to 2 years for a Masters by Research, 3 years for a PhD

It is expected that applicants will be of Honours 1 or high 2A standard or equivalent. Graduates from non-food technology disciplines, such as engineering, mathematics and physics, are also encouraged to apply. Further information and applications are available from AFISC, Private Bag 16, Sneydes Road, Werribee VIC 3030, Tel(03) 9742 0111. Applications close early November.

The Australian Federation of University Women (I,L,R,C)

Each year the Federation offers to its members a number of awards for study in Australia and overseas. Details of awards are included in a booklet available from the Australian Federation of University Women Inc, 215 Clarence Street, Sydney NSW 2000, Tel (02) 9299 9888.

The Australian Institute of Nuclear Science and Engineering (AINSE) Postgraduate Research Awards (I,L,R)

- $7,500 supplement to an APA or equivalent scholarship and $5,500 pa for facility costs plus allowances
- Up to 3 years

The Institute offers awards for postgraduate students whose research projects are associated with nuclear science or its applications. Applicants must be eligible for an APA or equivalent scholarship after having completed a Bachelor of Engineering or Bachelor of Science with Honours. At least one month per year must be spent at the Institute at Lucas Heights, NSW. Applications close early December.

The Australian Kidney Foundation Grants and Scholarships (I,L,R)

The AKF supports research into the causes, prevention and treatment of disorders of the kidneys and urinary tract. Programs include Medical Research Seeding Grants, Medical Research Equipment Grants, Biomedical Research Scholarships and Summer Vacation Scholarships. Applications are available from the Medical Director's Office, Australian Kidney Foundation, GPO Box 9993, Adelaide SA 5001, Tel (08) 8267 4555, Fax (08) 8267 4450, Email: ttaylor@terra.net.au. Applications close 30 June.

The Australian and New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART) Student Award (I,L,R,C)

- $1,000 for attendance at the annual conference

Applicants can be postgraduate students from any discipline. The award provides assistance for a student to attend the annual conference. Applications are available from ANZCCART, PO Box 19, Glen Osmond, SA, 5064, Tel (08) 303 7325. Applications close in July.

The Australian Pain Relief Association and Australian Pain Society PhD Scholarship (L,R)

- $16,750 pa plus allowances
- Up to 3 years subject to satisfactory progress

Applicants must hold an Honours 1 degree and be proposing to undertake a PhD in the mechanism, diagnosis, treatment or epidemiological features of acute or chronic (Including cancer) pain. Further information and applications are available from the Australian Pain Society Secretariat, PO Box 629, Willoughby NSW 2068, Tel (02) 9439 6744. The award is offered bi-annually. Applications close early November.

The Australian Society for Microbiology (L,R,C)

- $100 - $10,000

The Australian Society for Microbiology (ASM) provides prizes and awards, for study, research and projects related to Microbiology. More information can be obtained from the ASM National Office, Unit 23/20 Commercial Rd, Melbourne VIC 3004, Tel (03) 9867 8699, Fax (03) 9867 8699.

The Australian Spinal Research Foundation Postgraduate Research Awards (I,L,R)

- Equivalent to Australian Postgraduate Award (see APA entry under General)
- Up to 2 years for a Masters by Research or 3 years for a PhD degree

Applicants must be undertaking a Masters by Research or PhD in an area designed to contribute to an understanding of the anatomical and physiological mechanisms underlying chiropractic care or the clinical efficiency of chiropractic care and management procedures. Information and applications are available from the Australian Spinal Research Foundation, PO Box 1047, Springwood Qld 4127, Tel (07) 3808 4098, Fax (07) 3808 8109, Email: t.flack@qut.edu.au. Applications close mid-October.

The Captain Reg Saunders Scholarship (L,R,C)

- $3,000
- Up to 4 years

Applicants must be Aboriginals or Torres Strait Islanders eligible to commence a university degree in the area of psychology, nursing, applied science, social work or education. Further information and applications are available from the Aboriginal Education Program, UNSW, Tel (02) 9385 3805.

The Community Health and Anti-Tuberculosis Association - The Harry Windsor Biomedical and Medical Research Scholarship (L,R)

- $23,997 pa (Medical postgraduates), $16,135 (Biomedical Science graduates) plus allowances
- Up to 3 years

Applicants must be proposing to undertake full-time postgraduate medical research in the areas of tuberculosis, respiratory disease (particularly community aspects) or the health of disadvantaged people. Only original application forms will be accepted and are available from The Executive Officer, Community Health and Anti-Tuberculosis Association, PO Box 200, Rose Bay, NSW 2029, Fax (02) 9371 9768. Applications close 1 August.

The Cooperative Research Centre for Eye Research and Technology (CRCERT) Postgraduate Research Scholarship (I,L,R)

- $15,321 - $19,827 pa (depending on the type of research)
- 3 years

The scholarship is available for full-time PhD studies in subjects such as optometry, microbiology, biochemistry, optics, materials science, polymer chemistry and immunology. For information about application procedures applicants should initially contact Dr Mark Wilcox, CRCERT, University of New South Wales, Sydney 2052, Tel (02) 9385 0222.

The Clean Air Society of Australia and New Zealand Inc Postgraduate Research Award (I,L,R,C)

- $5,000 pa
- 1 year, with a possible 1 year extension

The scholarship is open to students enrolled in a Masters degree program with a significant research component connected with air quality. Applications close early February.

The CSIRO Division of Fisheries Supplementary PhD Awards (L,R)

- $10,000 pa
- Up to 3 years

This scholarship is a supplement to any primary scholarship (eg APA) for PhD stucy in marine studies, environmental studies, zoology, botany, broadly-based life sciences, economics and mathematics. Applications close early March.

The Dairy Research and Development Corporation (DRDC) Postgraduate Scholarships and Study Awards (L,R)

Awards to undertake full-time postgraduate research degrees are available in a wide range of disciplines including dairy manufacturing, farm research, economics and marketing, and agricultural extension. New and experienced applicants are welcome to apply. Guidelines and applications are available from the Scholarships and Student Loans Unit or DRDC, Level 3, 84 William Street, Melbourne VIC 3000, Tel (03) 9602 5300. Applications close 31 October.

The Forest and Wood Products Research and Development Corporation (FWPRDC) Scholarships (L,R)

- Up to $25,000 pa
- Up to 3 years

The scholarships are open to students undertaking a postgraduate research degree at an Australian University. Selection is based on academic merit and the relevance of the project to FPWRDC Programs. Further information and applications are available from the Executive Director, FWPRDC, PO Box 157, Bond University Qld 4229, Fax (07) 5578 7911. Applications close early October.

The Garnett Passe and Rodney Williams Memorial Foundation Research Scholarships in Otolaryngology (I,L,R)

- $15,364 pa for science graduates, $22,850 pa for medical graduates, plus allowances
- 3 years

The scholarships are available to medical or science graduates for research in Otolaryngology or in related fields of biomedical science. Applicants must be enrolled in a postgraduate degree in Australia or New Zealand. Information and applications are available from the Garnett Passe and Rodney Williams Memorial Foundation, Pelham House, 165 Bouverie St, Carlton VIC 3053, Tel (03) 9349 2622, Fax (03) 9349 2615. Applications normally close in August.

The Gerontology Foundation Grant-In-Aid (I,L,R,C)

- Up to $5,000 for a specific research project

Grants-In-Aid are awarded to students who have not had their work published in a refereed journal and who have not won any research grants in open competition. The grant supports a proposed scientific investigation topic specified by the Foundation. Information and applications are available from The Executive Officer, Gerontology Foundation of Australia Inc, PO Box 199, Annandale NSW 2038. Applications normally close late July.

The Gowrie Scholarship Trust Fund (L,R)

- $4,000 pa
- 2 years

Applicants must be members of the Forces or children (or grandchildren or lineal descendants) of members of the Forces who were on active service during the 1939-45 War. Tenable at tertiary institutions in Australia and overseas. Applications close early October.

The Grains Research and Development Corporation (GRDC) Junior Research Fellowship (L,R)

- $21,000 pa plus up to $3,000 to the supporting institution, some conference/workshop attendance allowances
- Up to 3 years

Applicants must be undertaking full-time PhD studies in fields of high priority to the grains industry. Applications close mid-October.

The Great Barrier Reef Marine Park Authority Research Support (I,L,R)

- $1,000

Applicants must be undertaking a full-time Masters or PhD research project that could contribute to planning and managing the Great Barrier Reef Marine Park and to the Reef's ecologically sustainable development. Applications and further information may be obtained from the Executive Officer, Great Barrier Reef Marine Park Authority, PO Box 1379, Townsville QLD 4810, Email: k.lally@gbrmpa.gov.au. Applications close mid December.

The Harold G. Conde Memorial Fellowship (L,R,C)

- $5,000 pa subject to the availability of funds
- Up to 3 years

Applicants should be honours graduates. The Fellowship is a supplementary award to be held in conjunction with another scholarship and is for postgraduate study or research in a field related to the electricity industry. Applications close early April.

The Julian Small Foundation Annual Research Grant (I,L,R)

- Up to $5,000

Applications are open to postgraduate and undergraduate students undertaking research and involved in the study of law, or industrial relations. Selection will be based on a research proposal which outlines how the research will advance thinking and practice in the area of employment law and industrial relations in Australia. Applications close mid-August.

The June Opie Fellowship (I,L,R,C)

- NZD$12,000
- 1 year

The award is administered by the University of Auckland and is available to Citizens and Permanent Residents of Australia, Canada and New Zealand, and is designed as an incentive for students of high academic achievement who have a severe disability. It is primarily intended for those who plan to undertake postgraduate study with a view to preparing themselves for a role in the professions, in politics or more particularly in university teaching and research and who have disability issues as a continuing interest. Applications close with the University of Auckland in late October.

Land and Water Resources Research and Development Corporation (LWRRDC) Postgraduate Research Scholarships (I,L,R)

- $20,000 pa plus $5,000 for operating expenses
- 2 years for Masters, 3 years for a PhD degree

General Research Scholarships are available for research that will lead to better management, sustainable use and conservation of land, water and vegetation resources in Australia. Irrigation Research Scholarships are specifically for research that will lead to better management, sustainable use and conservation of natural resources in Australia. Applications are available from the Scholarships and Student Loans Unit or LWRRDC, GPO Box 2182, Canberra ACT 2601, Tel (02) 62573379. Applications close early October.

The Lionel Murphy Postgraduate Scholarship (L,R,C)

- $15,000 pa for study in Australia, up to $30,000 for study overseas
- 1 year

Applicants must be intending to undertake a postgraduate degree in Law, Science, Legal Studies or other appropriate discipline. Preference will be given to applicants who propose to study the law and legal system in a social context, science/law or international law. Information and application forms are available from the Lionel Murphy Foundation, GPO Box 4545, Sydney NSW 2001, Tel (02) 9223 5151, Fax (02) 9223 5267. Applications close mid-September.

The MBF Health Research Awards- Postgraduate Research Scholarships

- Similar to NHMRC guidelines

The scholarships are open to students undertaking an MD or PhD in the areas of preventative health care, disease/drug management, evaluation of health care delivery outcomes, health policy evaluation and public health promotion/communication. Applications are available from The Executive Assistant, Research Team, Medical Benefits Fund of Australia Ltd, 97-99 Bathurst St, Sydney NSW 2000. Tel (02) 9323 9158. Fax (02) 9323 9168. Applications close late February.

The Meat and Livestock Australia (MLA) Studentships and Junior Research Fellowships (L,R,C)

- $15,888 pa for study in a Masters or Diploma, $20,000 for a PhD in Australia or US$17,500 for study overseas, plus airfares, insurance and allowances
- 2 years for Studentships (Masters or Diploma), 3 years for Junior Research Fellowships (PhD)

Applicants should be proposing to undertake research in disciplines relevant to the Australian meat and livestock industry. Applications close late September.

The Menzies Research Scholarship in Allied Health Sciences (L,R)

- Up to $24,000 pa
- 2 years

The scholarship is awarded to stimulate research in the non-medical allied health disciplines. Applicants should be full-time students, who have completed the first stage of a PhD program. Applications are available from The Menzies Foundation, 210 Clarendon St, East Melbourne VIC 3002, Fax (03) 9417 7049. Applications close late June.

The Minerals Council of Australia Student Research Award (I,L,R)

- $500 plus travel and accommodation for the Environmental Workshop

The award is open to scholars who have completed or are undertaking postgraduate studies, and is aimed at encouraging excellence in student research and communication in the field of environmental management in mining. The award will be judged on a paper written for and presented at the Minerals Council of Australia's Environmental Workshop. Nominations close early May.

The National Health and Medical Research Council (NHMRC) Training Scholarship for Aboriginal Health Research (L,R)

- $16,135 - $23,997 pa (depending on qualifications)
- Up to 3 years

Applicants must be undertaking an undergraduate or postgraduate degree which includes, or leads to, research relevant to Aboriginal health. Applications will be assessed in terms of previous qualifications and experience. Consideration will be given to prior knowledge and experience of Aboriginal culture and health. Applications close early August.

The National Health and Medical Research Council (NHMRC) Dora Lush Biomedical Postgraduate Scholarships (L,R)

- $16,135 pa, $20,997 for HIV/AIDS research, $17,888 for special initiative scholars, plus allowances
- Up to 3 years

Applicants must have completed a Science degree with Honours, or equivalent, at the time of submission of the application. Current APA holders or students enrolled in the final year of an Honours degree at the time of application are not eligible. Applications close early August.

The National Health and Medical Research Council (NHMRC) Medical and Dental Postgraduate Scholarships (L,R)

- $23,997 pa plus allowances
- Up to 3 years

The scholarships are open to medical and dental graduates to undertake full-time research. Applications are particularly encouraged for research in the following special initiative areas: Aboriginal health and disease, prostate cancer, alcohol and substance abuse, nursing and allied health services, dementia, schizophrenia, injury and HIV/AIDS. Applications close early August.

The National Health and Medical Research Council (NHMRC) Public Health Postgraduate Scholarships (L,R)

- $23,997 pa (medical/dental graduates), $16,135 pa (other graduates), $20,822 pa for HIV/AIDS research, $17,888 pa for special incentive scholars, plus allowances
- Up to 3 years

The scholarships are open to medical/dental or health related graduates to obtain training in public health research. Applications are particularly encouraged for research in the following special initiative areas: Aboriginal health and disease, prostate cancer, alcohol and substance abuse, nursing and allied health services, dementia, schizophrenia, injury and HIV/AIDS. Applications close early August.

The National Heart Foundation of Australia Postgraduate Medical and Science Research Scholarships (L,R)

- $17,637 pa (science), $23,257 pa (medical) plus $1,200 departmental allowance
- Up to 3 years subject to satisfactory progress

Scholarships are available to science or medical graduates for research in cardiovascular function, disease or related problems. Applicants must usually reside in Australia. Further information and applications are available from the Medical Director, National Heart Foundation, PO Box 2, Woden ACT 2606. Medical applications close in May and Science applications close in October.

The National Tertiary Education Union (NTEU) Scholarship for the Study of Industrial Relations and Unionism in Australian Tertiary Education (I,L,R)

- $5,000 pa
- Up to 3 years

Applicants must have made or intend to make an application for candidacy for a Masters by Research or PhD in a topic which covers some aspect of industrial relations, policy issues and/or unionism related to Australian tertiary education. Further information is

available from NTEU, PO Box 1323, South Melbourne VIC 3205, Tel (03) 9254 1910. Applications close early November.

The National Multiple Sclerosis Society of Australia Postgraduate Research Scholarships (L,R)

- Same as NHMRC scholarship stipends for medical and biomedical graduates
- Up to 2 years

Scholarships are available to medical graduates (or to appropriately qualified science graduates or health professionals) enrolled in a postgraduate research degree. Applications close mid-July.

The NSW Ministry for the Arts Scholarships (L)

- $5,000 - $25,000 (depending on the award)

The NSW Government offers a number of scholarships and awards to writers, artists and scholars living in NSW. Further information is available from the New South Wales Ministry for the Arts, GPO Box 5341, Sydney NSW 2000, Tel (02) 9228 3533, Fax (02) 9228 4722.

The Pig Research and Development Corporation (PRDC) Postgraduate Top-Up Scholarships (L,R)

- Up to a maximum of $21,000 as a supplement to other scholarships, plus allowances

Applicants must be eligible for another scholarship and be undertaking research relevant to increasing the competitiveness of the Australian pig industry. Applications close mid-December.

The Postgraduate Equity Scholarships (L,C)

- Substitution of HECS for tuition fees
- Duration of the course if eligibility criteria continue to be satisfied

These scholarships allow postgraduate students enrolled in full-fee courses to pay HECS for their course rather than course fees. Students granted the scholarship must still pay Student Activity Fees. Students who have previously completed a postgraduate course in Australia at the same or higher level are not eligible. Applications for Session One close 30 January. Applications for Session Two close 15 July.

Financial Need HECS Substitution Scholarships

Applicants must be in receipt of a full allowance from the Department of Social Security (DSS), Department of Veteran Affairs, or AUSTUDY.

HECS Substitution for Scholarships for Women

A limited number of scholarships are provided to women enrolling in postgraduate courses after a period of absence from study and/or employment who are seeking to extend their professional experience in order to re-enter the workforce. Preference will be given to women enrolling in courses which have a low female enrolment. Selection will take into account the applicant's academic merit, her personal statement, including details of a well-planned future career path, and referee's support. The scholarship is tenable for the duration of the course.

The Re-Entry Scholarship for Women (I,L,R,C)

- $16,135 pa (equivalent to the Australian Postgraduate Award)
- 1 year

Applicants must be women who have been out of full-time paid professional employment for a period of time and who wish to take up or resume a full-time research or coursework program of postgraduate study. Priority will be given to applicants wishing to update their research skills or to those who wish to gain further experience in order to return to employment in industry, business or education. Applicants must be able to demonstrate a well-planned career path. A letter of application and curriculum vitae should be forwarded to the Scholarships and Student Loans Unit, UNSW. Applications close 31 October.

The River Basin Management Society Ernest Jackson Memorial Research Grants (I,L,R)

- Up to $2,000

The scholarship assists PhD and Masters students undertaking research in the field of river basin management. PhD, Masters and 4th year Honours students are encouraged to apply. Further information is available from RBMS, PO Box 113, Forest Hill Vic 3131, Tel (03) 9816 6896. Applications close in April.

The Ronald Henderson Postgraduate Scholarships (L,R)

- $5,000 pa as a supplement to an APA
- Up to 2 years for Masters by Research, 3 years for a PhD

The scholarships are open to graduates who intend to commence Masters or PhD studies in social economics, and who obtain an APA or equivalent university postgraduate award. Applicants may be proposing study in qualifications in economics, commerce or arts. Information and applications are available from the Ronald Henderson Research Foundation, 5th Floor, 165 Flinders Lane, Melbourne VIC 3000, Tel (03) 9654 8299, Fax (03) 9650 7501, Email: lance@creativeaccess.com.au. Applications close in late October.

The RSPCA Alan White Scholarship (I,L,R)

- $2,500

Applicants should be undertaking original research to improve the understanding and welfare of animals. Applicants must have a sound academic record and demonstrate a major commitment animal welfare issues. A letter of application including two referees and academic transcripts, should be sent to the Executive Officer, RSPCA Australia, PO Box E369, Queen Victoria Terrace, Canberra ACT 2600, Tel (02) 62311437. Applications close mid-March.

The Rural Allied Health Placement Grants (L,R)

- Up to $500

Grants are available to students undertaking a postgraduate course in dietetics or psychology (Masters). Applications are available from the NSW Health Rural Health Support Unit, Tel (02) 6640 2302, Fax (02) 6640 2499, Email: rhsu@nor.com.au, web: www.nor.com.au/community/rhsu. Session One applications close 15 May. Session Two closing dates are available in August.

The Rural Allied Health Scholarships (L)

- $5,750

Scholarships are available to students in any year of a postgraduate course in dietetics or psychology (Masters). Applications are available from the NSW Health Rural Health Support Unit. Tel (02) 6640 2302, Fax (02) 6640 2499, Email: rhsu@nor.com.au, web: www.nor.com.au/community/rhsu. Applications close late September.

The Rural Industries Research and Development Corporation (RIRDC) Postgraduate Scholarships (L,R)

- $21,500 pa plus $3,500 to the host institution
- Up to 3 years

The scholarships are available for postgraduate study in rural research and development in areas of interest to the Corporation. Applicants must hold an Honours 1 or 2/1 degree in an appropriate discipline. Applications from mature age students with rural industry experience are particularly encouraged. Applications close in early November.

The Social Policy Research Centre (SPRC) Postgraduate Research Scholarship (L,R)

- $16,135 pa (equivalent to the APA), plus allowances
- 3 years for a PhD

Applicants should hold a Bachelors Degree with at least Honours 2/1 in any of the fields of study relevant to social policy. The successful candidate will be enrolled in a relevant School of the University but will undertake research at the Centre. Prospective applicants must contact the School in which they wish to enrol. Application packages are available from the Administrator, Social Policy Research Centre, UNSW, Tel (02) 9385 3833. Applications close late November.

The State Librarian's Metcalfe Scholarship at UNSW (L,R,C)

- At least $2,000

The scholarship is open to suitably qualified applicants to undertake a Masters or PhD in the areas of librarianship, marketing or technology. Selection will be based on academic merit, the outline for the proposed area of study and demonstrated interest in librarianship. Applications normally close 30 November.

The Sugar Research and Development Corporation (SRDC) Postgraduate Scholarships (L,R)

- $22,000 pa plus $3,000 to the host institution
- Up to 3 years

The scholarships are available to foster research in disciplines compatible with the SRDC's research priorities. Applicants should hold an Honours degree or equivalent and have a strong motivation to make a professional career in the sugar industry. Further information and applications are available from the Executive Director, Sugar Research and Development Corporation, PO Box 12050, Brisbane Elizabeth St Qld 4002, Tel (07) 3210 0495, Fax (07) 3210 0506. Applications close mid-September.

The Sydney Gay and Lesbian Business Association Scholarship (L, R, C)

- $1,500
- 1 year

The scholarship is provided to encourage the participation of gay men and lesbians in business and management careers. Scholarships are available to full-time students in Commerce or the AGSM. Applicants must be gay or lesbian. Applications normally close 15 April.

The Telstra Research Laboratories Postgraduate Research Fellowship (L,R)

University departments may apply for the Fellowships for one or more of their PhD students who are undertaking research relevant to the telecommunications industry in the fields of electrical engineering, computer science, science, psychology, social science or economics or other appropriate course. Further information is available from the Fellowship Applications Officer, Telstra Research Laboratories, Box 249, Rosebank MDC, Clayton VIC 3169. Email: c.zaman@trl.telstra.com.au. Applications close late September.

The Ukrainian Studies Foundation of Australia Endowed Scholarship (I,L)

- $1,000 in 2000, $1,500 from 2001
- 1 year only

The Scholarship is available to students undertaking, or proposing to undertake, postgraduate or honours level studies at UNSW on a Ukrainian topic/theme, or comparative Ukrainian/Australian topic/theme. Selection will be based on academic merit and the reasons for undertaking the current and/or proposed studies. Applications will normally close on January 31.

United Uranium Trust Fund Scholarship

This Scholarship is available for the study of nuclear science and technology at the Australian Nuclear Science and Technology Organisation (ANSTO) or other designated institution. Applicants must be under 40 years of age. Further information and applications are available from ANSTO on telephone (02) 9543 3111.

VSDC Deafness Projects (L)

Tertiary Education Scholarships may be awarded to deaf students undertaking tertiary courses related to deafness, deaf education, or fields which will advance the interests of deaf people. Applicants must be Permanent Residents of Australia. Further information is available from the VSDC-SerVices for Deaf Children, PO Box 6466, St Kilda Rd Central, Melbourne Vic 3004. Applications close mid-May.

The Wenkart Foundation Grants (L,R)

- Up to $22,000 pa
- 2 years with the possibility of renewal

Applicants must be undertaking full-time research in clinical, biomedical or health related clinical sciences. The grants will not be available again until the 1999 academic year. Applications close mid-May.

The Zonta International Amelia Earhart Awards (I,L,R)

- US$6,000
- 1 year

Applicants must be women who have completed one year graduate study in an aero-space related science or engineering degree. Further information and applications are available from Zonta International, 557 West Randolph St, Chicago, Illinois 60661-2206, USA, Tel +1 312 930 5848, Fax +1 312 930 0951. Applications close early November.

Faculty Scholarships

Faculty of the Built Environment

Faculty of the Built Environment Doctoral Scholarships (I,L,R)

- $20,000 per annum, tuition and other fees waived
- up to 3 years

The Faculty wishes to further its research agenda through the provision of research opportunities for outstanding scholars interested in joining approximately thirty current doctoral students. The Faculty has five Research Groups to encourage and promote both individual and team research in an intellectually stimulating environment. Fields of study include: Design, Theory, Management and Decision Processes, Technology, and Urban and Regional Studies. Further information and application forms can be obtained from Julia Hauman, Fax +612 9385 5613 or Email JuliaJ@unsw.edu.au or http//www.fbe.unsw.edu.au Applications close 30 October.

The Lindsay Robertson Memorial Travel Award (I,L,R,C)

- A maximum of $1,500
- 1 year

Candidates should be UNSW Landscape Architecture graduates. The award is to undertake full-time postgraduate study or research in Landscape Architecture at an approved institution overseas or in Australia. Applications close mid-May.

The Wightman Postgraduate Scholarship in Architecture (I,L,R,C)

- Up to $4,000
- 1 year with the possibility of renewal subject to satisfactory progress

The scholarship is open to graduates in architecture, or other related studies, for full-time postgraduate study in architecture at UNSW. Applications close late January.

Travel Scholarships

Students in receipt of postgraduate scholarships not listed below may, if the scholarships conditions allow, spend a period of time overseas undertaking research relevant to their Australian qualification.

General Travel

AAUW Educational Foundation Awards (I,L,R,C)

The American Association of University Women (AAUW) offers a range of scholarships and fellowships for full-time study in the United States. Additional information may be obtained from the Association's website: http://www.aauw.org

AAUW Educational Foundation International Fellowships (I,L,R,C)

- US$16,000
- 1 year

The American Association of University Women (AAUW) offers Fellowships for full-time postgraduate study or research in the United States for one acacemic year. Applicants must be females who have earned the equivalent of a United States Bachelor's degree and who are not US Citizens or Permanent Residents. Applicants can be preparing to undertake study in a broad range of disciplines including arts and humanities, physical and biological sciences, social sciences, law, economics, political sciences, or studies important to changing the lives of women and girls. International fellows can also qualify for a supplemental grant (US$5,000-$7,000) to support a community action project designed to improve the lives of women and girls for study in the fellow's home country in the year immediately following the fellowship year. Application packs are available from the AAUW Educational Foundation, Customer Centre, Dept 141, N. Dodge St, Iowa City, IA 52243-4030 USA. Applications close mid-January for the Fellowship year commencing in July.

The ACSANZ Postgraduate Awards for Canadian Studies (I,L,R)

- Up to $2,800 towards a research trip to Canada

The Association for Canadian Studies in Australia and New Zealand will offer grants to postgraduate students wishing to undertake a short research trip to Canada. Applicants must be enrolled in a Masters or Doctoral degree at an Australian or New Zealand university. Grants will be for research into all areas of academic enquiry that have a distinctly Canadian orientation, for example in the humanities, social and political sciences and some branches of the health and environmental sciences. Information and applications are available from the Academic Relations Officer, Canadian High Commission, Commonwealth Avenue, Canberra, ACT 2600, Tel (02) 6273 3844, Fax (02) 6270 4083, Email co.cnbra@cnbra01.x400.gc.ca. Applications close late September.

The Asian Studies Library Awards (ASLA) (L,R)

- $250 to $800 in a lump sum

Applicants must be undertaking a Masters by Research or PhD. The award provides a contribution towards the travel costs to centres with Asian collections to undertake library research. Further information and application forms are available from the Project Co-ordinator, Asian Studies Library Awards, Collection Management Division, Library ANU, Canberra ACT 2600. Applications close mid-June.

The Association of International Education Japan (AIEJ) Short-Term Student Exchange Promotion Program (Inbound) Scholarships (I,L,R,C)

- 50,000 yen (settling-in allowance), 80,000 yen per month, plus airfare
- Six months to one year

Applicants must be accepted by a Japanese University under a student exchange program agreement with UNSW. Students must initially apply directly to a Japanese University through the International Student Centre at UNSW. The Japanese host university will recommend candidates to AIEJ and students must apply as directed by the host university. Applications close in February, May and September each year.

The Association of International Education Japan (AIEJ) Short-Term Student Exchange Promotion Program (Inbound) Peace and Friendship Scholarships (I,L,R,C)

- 50,000 yen (settling-in allowance), 100,000 yen per month, plus airfare
- Ten months to one year

Applicants must be accepted by a Japanese University under a student exchange program agreement with UNSW. Students must initially apply directly to a Japanese University through the International Student Centre at UNSW. The Japanese host university will recommend candidates to AIEJ and students must apply as directed by the host university. Applications close in February, May and September each year.

Association of University Women Educational Foundation-Charles & June Ross International Fellowship (L,R,C)

- US$15,400
- 1 year

The fellowship is available to Australian women who have graduated from an Australian University and who are proposing to undertake one year of full-time postgraduate study or research in the United States. Applicants must be members of the Australian Federation of University Women or AAUW and intend to return to Australia to pursue their professional career. Information and applications are available only from AAUW Educational Foundation, PO Box 4030, Iowa City, Iowa 52243-4030, USA, Tel +1 319 337 1716, Fax +1 319 337 2201. Applications close late November.

The AT&T Leadership Award (I,L,R,C)

- US$5,000

The award is open to students who will be commencing full-time undergraduate or postgraduate study in the United States between January and September in the year of application. The scholarship is open to students from the following Asia/Pacific countries: Australia, China, Hong Kong, India, Indonesia, Japan, Republic of Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand. Information and applications are available from the U.S. Consulate General, USIS, Level 59 MLC Centre, 19-20 Martin Place, Sydney NSW 2000, Tel (02) 9662 3016. Applications close 15 September.

The Australian Academy of Science International Exchange Programs (L,R)

The Academy administers exchange programs which support collaborative research between professional Australian scientists and technologists with countries such as the UK, France, Germany, Taiwan, China, Korea and Japan. The programs provide funds for living and travelling costs. Applicants must be Australian citizens who hold a PhD degree or equivalent. Information is available from International Programs, The Australian Academy of Science, fax (02) 6257 4620, Email is@scince.org.au, web site: http://www.science.org.au/internat/exchange/contscix.htm.

The Australia-Korea Foundation Awards (L,R,C)

The AKF provides assistance to Korean language graduates who will be undertaking teacher training in the Korean language, or for work-experience programs. Information and applications are available from the Programs Co-ordinator, National Korean Studies Centre, PO Box 218, Hawthorn Vic 3122. Email: nksc@swin.edu.au.

The Australian Bicentennial Scholarships and Fellowships Scheme (L,R,C)

- 4,000 pounds sterling
- At least 3 months

Awards are available for study or research in the United Kingdom in any discipline, where it can be demonstrated that there is an advantage to be gained from a period of study in the U.K. Applicants must be enrolled as postgraduate students at an Australian higher education institution and who are usually resident in Australia. Applications are available from the Secretary, Sir Robert Menzies Centre for Australian Studies, University of London, 28 Russell Square, London, WC1B 5DS, UK, Tel +44 171 580 5876, Fax +44 171 580 9627, Email: mcintyre@sas.ac.uk. Applications close early November.

The Australian Federation of University Women (AFUW) (I,L,R,C)

Each year the Federation offers to its members a number of awards for study in Australia and overseas. Details of awards are included in a booklet available from the Australian Federation of University Women Inc, 215 Clarence Street, Sydney NSW 2000, Tel (02) 9299 9888.

The British Aerospace Australia Chevening Scholarship (L,R,C)

- Tuition fees, maintenance allowance, airfare
- 1 year

The scholarship is available for study in an approved, one-year MSc course in aerospace engineering at a British university. Applicants must hold, or expect to complete before October, an Honours 1 or 2/1 degree. Application forms are available from the British Council, PO Box 88, Edgecliff NSW 2027, Tel (02) 9326 2022, Fax (02) 9327 4868. Applications close late October.

The British Chevening Scholarships (L,R,C)

- Tuition fees, maintenance allowance and return airfare
- 3 months to 1 year

The awards are intended for outstanding graduates and young professionals with the potential to rise to senior positions in the private or public sectors and will contribute to Australian-British relations and understanding. The awards are tenable for postgraduate study at British universities. Application forms are available from the British Council, PO Box 88, Edgecliff NSW 2027, Tel (02) 9326 2022, Fax (02)

9327 4868. Applications close in October.

British Council Postgraduate Bursaries (L,R)

- Return economy airfare plus monthly stipend of 450 pounds
- 3 months

The scholarships are available for students enrolled in a full-time PhD who are proposing to spend three months at a British University or similar institution to take advantage of British expertise, equipment or data. Applications should be received by the British Council a minimum of 6 months prior to departure. Further information and applications are available from the British Council, PO Box 88, Edgecliff NSW 2027, Tel 9326 2022, Fax 9327 4868.

The Cambridge Commonwealth Trust Scholarships (L,R,C)

The Cambridge Commonwealth Trust administers several scholarships for Australian Citizens to undertake postgraduate study at the University of Cambridge. Scholarship application forms should be requested from the University of Cambridge when applying for admission. Admission forms and copies of the Graduate Studies Prospectus are available from The Board of Graduate Studies, 4 Mill Lane, Cambridge CB2 1RZ, United Kingdom. By submitting one Scholarship Application Form, applicants will be considered for all the Trust's scholarships for which they are eligible. Information on how to apply is available from the Honorary Secretary, Australian Committee of the Cambridge Australia Trust, GPO Box 93, Canberra ACT 2601, Tel (02) 6248 7744, Fax (02) 6248 6287. Applications for admission to Cambridge close 31 January and scholarship applications close 30 April in the following year.

The Cancer Research Fellowship Programme (I,L,R)

- Travel expenses and living allowances
- 1 year

Applicants should be engaged in research in medicine or the allied sciences and intending to pursue a career in cancer research. The awards are tenable at the International Agency for Research on Cancer in France, or any other suitable institution abroad. Areas of research include epidemiology, biostatistics, environmental and viral carcinogenesis and mechanisms of carcinogenesis. Applications are available from the International Agency for Research on Cancer, 150 cours Albert-Thomas, 69372 Lyon Cedex 08, France, tel 72 73 84 85, Fax 72 73 85 75. Applications normally close in December.

Churchill Fellowships (L)

- Tuition, travel and living allowances

Churchill Fellowships provide financial support for Australian Citizens to undertake study, training or projects overseas. Fellowships will not normally be awarded for higher academic or formal qualifications however. Applicants must be over 18 years of age. Further information and applications are available from the Chief Executive Officer, The Winston Churchill Memorial Trust, 218 Northbourne Ave, Braddon ACT 2612, Tel (02) 6247 8333. Applications close late February.

The Commonwealth Scholarship and Fellowship Plan (CSFP) (L,R,C)

- Varies for each country. Generally covers travel, living expenses, tuition fees, books and equipment, approved medical expenses
- Usually 2-3 years depending on the country

CSFP provides opportunities for Commonwealth students to undertake advanced academic study in other Commonwealth countries. Candidates should be Commonwealth Citizens who hold an undergraduate degree. Applications close at different times depending on the country in which the study is proposed.

The Coral Sea Scholarship (L,R,C)

- $3,000 per month, plus $2,500 travel entitlement
- Up to 3 months

The award is for applicants holding a tertiary qualification who are proposing study in the United States, to investigate a problem or opportunity relevant to Australian business or industry. Applicants must be Australian Citizens (Permanent Residents are not eligible). Further information and applications are available from the Fulbright Home Page, http://sunsite.anu.edu.au/education/fulbright, or by contacting the Program Officer, Australian-American Educational Foundation, GPO Box 1559, Canberra ACT 2601, Tel (02) 6247 9331. Email rachel@aaef.anu.edu.au. Applications close 30 September.

DAAD- The German Academic Exchange Service Scholarships (I,L,R,C)

Application forms and information (Including closing dates) for the following scholarships are available from the Embassy of the Federal Republic of Germany, 119 Empire Circuit, Yarralumla, Canberra ACT 2600.

One-Year Scholarships

- Monthly allowance between DM1,000 and DM1,700, airfares, health and accident insurance, and tuition fees
- 1 year

Scholarships are available for graduate studies in Germany. Applicants must be aged 32 or under and hold a Bachelors degree (or equivalent). A working knowledge of German is required of those who study arts, others may receive additional language training prior to the commencement of the scholarship. Applications normally close in September.

Research Grants

- Monthly stipend of DM1,700, health insurance contribution and travel assistance of DM2,500
- 2 to 6 months

PhD students can apply for assistance to undertake a short period of research in Germany. Applicants must be aged 32 or under.

Information Visits by Groups of Professors and Students

Groups (minimum of 10 persons, maximum of 20 persons) of professors and students can apply for assistance to visit Germany with the intention of increasing the knowledge of specific German topics. The program offers support in making travel and study arrangements and may include some financial assistance (based on the length of the stay and the number of persons undertaking the study tour). The period of stay must be between 7 and 21 days. No tours will be organised for July or August.

Deutschlandkundlicher Winterkurs

- Course fees, DM3,500 to assist with travel and living expenses, health insurance
- 8 weeks (3 January - 21 February)

Undergraduate and postgraduate students from all fields with at least two years university-level German may apply for this scholarship. Applicants must be Australian or New Zealand Citizens, aged from 19 to 32 and proposing to undertake a German Studies course (In German) at the Albert-Ludwigs University of Freiburg. The course provides language instruction and concentrates on historical and cultural aspects of contemporary Germany for students with a background in German Studies. Applications usually close in early August.

East West Center Graduate Degree Fellowship (I,L,R,C)

- Accommodation, monthly stipend of US$600, tuition fees, health insurance plus allowances
- 12 months with a possible one year extension

The Fellowships are available for postgraduate study at the University of Hawaii, preferably at Masters level. Citizens of the United States and Asian or Pacific countries are eligible to apply. Potential applicants must request an application package direct from the East West Centre, Awards SerVices Officer, Burns Hall 2066, 1601 East-West Road, Honolulu Hawaii 96848-1601, USA, Tel +1 808 944 7735, Fax +1 808 944 7730. Applications close early October.

The English-Speaking Union (NSW Branch) Scholarship (L,R,C)

- Up to $8,000

The scholarship assists graduates who, at the outset of their careers, are seeking to further their education overseas. The scholarship is open to Australian citizens living in NSW or the ACT, whose intention it is to return to Australia after undertaking study overseas. Further information is available from The English-Speaking Union (NSW Branch), PO Box A2156, Sydney South NSW 1235, Tel (02) 9231 0667. Applications close early June.

Frank Knox Memorial Fellowships (L,R,C)

- US$15,000 pa plus tuition fees and health insurance
- 1 year with the possibility of renewal for a further year

Applicants must be undertaking, or near completion of, a postgraduate qualification at an Australian University. The scholarships are tenable at one of Harvard University's graduate schools. Applications close early October.

The Fulbright Postgraduate Student Awards (L,R)

- Up to $32,530, depending on the type of award, with the possibility of other allowances (eg return airfares and tuition fees)
- 1 year

Students planning to undertake an American higher degree or engage in research towards an Australian higher degree in any field can apply for the Fulbright Student Awards. Four other privately sponsored awards are available - The Engineering Award, The Aboriginal and Torres Strait Islander People Award, The Visual and Performing Arts Award, and The Tim Matthews Memorial Award in Statistics and Related Disciplines. Applicants must be Australian Citizens who have completed an Honours degree (or equivalent). Further information and applications are available from the Fulbright Home Page, http://sunsite.anu.edu.au/education/fulbright Tel (02) 6247 9331, Email: rachel@aaef.anu.edu.au. Applications close 30 September.

The Golda Meir Scholarship (I,L,R,C)

- Tuition (some allowances may be paid)
- 1 year

The Golda Meir scholarships are available to graduates who are wishing to pursue a course in Jewish studies, religious studies, Israel studies or Middle East studies, who meet the relevant requirements for the Graduate Year Program at the Hebrew University's Rothberg School for Overseas Students. Application forms are available from the Australian Friends of the Hebrew University, 36 Hawthorn Road, South Caulfield VIC 3162, Tel (03) 9272 5511.

The Gowrie Scholarship Trust Fund (L,R)

- $4,000 pa
- 2 years

Applicants must be members of the Forces or children (or grandchildren or lineal descendants) of members of the Forces who were on active serVice during the 1939-45 War. Special consideration may be given to cases of financial hardship. Applications close October.

Greek Government Scholarships (L,R,C)

- Tuition fees, monthly subsidy plus other allowances

Scholarships are available for undergraduate and postgraduate study in Greece. Applicants must be Australian citizens. Further information is available from the Embassy of Greece, 9 Turrana St, Yarralumla ACT 2600, Tel (02) 6273 3011. Applications normally close late March.

The Harkness Academic Fellowships (L,R,C)

- Some allowances and tuition fees for study in the USA
- 12-21 months

The Academic Fellowships cover academic study and research. Applicants should be active in the public, business or voluntary sectors with an outstanding record of achievement. Special consideration may be given to studies in health care and related community issues. Applications are available on written request from the Harkness Fellowship, PO Box 836, Belconnen ACT 2606. Applications close early September.

The Harkness Mid-Career Fellowships (L,R,C)

- Professional travel allowance
- 7-12 months

The Mid-career Fellowships are provided to support study and practical experience. Applicants should be active in the public, business or voluntary sectors with an outstanding record of achievement. Special consideration may be given to studies in health care and related community issues. Applications are available from Sylvia Browning, CHERE, University of Sydney, Level 6, Building F, 88 Mallett St Camperdown NSW 2050. Tel (02) 9351 0900 Fax (02) 9351 0930 http://www.cmwf.org Applications close late September.

The Italian Government Scholarships (L)

- 1 million Italian lira per month
- 2 to 24 months

Scholarships are open to Australian citizens to undertake research and language studies in Italy. Applicants must be aged under 35 years. Further information is available from the Italian Embassy, 12 Grey St, Deakin ACT 2600, Tel (02) 6273 3333, Fax (02) 6273 4223. Applications close early March.

The Japanese Government (Monbusho) Scholarships (L)

Scholarships are available to Australian Citizens for study in Japan for postgraduate research or five years of undergraduate study. Applicants must be willing to study the Japanese language and receive instruction in Japanese. Further information and applications are available from Monbusho Scholarships, Embassy of Japan, 112 Empire Circuit, Yarralumla ACT 2600, Tel (02) 6272 7268, Fax (02) 6273 1848. Applications close early July.

The Kobe Steel Postgraduate Scholarship (L,R,C)

- Maintenance allowance of at least 7,000 pounds sterling plus tuition fees and travelling expenses
- Up to 2 years with the possibility of extension

The scholarship is tenable at St Catherine's College, Oxford University. The scholarship will be awarded to outstanding individuals who display qualities of leadership, excellence in sport as well as academic ability. Students should have a past or future interest in Japan. Applications close mid-October.

The Korean Government Scholarships (L)

- Tuition fees, living allowance, travel and other allowances
- Duration of course

Scholarships are available to Australian citizens for Masters or PhD study in Korea. Preference will be given to applicants with a knowledge of the Korean language. Information and applications are available from the Embassy of the Republic of Korea, 113 Empire Circuit, Yarralumla ACT 2600, Tel (02) 6273 3044, Fax (02) 6283 4839. Applications close early May.

The Lady Davis Fellowship Trust (I,L,R,C)

The Lady Davis Trust provides awards for study, research, or teaching at graduate, post-doctoral or professorial levels at the Hebrew University or the Technion (Israel Institute of Technology). Information is available from the Australian Friends of the Hebrew University, 36 Hawthorn Road, South Caulfield VIC 3162, Tel (03) 9272 5511. Applications normally close in November.

The Laporte Centenary Scholarship (L,R)

- Airfare, living allowance, tuition fees
- 3 to 6 months

The scholarship is tenable for postgraduate research in the United Kingdom. Candidates should be undertaking a postgraduate qualification in a science-based discipline, preferably in the practical application of special chemicals. Applications are available from the Secretary, Sir Robert Menzies Centre for Australian Studies, University of London, 28 Russell Square, London, WC1B 5DS, UK, Tel +44 171 580 5876, Fax +44 171 580 9627, Email:mcintyre@sas.ac.uk. Applications close early November.

Learn Arabic in Cairo Scholarship (I,L,R,C)

- Course fees, AU$70 per month living allowance
- 8 months

Scholarships are available to undertake the Arabic as a Foreign Language course in Cairo. Applications are available from the Embassy of the Republic of Egypt, 1 Darwin Avenue, Yarralumla ACT 2600, Tel (02) 6273 4437, Fax (02) 6273 4279. Applications close 1 July.

The Lionel Murphy Postgraduate Scholarship (L,R,C)

- $15,000 pa for study in Australia, up to $30,000 for study overseas
- 1 year

Applicants must be intending to undertake a postgraduate degree in Law, Science, Legal Studies or other appropriate discipline. Preference will be given to applicants who are proposing study of the law and legal system in a social context, science/law or international law. Information and application forms are available from the Lionel Murphy Foundation, GPO Box 4545, Sydney NSW 2001, Tel (02) 9223 5151, Fax (02) 9223 5267. Applications close mid-September.

The Lloyd's Register of Shipping Chevening Scholarship (L,R,C)

- Tuition fees, maintenance allowance, airfare
- 1 year

Two scholarships are available to graduates with proven academic merit and leadership potential, to pursue a postgraduate course at a British University. One scholarship is for a one-year MSc course in Marine Engineering/Naval Architecture, and the other is for a one-year MSc course in Environmental Sciences. Applicants must

hold, or expect to complete before October, an Honours 1 or 2/1 degree. Application forms are available from the British Council, PO Box 88, Edgecliff NSW 2027, Tel (02) 9326 2022, Fax (02) 9327 4868. Applications close late October.

The Meat Research Corporation (MRC) Studentships and Junior Research Fellowships (L,R,C)

- $15,888 pa for study in a Masters or Diploma, $20,000 for a PhD in Australia or US$17,500 for study overseas, plus airfares, insurance and allowances
- 2 years for Studentships (Masters or Diploma), 3 years for Junior Research Fellowships (PhD)

Applicants should be proposing to undertake research in disciplines relevant to the Australian meat and livestock industry. Applications normally close late September.

The Menzies Scholarships (L,R,C)

The Menzies Scholarships are intended to provide funds for Australian Citizens (aged 21 to 45) who wish to travel to Britain to undertake a course of research and to write a paper on a subject of concern and importance to the relationship between the Australian and British communities. Tertiary qualifications are preferred but the awards are not restricted to graduates or students. Information and applications are available from the Australia-Britain Society, GPO Box 551, Sydney NSW 2000, Tel (02) 223 5244. Applications normally close October.

Nanyang Technological University Singapore Research Scholarships (I,L,R)

- Tuition fees plus S$1,400-S$1,500 per month allowance
- 2 years for a Masters, 3 years for a PhD degree

Research scholarships are available to graduates with good Honours degrees to undertake postgraduate study. Information and application forms are available from The Registrar, Nanyang Technological University. Email: gleong@ntu.edu.sg, Fax: +65 7911604.

The NSW Ministry for the Arts Scholarships (L)

- $5,000 - $25,000 (depending on the award)

The NSW Government offers a number of scholarships and awards to writers, artists and scholars living in NSW. Further information is available from The New South Wales Ministry for the Arts, GPO Box 5341, Sydney NSW 2000, Tel (02) 9228 3533, Fax (02) 9228 4722.

The Oxford Nuffield Medical Fellowship (L,R)

- Between 27,525 and 31,945 pounds sterling pa (subject to tax), plus travel expenses
- 2 years with a possible one year extension

The awards are available for research in a clinical medicine or medical science department of the University of Oxford. The appointee is required to return to Australia for at least 3 years to perform work similar to that carried out in the United Kingdom during the tenure of the Nuffield fellowship. Further information is available from Australian Academy of Science, GPO Box 783, Canberra City ACT 2601, Tel (02) 6247 5777, Fax (02) 6257 4620. Applications close mid-March.

Overseas Research Students Awards Scheme (United Kingdom) (I,L,R)

- Difference in tuition fees for a 'home' and an 'overseas' student

The ORS Scheme provides partial remission of tuition fees to overseas students of outstanding merit and research potential. The awards are open to graduates who will be commencing full-time research studies at a participating institution in the United Kingdom, and who will be liable to pay tuition fees at the overseas student rate. Information and applications must be obtained directly from the Registrar or Secretary of the institution students are applying to in the United Kingdom. Applications normally close in April in the year of tenure.

Queen's Trust Grants (L)

- Up to $15,000

The Queen's Trust provides grants to Australian Citizens aged 18-28 years, for the pursuit of excellence in their chosen fields. Support is provided for projects studying the advancement of Australian youth, development of community leadership and/or other skills which will be of benefit to Australia. Information and applications may be obtained from the Queen's Trust, Tel 1800 033 625. Applications close in late April.

The Rhodes Scholarship (L,R,C)

- Tuition fees, assistance with travel expenses, up to $17,500 allowance
- 2 years, with a possible one year extension

The scholarship is tenable for postgraduate study at Oxford University. Applicants must be aged between 19 and 25 and have an honours degree or equivalent. Selection for the scholarship will be based on academic and personal achievements and community spirit. Further information is available on the Rhodes home page http://www/usyd.edu.au/su/rhodes. Applications close 1 September.

The Robert Gordon Menzies Scholarship to Harvard (L,R,C)

- Up to $25,000 towards tuition fees, living expenses or travel costs (students who enrol in the Harvard Business School may be eligible for an additional $12,000)
- 1 year

The scholarships are tenable at one of the Harvard University graduate schools. Applicants must be an Honours graduate of an Australian university who intend to return to Australia after studies at Harvard or to represent Australia overseas. Applicants must be eligible for, and have applied for admission to a degree program in a graduate school of Harvard University. The scholarships are awarded on the basis of academic excellence and personal qualities such as leadership and public duty. Applications and additional information may be obtained from the Administrative Officer, Council and Board Secretariat, ANU, Canberra ACT 0200. Fax (02) 6279 8524, Email: cabs.admin@anu.edu.au, Website: http://www.anu.edu.au/cabs/scholarships. Applications close at the end of December.

Rotary Foundation Ambassadorial Scholarships (I,L)

The Rotary Foundation offers scholarships to study or train in another country where Rotary clubs are located. Applicants must have completed at least two years of a university or college course , or have completed high school and have been employed for at least two years. Applicants must also be Citizens of a country in which there is a Rotary club. Information regarding scholarship availability, closing dates and applications should be obtained from the applicant's local Rotary club.

The Russian Scholarships (L,R,C)

- Payment an allowance and medical cover

Scholarships are available to Australian citizens to undertake undergraduate or postgraduate study in journalism, law, economics, international relations or medicine in Russia. Applications normally close in May.

The Sir Charles Mackerras / Australia-Britain Society Music Scholarship (L)

- 8,000 pounds sterling

The scholarship is open to an outstanding young conductor, composer or repetiteur, aged between 21 and 30 who is likely to be an influential leader in the field of music, to undertake study in the United Kingdom or the Czech republic for at least six months. Application forms are available from the British Council, PO Box 88, Edgecliff NSW 2027, Tel (02) 9326 2022, Fax (02) 9327 4868, Email: bcsydney@sprint.com. Applications close early November.

The STA Travel Grant (I,L,R,C)

- Up to $3,000

Applicants must be undertaking study leading to a degree or diploma of the University and a member of the University Union. The grant is awarded on the basis of significant contribution to the community life of the University involving a leadership role in student affairs and the University Union and the relevance and merit of the proposed travel to the student's academic program or University Union activities. Applications close mid-April.

The Swedish Institute Guest Scholarships (I,L)

- SEK 7,100 per month living allowance
- 9 months (1 academic year)

The scholarships are open to students/researchers who wish to travel to Sweden for studies/research which cannot equally well be pursued in countries other than Sweden. Applicants must establish contact with a Swedish University willing to accept the applicant for the proposed studies. Initial requests for application forms must be made in writing, including the applicant's name and address, nationality, educational background and work experience, knowledge of any languages, statement of the purpose of study/research in Sweden, and a copy of a letter of invitation from a Swedish University Department. Requests for applications should be sent to the Swedish Institute, Department for Exchanges in Education and Research, Box 7434, SE-103 91, Stockholm, Sweden. Email: grantinfo@si.se. Web site: http://www.si.se. Requests for application forms must reach the Swedish Institute before 1 December.

Swiss Government Scholarships (L,R,C)

- Tuition fees, living allowance, medical insurance and assistance with airfares
- 1 academic year

One scholarship is available for art/music and two for other disciplines, to undertake postgraduate study or attend an art school/ conservatory in Switzerland. Applicants will be required to pass a language test in German or French. Applicants must be aged under 35. Applications close early October.

The Tokyo Metropolitan Government Foreign Student Scholarship Program (L,R,C)

- 200,000 yen per month, tuition and travel expenses, plus allowances
- Up to 2.5 years

Scholarships are available for a Masters degree or postgraduate research at Tokyo Metropolitan University, or Tokyo Metropolitan Institute of Technology. Applicants must be aged under 35 years, be Australian Citizens from New South Wales, and be graduates of a university in NSW. Applications close early April.

The Turkish Government Language & Culture and Higher Education Scholarships (I,L)

Scholarships are available to high school graduates to undertake study at a Turkish University. Students may be required to undertake a one year Turkish language course before commencement of the degree. The scholarships pay a monthly allowance for the duration of the course. Scholarships are also available to university graduates who would like to attend Turkish Language and Culture Summer Courses conducted by Turkish Studies Centre. Further information is available from the Embassy of the Republic of Turkey, 60 Mugga Way, Red Hill ACT 2603. Applications close 30 May for Language and Culture Scholarships, and 15 July for Higher Education Scholarships.

University College London Scholarships

The University College London offers various scholarships to students from overseas, who hold an offer of admission to a full-time programme of study at UCL. Applicants must be self-financing and liable to pay tuition fees at the rate for overseas students. Information and applications are available from the International Office, University College London, Gower St, London WC1E 6BT, UK, Tel +44 171 380 7708, Fax +44 171 380 7380, Email: international@ucl.ac.uk.

Yokoyama Scholarship Awards (L,R,C)

Assistance may be available for undergraduate and postgraduate study at a Japanese University.

Information is available from Mr Masao Iwashita, Secretary-General, Yokoyama Scholarship Foundation, 6F Shiozaki Building, 2-7-1 Hirakawacho, Chiyoda-Ku, Tokyo 102 Japan, Tel (813) 3238 2913, Fax (813) 5275 1677.

Faculty Travel Scholarships

Faculty of the Built Environment

The Lindsay Robertson Memorial Travel Award (I,L,R,C)

- A maximum of $1,500
- 1 year

Candidates should be UNSW Landscape Architecture graduates. The award is to undertake full-time postgraduate study or research in Landscape Architecture at an approved institution overseas or in Australia. Applications close in mid-May.

The Planning Workshop Australia Scholarship (I,L,C)

- Up to $2,000 to cover travel expenses

A scholarship is available to cover the costs of an international field trip for a student undertaking the Master of Urban Development and Design (MUDD) program at UNSW. Selection is based on academic merit and professional excellence. A written application, including a curriculum vitae and the names of two referees, should be sent to the Head of School, Graduate School of the Built Environment, UNSW 2052. Applications close 31 August.

Prizes

The following information summarises prizes awarded by the University. Prizes are grouped by level as follows: Undergraduate, common Undergraduate/Postgraduate, Postgraduate. Within these groups prizes are listed under the faculty, school or department in which they are awarded. Prizes which are not specific to any school are listed under General. Law prizes are awarded only for students enrolled in the LLB or Jurisprudence programs.

Information regarding the establishment of new prizes may be obtained from the Student Information and Systems Office.

Prize information is normally provided in the following format:

- Prize value
- Conditions

Undergraduate Prizes

The University Of New South Wales General Category for Prizes

The Heinz Harant Challenge Prize

- $1000 (bi-annual prize)

For an original piece of assessable work submitted in the program of completing a General Education course

The Spirit of Reconciliation Prize

- $150

For the best piece of work with an Aboriginal theme, emphasising the importance of reconciliation, undertaken by a student in any faculty

The Sydney Technical College Union Award

- $400 and a bronze medal

For leadership in student affairs combined with marked academic proficiency by a graduand

The UNSW Human Rights Essay Prize

- $400

For the best research essay on a Human Rights topic by a student enrolled at the University of New South Wales proceeding to a Bachelor degree

Faculty of the Built Environment

The Belt Collins Australia Design Prize

- $500

For the best performance in Design Project (Landscape Design 6)

The Mary Broinowski Prize for Interior Architecture

- $500

For the best performance in all aspects of the Graduation Project by a graduating student

Architecture Program

The Board of Architects of New South Wales Prize for Year 1

- $250

For the best performance in Year 1 of the Bachelor of Architecture degree program

The Board of Architects of New South Wales Prize for Year 2

- $250

For the best performance in Year 2 of the Bachelor of Architecture degree program

The Board of Architects of New South Wales Prize for Year 3

- $250

For the best performance in Year 3 of the Bachelor of Architecture degree program

The Board of Architects of New South Wales Prize for Year 4

- $250

For the best performance in Year 4 of the Bachelor of Architecture degree program

The Board of Architects of New South Wales Final Year Prize

- $500

For the best performance in the final year of the Bachelor of Architecture degree program

The Eric Daniels Prize in Residential Design

- $500

For the best performance in design for residential accommodation in the Bachelor of Architecture degree program

The Frank Fox Memorial Prize

- $150

For the best performance in historical research in the Bachelor of Architecture degree program

The Frank W Peplow Prize

- $100

For the best performance in church architecture or design in the Bachelor of Architecture degree program

The Morton Herman Memorial Prize

- $100

For the best performance in studies of historic structures in the Bachelor of Architecture degree program

The Royal Australian Institute of Architects Prize

- $250

For outstanding performance in architectural design and related studies in the final two years of the Bachelor of Architecture degree program

---

Building Construction Management Program

The Australian Institute of Building Chapter Medal

- $200 and a medal

For the highest marks achieved by a student completing the Bachelor of Building Construction Management degree program

The Institute of Wood Science (Australian Branch) Timber in Building Prize

- Membership of the Institute and a Journal

For the best performance in BLDG4114 Building Science 4 (Timber) in the Bachelor of Building Construction Management degree program

The Multiplex Constructions Prize

- $1500

For the best performance in the major Building Construction courses Construction 1 to 5 in the Bachelor of Building Construction Management degree program

The Reed Constructions Prize

- $1000

For the most outstanding performance in the Bachelor of Building Construction Management degree program

---

Industrial Design Program

The Fay Adams Ergonomics in Design Prize

- $500

For the final project in IDES4301 Project Research or IDES4351 Project which most clearly reflects the effective application of ergonomic principles in its design and use

---

Landscape Architecture Program

The Lindsay Robertson Memorial Prize

- $300

For the best performance in LAND2270 Landscape Design 2 in the Bachelor of Landscape Architecture degree program

---

Planning and Urban Development Program

The Hans Westerman Prize

- $500

For the best performance in Year 1 of the Bachelor of Town Planning degree program

The Head of School's Prize

- $500

For the best performance in Year 2 of the Bachelor of Town Planning degree program

The John Shaw Memorial Prize

- $400

For the best thesis in the Bachelor of Town Planning program

The Royal Australian Planning Institute (NSW Division) Prize

- $250

For the best performance in Year 3 of the Bachelor of Town Planning degree program

The Royal Australian Planning Institute (NSW Division) Prize for Excellence in Local Planning

- $250

For the best performance in the major courses focusing on local planning in the Bachelor of Town Planning degree program

Undergraduate and Postgraduate Prizes

Faculty of the Built Environment

The J M Freeland Prize

- $500

For a significant research achievement by a student or students in the field of History and/or Conservation of the Built Environment in Australia (The work for which the prize is awarded must have been submitted as partial or complete fulfilment of the requirements for a degree offered in the Faculty of the Built Environment. Significant research achievements eligible for the award include a thesis, project report or dissertation, a substantial measured study or a conservation plan)

Postgraduate Prizes

Building Construction Management Program

The Hansen Yuncken Prize

- $1000

For the best performance in the Master of Construction Management degree program

The University of New South Wales • Kensington Campus

Theatres

Applied Science Theatre **F11**
Athol Lykke Theatre **C27**
Biomedical Theatres **E27**
Central Lecture Block (CLB) **E19**
Clancy Auditorium **C24**
Classroom Block *(Western Grounds)* **H3**
Fig Tree Theatre **B14**
Hefffron Theatres *(Dwyer, Mellor, Murphy, Nyholm, Smith)* **E12**
Io Myers Studio **D9**
Keith Burrows Theatre **J14**
Macauley Theatre **E15**
Mathews Theatres **D23**
Parade Theatre **E3**
Physics Theatre **K14**
Rex Vowels Theatre **F17**
Science Theatre **F13**
Webster Theatres **G15**

Buildings

AGSM **G27**
Applied Science **F10**
Arcade **D24**
Barker Apartments **N13**
Basser College **C18**
Baxter College **D14**
Biological Sciences **D26**
Blockhouse **G6**
Chancellery **C22**
Civil Engineering **H22**
Dalton **F12**
Electrical Engineering **G17**
Goldstein College **D16**
Golf House **A27**
Heffron **E12**
International House **C6**
Geography and Surveying **K17**
Goodsell **F20**
Kensington Colleges *(Office)* **C17**
Library *(University)* **E21**
Library Stage 2 **F21**
Mechanical Engineering **J17**
Main **K15**
Mathews **F23**
Morven Brown **C20**
Myers, Sir Rupert **M15**
New College **L6**
Newton **J12**
NIDA **D2**
Parking Station (Barker Street) **N18**
Parking Station (Botany Street) **H25**
Pavilions, The **E24**
Philip Baxter College **D14**
Quadrangle **E15**
Red Centre **H13**
Roundhouse **E6**
Sam Cracknell Pavilion **H8**
Samuels **F25**
Shalom College **N9**
Squarehouse **E4**
The Scientia **G19**
University Regiment **J2**
Vallentine Annexe **H22**
Wallace Wurth School of Medicine **C27**
Warrane College **M7**
Webster, Sir Robert **G14**
Willis Annexe **J18**

Faculty Offices

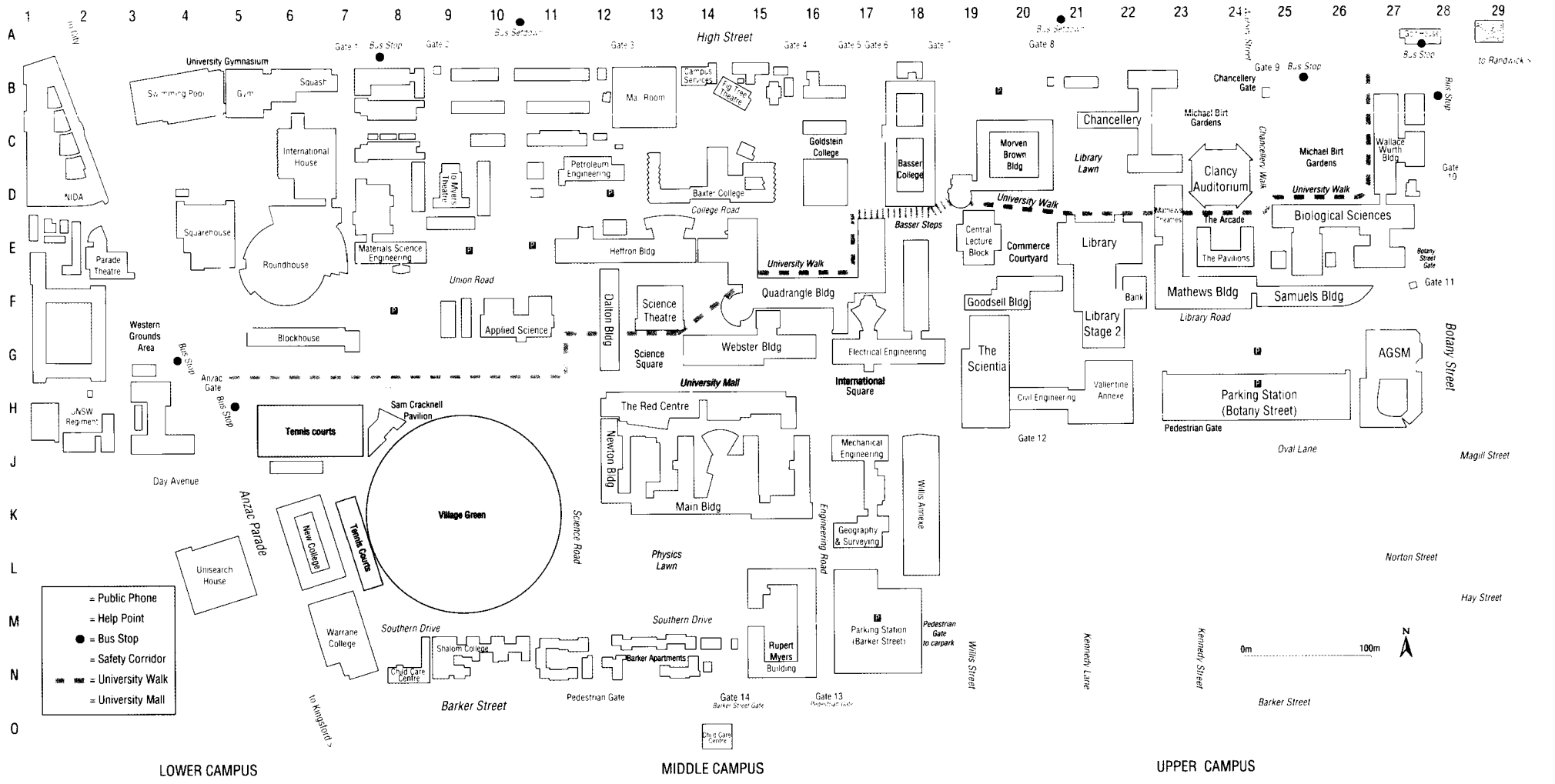
Arts and Social Sciences **C20**
Australian Graduate School of Management
AGSM **G27**
Built Environment **H13**
Commerce and Economics **F20**
Engineering **K17**
Law (Library Stage 2) **F21**
Life Sciences **D26**
Medicine **B27**
Science and Technology **E12**

School Offices

Accounting **E15**
Anatomy **B27**
Applied Bioscience **D26**
Architecture Program **H13**
Banking and Finance **F20**
Biochemistry and Molecular Genetics **D26**
Biological Science **D26**
Building Construction
Management Program **H13**
Business Law and Taxation **E15**
Chemical Engineering and Industrial Chemistry **F10**
Chemistry **E12**
Civil and Environmental Engineering **H20**
Community Medicine **D26**
Computer Science and Engineering **K17**
Economics **F20**
Education Studies **F23**
Electrical Engineering and Telecommunications **G17**
English **C20**
Geography **F10**
Geology **F10**
Geomatic Engineering **K17**
Health Services Management **F25**
History **C20**
Industrial Design Program **H13**
Industrial Relations and Organisational Behaviour **F20**
Information, Archive and Library Studies **F23**
Information Systems **E15**
Interior Architecture Program **H13**
International Business **E15**
Landscape Architecture Program **H13**
Law (Library Stage 2) **F21**
Marketing **F20**
Materials Science and Engineering **E8**
Mathematics **H13**
Mechanical and Manufacturing Engineering **J17**
Media and Communications **G15**
Medical Education **C27**
Microbiology and Immunology **D26**
Mining Engineering **K15**
Modern Language Studies **C20**
Music and Music Education **G15**
Optometry **M15**
Paediatrics **C27**
Pathology **C27**
Petroleum Engineering **D12**
Philosophy **C20**
Physics **K15**
Physiology and Pharmacology **C27**
Planning and Urban Development Program **H13**
Political Science **C20**
Psychology **F23**
Safety Science **B11a**
Science and Technology Studies **C20**
Social Science and Policy **C20**
Social Work **F23**
Sociology **C20**
Theatre Film and Dance **G14**

Services

Aboriginal Student Centre **A29**
Access Scheme - Equity and Diversity Unit **E15**
Accommodation - Housing Office **E15**
Admissions and Enrolment - Student Centre **C22**
Biomedical Library **F23**
Campus Conferencing **C22**
Campus Services **B14a**
Cashier **C22**
Careers and Employment Office **E15**
Chaplains **E4**
Child Care Centres -
House at Pooh Corner **N8**
Kangas House **O14**
Tiggers/Honey Pot - 34 Botany St.
Co-op program **M15**
CONTACT **E15**
Counselling Service **E15**
Educational Testing Centre **E4**
Equity and Diversity Unit **E15**
Facilities Department **C22**
Health Service **E15**
Housing Office **E15**
Human Resources **C22**
Law Library **F21**
NewSouthQ Student Centre **C22**
Public Affairs and Development **C22**
Publishing and Printing Services **C22**
Religious Services **E4**
Research Office **M15**
Roundtable Conferencing and Catering **E4**
SECURITY/Lost Property/Parking **H13**
Sports Association **H8**
Student Centre **C22**
Student Guild **E15**
Student Recruitment Office **C22**
Unisearch Limited **M15**
University Gymnasium **B5**
University Union
Blockhouse **G6**
Roundhouse **E6**
Squarehouse **E4**
UNSW Bookshop **E15**
UNSW International **H13**



The University of New South Wales • Kensington Campus

UNSW

This Handbooks has been specifically designed as a source of detailed reference information for first year, re-enrolling undergraduate and postgraduate students.

Separate Handbooks are published for:
Arts and Social Sciences
Built Environment
College of Fine Arts
Commerce and Economics
Engineering
Law
Medicine
Science
Australian Graduate School of Management (AGSM)
Australian Taxation Studies Program (ATAX)
University College, Australian Defence Force Academy(ADFA)
General Education.

For further information about the University – its organisation; staff members; description of disciplines; scholarships; prizes and so on, consult the University Calendar (Summary Volume). For further information on student matters, consult the UNSW Student Guide.