

Faculty of the Built Environment

A Message from the Dean

Welcome to the Faculty of Built Environment (FBE) at UNSW. I hope you find the information in this Handbook helpful in understanding the programs offered in our Faculty. The structure of FBE is unique in Australia in the range of disciplines it offers including Architecture, Building, Industrial Design, Interior Architecture, Landscape Architecture and Planning & Urban Development. FBE is structured to encourage synergy between the disciplines and flexibility for students in the range of courses they can take. Students have the opportunity to gain both expertise in their chosen disciplines and to become familiar with the concepts and ideas of the other disciplines in the Faculty. In reading this Handbook you will discover the wide range of courses on offer.

The undergraduate and postgraduate programs offered by the Faculty are well established and well regarded by employers. Each program integrates the academic knowledge and practical skills required for professional practice.

The Faculty offers both postgraduate coursework and research degrees. Details are contained in this Handbook.

Around 20 per cent of our students are international students. FBE has a reputation for the excellence of its staff and students and is professionally recognised nationally and internationally. The Faculty receives strong industry support and extensive international academic links provide opportunities for exchange and collaboration in learning and research.

If you have further questions after reading through this Handbook, please do not hesitate to obtain advice from your lecturers and from the Faculty administrative staff at all stages of your study. You may also wish to visit FBE's website at: www.fbe.unsw.edu.au

Peter A Murphy
Dean
Faculty of the Built Environment

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Who Can Help?

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, Red Centre Building.

To speak to the Associate Dean (Education), Head of School, or any of the staff responsible for the postgraduate coursework and research programs offered in the Faculty, go to the Postgraduate Studies and Research Office on Level 2.

Faculty Information and Assistance

The Faculty of Built Environment Website

The Faculty of the Built Environment's website www.fbe.unsw.edu.au provides detailed information on the Faculty's programs, staff, research and events as well as exhibits of student work and an extensive online learning resource.

Computing Information

The Faculty has five major computing laboratories containing 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 24 hours a day. The computers are higher end PC workstations configured to support a wide range of applications including: CAD, modelling, rendering, visualisation, multimedia presentations, GIS, analysis, general office applications and much more. The Faculty's Resource Centre and Postgraduate labs add a further 40 computers to this mix which is complimented by the student accessible wireless networking in and around the Faculty.

These laboratory 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 offers a 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 across the Built Environment's disciplines.

All these computers are connected to the Campus Wide Network, providing secure online 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.

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 on the website, providing advice to students regarding the purchase of personal computers, software and network connectivity.

Course Descriptions

Descriptions of courses offered in 2006 can be found in alphabetical order by the course code at the back of this Handbook or in the Online Handbook at www.handbook.unsw.edu.au

Enrolment Procedures

New Students

New students enrolling in graduate programs will be sent enrolment information from the University Admissions Office. New students enrol online at myUNSW <https://my.unsw.edu.au>.

Re-enrolling Students

All students re-enrolling in the Faculty will re-enrol online via myUNSW. Instructions can be found on the FBE website.

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 consists of textbooks and recommended reading, background information to programs, serials and standards (these are duplicated in the Physical Sciences Library). Unique materials held consist of donations, undergraduate theses, trade catalogues and an open reserve collection of specific materials left by lecturers to supplement program work.

The Resource Centre computers provide access to library catalogues and other online databases, email facilities and the Internet and six of the computers have word-processing facilities. Photocopying facilities are also provided.

Assistance is provided by the librarian in using the Centre's resources and development 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-6.00pm Monday to Thursday, 8.30am-4.00pm on Friday. Out of session, the Resource Centre is open from 8.30am-4.00pm Monday to Friday, closed all January, weekends and public holidays.

Rules for Progression

Progression in programs offered in FBE is generally dependent on the successful completion of prerequisites and/or corequisites 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 Program Director may recommend a restricted program.

Summary of Programs

Higher Degrees – Research

Following the award of a first degree in Architecture, Building, Industrial Design, Landscape Architecture, Planning or other relevant program 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 Science
4. Master of Building
5. Master of Landscape Architecture
6. Master of Town Planning

8. Master of the Built Environment

For details concerning these degrees see Program Rules and Information – Research 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 Project Management in Professional Practice
3. Master of Construction Project Management
4. Master of Property and Development
5. Master of Urban Development and Design
6. Graduate Diploma in Built Environment (Sustainable Development)
7. Graduate Certificate in Built Environment (Sustainable Development)
8. Graduate Certificate in Construction Project Management

Program Rules and Information - Research Degrees

Postgraduate Student Director: Catherine De Lorenzo

The Faculty of the Built Environment offers excellent facilities for research and welcomes inquiries from students who wish to pursue programs for research as detailed below. Prospective students should consult the Postgraduate Student Director to discuss their research interests prior to making a formal application.

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
- Management
- History and Theory
- Environment and Sustainability
- Urban and Cultural Studies

The Faculty is home to the following research centres and units which provide opportunities for research students to participate in a focused research endeavour:

- Centre for a Sustainable Built Environment (formerly SOLARCH)
- City Futures Research Centre
- Centre for Health Assets Australasia (CHAA)

1120 Doctor of Philosophy

PhD

Typical Duration

4 years

Minimum UOC for Award

144 units of credit

Typical UOC per Session

24 units of credit

Program Description

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, human and environment interface geography, 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.

The Doctor of Philosophy (PhD) degree is offered in all faculties of the University of New South Wales and encourages initiative and originality in research. Candidates should make a significant contribution to knowledge in their field.

As a general guide, the UNSW entry requirements for the degree of Doctor of Philosophy are as follows:

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 Research Committee of the appropriate faculty.

Candidates may be admitted to the PhD program after one year's full-time enrolment in a Masters by Research program, with the approval of the Faculty Postgraduate Affairs Committee.

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.

However, as each faculty manages its own PhD programs, prospective local and international research students should check with the relevant faculty and/or school for specific entry requirements.

English language requirements also apply. Please refer to the UNSW website: www.unsw.edu.au/futureStudents/postgradResearch/res/fspgreqpolicy.html

Program Objectives and Learning Outcomes

The Doctor of Philosophy degrees encourages initiative and originality in research. Students will make a significant contribution to knowledge in their field and will be competent to carry out research in their chosen area.

Program Structure

This program involves a minimum of three years full-time study. Students undertake supervised research leading to the production of the thesis.

The length of a doctoral thesis normally should not exceed 100,000 words of text and should be submitted for examination within 4 years of full-time study.

In some faculties advanced coursework is also prescribed.

Academic Rules

1. The degree of Doctor of Philosophy may be awarded by the Council on the recommendation of the Research 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 subject;

(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 a Dean of a Faculty. Enrolment is permitted in more than one such teaching unit.*

Further Information

If you are considering applying for a PhD at UNSW you will need to make contact with the relevant school or faculty. This is necessary in order to establish that your research interests and those of the school and faculty are aligned, and that there is a suitable supervisor for your particular area of research.

Prospective students are strongly advised to make contact with potential supervisors before applying for research study at the University. Please refer to the Faculty home page for contact details of schools and departments.

Please refer to the UNSW website for further information on how to apply, scholarships, English language requirements, thesis preparation and other research related matters: www.unsw.edu.au/futurestudents/research

2200 Master of Architecture

MArch

Typical Duration

2 years

Minimum UOC for Award

96 units of credit

Typical UOC per Session

24 units of credit

Program Description

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. For further information on program requirements and availability, please contact the Faculty of the Built Environment.

Academic Rules

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 Town Planning by research may be awarded by the Council on the recommendation of the Research 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 year's 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 director of the program 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 theses.

(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 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.

2206 Master of Science

MSc

Typical Duration

2 years

Minimum UOC for Award

96 units of credit

Typical UOC per Session

24 units of credit

Program Description

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. For further information on program requirements and availability, please contact the Faculty of the Built Environment

Academic Rules

Please refer to the Academic Rules for program 2200 Master of Architecture (MArch).

2210 Master of Building

MBuild

Typical Duration

2 years

Minimum UOC for Award

96 units of credit

Typical UOC per Session

24 units of credit

Program Description

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. For further information on program requirements and availability, please contact the Faculty of the Built Environment.

Academic Rules

Please refer to the Academic Rules for program 2200 Master of Architecture (MArch).

2220 Master of Landscape Architecture

MLArch

Typical Duration

2 years

Minimum UOC for Award

96 units of credit

Typical UOC per Session

24 units of credit

Program Description

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. For further information on program requirements and availability, please contact the Faculty of the Built Environment.

Academic Rules

Please refer to the Academic Rules for program 2200 Master of Architecture (MArch).

2230 Master of Town Planning

MTP

Typical Duration

2 years

Minimum UOC for Award

96 units of credit

Typical UOC per Session

24 units of credit

Program Description

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. For further information on program requirements and availability, please contact the Faculty of the Built Environment.

Academic Rules

Please refer to the Academic Rules for program 2200 Master of Architecture (MArch).

See above.

2240 Master of the Built Environment

MEnv

Typical Duration

2 years

Minimum UOC for Award

96 units of credit

Typical UOC per Session

24 units of credit

Program Description

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. For further information on program requirements and availability, please contact the Faculty of the Built Environment.

Academic Rules

Please refer to the Academic Rules for program 2200 Master of Architecture (MArch).

Program Rules and Information - Coursework Degrees

The Faculty of the Built Environment welcomes enquiries from students who wish to pursue graduate coursework programs as detailed below. Prospective students should consult the Program Director to discuss their interests prior to making a formal application.

8142 Master of Architecture

MArch

Typical Duration

1 year

Minimum UOC for Award

48 units of credit

Typical UOC per Session

24 units of credit

Program Director: Professor Xing Ruan

Program Description

The Master of Architecture Program at UNSW offers three majors providing advanced understanding in Architectural Design, History/Theory and Computing. The Program is suitable for generalists as well as specialist members of the design professions wishing to develop significant leadership potentials in the profession, as well as pathways leading towards academic and research careers. The Program is cosmopolitan in its scope, and Asian-Pacific in its emphasis.

- **Architectural Design** (plan code **ARCHBS8142**)
- **Architectural History/Theory** (plan code **ARCHDS8142**)
- **Architectural Computing** (plan code **ARCHAS8142**)

The Master of Architecture by coursework degrees are of one year full-time or two years part-time duration, and students may enrol either at the beginning or the middle of the year.

This is a post-professional degree and is not accredited for architectural registration.

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 minimum requirement is a 4 year full-time bachelor or equivalent degree, and additional requirements apply to different specialisations as described below. Students must nominate their proposed major at the time of application i.e. Design, History and Theory or Computing.

Architectural Design Major

Applicants must have a recognised professional degree in architecture, a high level of performance in design studio and design related subjects, and must submit a design portfolio demonstrating the range and quality of their design experience. One year of post-graduation professional experience in architectural practice, as well as personal and employer declarations about their role in the work are desirable.

History/Theory Major

Applicants must outline their interest in the field and the benefits to be gained from this Major in a written statement.

Computing Major

Applicants are assumed to have a working knowledge and experience with the principal computing tools used in architectural design practice, specifically CAD, 3D modelling and visualisation. Where students do not have those skills upon entry to the program, it is strongly recommended that they take an additional non-award course in order to acquire that base knowledge. Please note that additional tuition fees apply to non-award courses.

Program Objectives and Learning Outcomes

Please contact the Faculty of Built Environment for information regarding the Program Objectives and Learning Outcomes.

Program Structure

Students undertaking the MArch Program are required to nominate their plan of study before commencement. They must then complete a set of prescribed core courses in that area of study, supplemented by elective courses to bring their total units of credit (UOC) to 48 for the degree.

The degree may be commenced in either session of the academic year subject to the availability of places in the program 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.

Notwithstanding any of the above, whether courses are offered in any one academic session will depend on student numbers. Students must therefore plan their programs in consultation with the Program Director or Coordinators.

Master of Architecture (Architectural Design) (program 8142, plan code ARCHBS8142)

Students in the MArch (Arch Des) program must undertake core courses totalling 36 UOC and electives totalling 12 UOC. In special cases, students may take another combination of courses towards their core with the agreement of the Program Director.

The MArch (Arch Des) 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 6 UOC and elective courses are 6 UOC.

Candidates wishing to undertake the MArch (Arch Des) program on a part-time basis must note that the studio-based design courses (Architectural Design Project 1 & 2) are session-specific courses and must be completed in the session in which they are scheduled.

Plan Structure

Students with an architecture or design related professional degree pursuing the Design major must take the following combination of courses:

Core Courses:

ARCH7103	Architectural Design Project 1	(12 UOC)
ARCH7104	Architectural Design Project 2	(12 UOC)

Core Options:

Students select 12 UOC from this list.

ARCH7304	Architecture and the City	(6 UOC)
ARCH7305	Theories in History	(6 UOC)
ARCH7306	Theory and Architectural Practice	(6 UOC)
ARCH7307	Architectural Design Strategies	(6 UOC)
ARCH7308	Architectural Design Aesthetics	(6 UOC)
ARCH7309	Architectural Writing and Criticism	(6 UOC)

Electives:

Students take 12 UOC of electives. These can be from the recommended electives or core option courses not taken as core, or with the approval of the Program Director, other courses offered within the Faculty or the University.

Recommended Elective courses

BENV7140	Multimedia on the Web	(6 UOC)
BENV7141	Multimedia in Design Presentation	(6 UOC)
BENV7142	CAD and Visualisation	(6 UOC)
BENV7143	Advanced Visualisation	(6 UOC)
BENV7149	Design Collaboration using a Building Information Model	(6 UOC)
BENV7190	People and Urban Space	(6 UOC)
SUSD0001	Sustainable Development and the Urban Environment	(6 UOC)
SUSD0002	Resources, Materials and Sustainability	(6 UOC)
SUSD0003	Energy and the Built Environment	(6 UOC)
SUSD0004	Human Factors, Sustainability and Habitability	(6 UOC)
UDES0004	History and Theory of Urban Development And Design	(6 UOC)
UDES0009	Urban Landscape and Heritage	(6 UOC)

Master of Architecture (History and Theory) (program 8142, plan code ARCHDS8142)

Plan Structure

Students pursuing the History and Theory Major take the following combination of courses.

Core Course:

ARCH7004	Architectural Research Project	(12 UOC)
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Core Options:

Students select 24 UOC from this list.

ARCH7304	Architecture and the City	(6 UOC)
ARCH7305	Theories in History	(6 UOC)
ARCH7306	Theory and Architectural Practice	(6 UOC)
ARCH7307	Architectural Design Strategies	(6 UOC)
ARCH7308	Architectural Design Aesthetics	(6 UOC)
ARCH7309	Architectural Writing and Criticism	(6 UOC)

Electives:

Listed Elective courses, or Core option courses not taken as Core, totalling 12 UOC, or with the approval of the Program Director other courses totalling up to 12 UOC within the Faculty or the University.

Elective Courses

BENV7149	Design Collaboration using a Building Information Model	(6 UOC)
BENV7190	People and Urban Space	(6 UOC)
SUSD0001	Sustainable Development and the Urban Environment	(6 UOC)
SUSD0002	Resources, Materials and Sustainability	(6 UOC)
SUSD0003	Energy and the Built Environment	(6 UOC)
SUSD0004	Human Factors, Sustainability and Habitability	(6 UOC)
UDES0004	History and Theory of Urban Development and Design	(6 UOC)
UDES0009	Urban Landscape and Heritage	(6 UOC)

Master of Architecture (Architectural Computing) (program 8142, plan code ARCHAS8142)

Plan Structure

Students in the MArch (Arch Comp) program must undertake core courses totalling 36 UOC and electives totalling 12 UOC. All students must complete a Graduate Research Project as part of the core, but are able to select the remaining core courses (4 courses at 6 UOC each) from the

prescribed list of postgraduate computing courses shown below. Elective courses (2 courses at 6 UOC) may be selected from the same list, or from any graduate course offered in the Faculty (except for 'BENV7142 CAD and Visualisation' which embodies assumed knowledge for this program and is only available as a non award course), or with the permission of the Program Director, from any postgraduate course offered by the University of New South Wales or appropriate course offered by another institution.

Note that students with a professional architectural background, or equivalent design experience, may be permitted to take a Design Application course for the MArch (Arch Design) major, in lieu of 12 UOC of electives in this major.

Core course

ARCH7003 Graduate Research project (12 UOC)

Core Options

(at least 4 core courses must be selected from this group to fulfill the program requirements)

ARCH7204	Design Computing Theory	(6 UOC)
ARCH7205	Computer Graphics Programming	(6 UOC)
ARCH7206	CAD Management and Information Technology	(6 UOC)
BENV7140	Multimedia on the Web	(6 UOC)
BENV7141	Multimedia in Design Presentation	(6 UOC)
BENV7143	Advanced Visualisation	(6 UOC)
BENV7147	Information Management Systems	(6 UOC)
BENV7148	Object Based CAD Modelling	(6 UOC)
BENV7149	Design Collaboration using a Building Information Model	(6 UOC)

Recommended Electives

ARCH7307	Architectural Design Strategies	(6 UOC)
BENV7190	People and Urban Space	(6 UOC)
CONS0005	Computers in Construction Management	(6 UOC)
SUSD0001	Sustainable Development and the Urban Environment	(6 UOC)
SUSD0002	Resources, Materials and Sustainability	(6 UOC)
SUSD0003	Energy & the Built Environment	(6 UOC)
SUSD0004	Human Factors, Sustainability & Habitability	(6 UOC)
UDES0004	History and Theory of Urban Development and Design	(6 UOC)
UDES0009	Urban Landscape and Heritage	(6 UOC)

Note: Not all computing courses are offered every semester or even in any given year. Applicants are advised to check the Faculty website for timetable information to get an idea of the mix of courses being offered at any point in time. There are, however, always at least two computing courses available in each semester to accommodate these program requirements.

Academic Rules

Advanced Standing

At least 50% of program requirements must be completed at UNSW for the award of a UNSW postgraduate coursework degree or diploma in the Faculty of the Built Environment. Advanced Standing may be granted for completed or partially completed postgraduate awards from UNSW or from another institution. When considering the granting of advanced standing on the basis of previous postgraduate study at another institution, the program authority will take into account the quality of the institution and the quality, level and content of postgraduate courses previously undertaken.

8124 Master of Construction Project Management in Professional Practice

MCPM (Prof Practice)

Typical Duration

1.5 years

Minimum UOC for Award

72 units of credit

Typical UOC per Session

24 units of credit

Program Director: Program Director: Dr Patrick XW Zou

Program Description

Management of Construction Projects embraces the principles of project management and applies them across different phases of the construction

project development cycle to achieve successful project outcomes in terms of time, cost, quality, safety, and sustainability. This three-tiered program (Graduate Certificate Master and Master in Professional Practice) has been designed to provide excellent opportunities to students for advanced study in construction project management and economics in either full time or part time modes. The program aims at improving proficiency of practitioners in the construction industry to meet current and future challenges. The program allows students to learn not only the general management and project management principles and techniques, but also to apply these principles and techniques to the management of large-scale and complex construction projects specifically.

Career Opportunities

The programs are appropriate for people seeking careers in construction management, project management, design management, value management and international project management. It also provides valuable education to those seeking a broader base to careers in architecture, engineering, property development, urban planning and facilities management.

Program Objectives and Learning Outcomes

Please contact the Faculty of the Built Environment for information regarding the Program Objectives and Learning Outcomes.

Program Structure

To qualify for the Master of Construction Project Management in Professional Practice program students will be required to complete a program of study totaling 72 UOC (as adjusted by advanced standing provisions). Students must complete 8 core courses plus 2 elective courses. In conventional mode the Master in Professional Practice degree requires three full-time sessions of study

Core Courses

CONS0002	Human Resources Management	(6 UOC)
CONS0007	Principles and Practice of Management	(6 UOC)
CONS0009	Construction Planning and Control	(6 UOC)
CONS0010	Contracts Management and Law	(6 UOC)
CONS0013	Construction Management Applications	(6 UOC)
CONS0014	Project Management	(6 UOC)
CONS0020	Research Project	(18 UOC)
SUSD0006*	Research Methods	(6 UOC)

**In exceptional cases, where a student can demonstrate his/her research skills with evidence, the Research Methods Course may be exempted and substituted with an elective course.*

Elective Courses

CONS0003	Project Quality Management	(6 UOC)
CONS0005	Computers in Construction Management	(6 UOC)
CONS0011	Cost Planning and Analysis	(6 UOC)
CONS0015	Building Construction	(6 UOC)
CONS0016	Project Risk Management	(6 UOC)
REST0004	Property Finance	(6 UOC)
REST0007	Facilities and Asset Management	(6 UOC)
SUSD0002	Resources, Materials and Sustainability	(6 UOC)

Elective Courses Alternatives

Candidates enrolled in the Master or Master in Professional Practice Programs may choose courses up to 12 UOC from other postgraduate programs in FBE subject to Program Director's approval.

Course Sequence

Note there are no pre-requisites in the program core or elective courses.

Elective courses with enrolment numbers below the Faculty determined threshold might not be offered. Some elective courses may be offered only once over two years.

Academic Rules

For academic rules relating to this program, please contact the Faculty of the Built Environment.

Admission Requirements

Admission is available to students with an appropriate degree or equivalent from an approved university in relevant fields such as building, construction management, construction economics, civil engineering, mining engineering, architecture, urban planning, quantity surveying, property development, real estate, or equivalent, together with evidence of a capacity to achieve average credit or better grades consistently in their first degree.

Professional experience is desirable and considered as an advantage in admission selection.

Students who have completed the requirements the Master of Construction Project Management may apply to upgrade to the Master of Construction Project Management in Professional Practice.

Advanced Standing

For Master and Master in Professional Practice Programs

At least 50% of program requirements must be completed at UNSW for the award of a UNSW postgraduate coursework degree or diploma in the Faculty of the Built Environment. Advanced Standing may be granted for completed or partially completed postgraduate awards from UNSW or from another institution. When considering the granting of advanced standing on the basis of previous postgraduate study at another institution, the program authority will take into account the quality of the institution and the quality, level and content of postgraduate courses previously undertaken.

A postgraduate coursework student enrolled in an articulated program may apply to progress from the Graduate Certificate to Masters level with full credit for courses completed in earlier programs in the sequence, provided that the earlier awards are not conferred.

Applications for progression through a particular articulated program will be refused if six years have elapsed since completion for the earlier award.

8123 Master of Construction Project Management

MCPM

Typical Duration

1 year

Minimum UOC for Award

48 units of credit

Typical UOC per Session

24 units of credit

Program Director: Program Director: Dr Patrick XW Zou

Program Description

Management of Construction Projects embraces the principles of project management and applies them across different phases of the construction project development cycle to achieve successful project outcomes in terms of time, cost, quality, safety, and sustainability. This three-tiered program (Graduate Certificate Master and Master in Professional Practice) has been designed to provide excellent opportunities to students for advanced study in construction project management and economics in either full time or part time modes. The program aims at improving proficiency of practitioners in the construction industry to meet current and future challenges. The program allows students to learn not only the general management and project management principles and techniques, but also to apply these principles and techniques to the management of large-scale and complex construction projects specifically.

Career Opportunities

The programs are appropriate for people seeking careers in construction management, project management, design management, value management and international project management. It also provides valuable education to those seeking a broader base to careers in architecture, engineering, property development, urban planning and facilities management.

Program Objectives and Learning Outcomes

Please contact the Faculty of the Built Environment for information regarding the Program Objectives and Learning Outcomes.

Program Structure

To qualify for the Master of Construction Project Management program students will be required to complete a program of study totaling 48 UOC (as adjusted by advanced standing provisions). Students must complete six core courses and two elective courses. In conventional mode the degree requires two full-time sessions of study.

Core Courses

CONS0002	Human Resources Management	(6 UOC)
CONS0007	Principles and Practice of Management	(6 UOC)
CONS0009	Construction Planning and Control	(6 UOC)

CONS0010	Contracts Management and Law	(6 UOC)
CONS0013	Construction Management Applications	(6 UOC)
CONS0014	Project Management	(6 UOC)

Elective Courses

CONS0003	Project Quality Management	(6 UOC)
CONS0005	Computers in Construction Management	(6 UOC)
CONS0011	Cost Planning and Analysis	(6 UOC)
CONS0015	Building Construction	(6 UOC)
CONS0016	Project Risk Management	(6 UOC)
REST0004	Property Finance	(6 UOC)
REST0007	Facilities and Asset Management	(6 UOC)
SUSD0002	Resources, Materials and Sustainability	(6 UOC)

Note: Not all elective courses are available in any one year.

Academic Rules

For academic rules relating to this program, please contact the Faculty of the Built Environment.

Admission Requirements

Admission is available to students with an appropriate degree or equivalent from an approved university in relevant fields such as building, construction management, construction economics, civil engineering, mining engineering, architecture, urban planning, quantity surveying, property development, real estate, or equivalent, together with evidence of a capacity to achieve average credit or better grades consistently in their first degree. Professional experience is desirable and considered as an advantage in admission selection.

Advanced Standing

For Master and Master in Professional Practice Programs

At least 50% of program requirements must be completed at UNSW for the award of a UNSW postgraduate coursework degree or diploma in the Faculty of the Built Environment. Advanced Standing may be granted for completed or partially completed postgraduate awards from UNSW or from another institution. When considering the granting of advanced standing on the basis of previous postgraduate study at another institution, the program authority will take into account the quality of the institution and the quality, level and content of postgraduate courses previously undertaken.

A postgraduate coursework student enrolled in an articulated program may apply to progress from the Graduate Certificate to Masters level with full credit for courses completed in earlier programs in the sequence, provided that the earlier awards are not conferred.

Applications for progression through a particular articulated program will be refused if six years have elapsed since completion for the earlier award.

7123 Graduate Certificate in Construction Project Management

GradCert CPM

Typical Duration

0.5 year

Minimum UOC for Award

24 units of credit

Typical UOC per Session

24 units of credit

Program Director: Program Director: Dr Patrick XW Zou

Program Description

Management of Construction Projects embraces the principles of project management and applies them across different phases of the construction project development cycle to achieve successful project outcomes in terms of time, cost, quality, safety, and sustainability. This three-tiered program (Graduate Certificate Master and Master in Professional Practice) has been designed to provide excellent opportunities to students for advanced study in construction project management and economics in either full time or part time modes. The program aims at improving proficiency of practitioners in the construction industry to meet current and future challenges. The program allows students to learn not only the general management and project management principles and techniques, but also to apply these principles and techniques to the management of large-scale and complex construction projects specifically.

Career Opportunities

The programs are appropriate for people seeking careers in construction management, project management, design management, value management and international project management. It also provides valuable education to those seeking a broader base to careers in architecture, engineering, property development, urban planning and facilities management.

Program Objectives and Learning Outcomes

Please contact the Faculty of the Built Environment for information regarding the Program Objectives and Learning Outcomes.

Program Structure

To qualify for the Graduate Certificate of Construction Project Management program students will be required to complete a program of study totaling 24 UOC. Students must complete 4 courses from the Core Courses. Subject to satisfactory performance, students may continue with their postgraduate studies by subsequently applying for enrolment in a Master of Construction Project Management degree program and may be granted advanced standing.

Core Courses

CONS0002	Human Resources Management	(6 UOC)
CONS0007	Principles and Practice of Management	(6 UOC)
CONS0009	Construction Planning and Control	(6 UOC)
CONS0010	Contracts Management and Law	(6 UOC)
CONS0013	Construction Management Applications	(6 UOC)
CONS0014	Project Management	(6 UOC)

Academic Rules

For academic rules relating to this program, please contact the Faculty of the Built Environment.

Admission Requirements

The Graduate Certificate program is suited to practicing personnel in relevant fields including building, construction management, construction economics, civil engineering, mining engineering, project management, quantity surveying, urban planning, real estate, or equivalent, who wish to enhance their career opportunities. This program also provides an opportunity to those who have relevant professional experience but limited formal qualifications to study at the graduate level. To qualify for an entry to the Graduate Certificate in Construction Project Management, the applicant needs to have:

- A recognised Bachelor degree, OR
- A recognised college or university diploma with minimum 3 years working experience, OR
- A recognised professional qualification plus 5 years working experience.

Applicants without formal qualifications may be required to provide examples of written work that display evidence of critical faculty, a degree of rigour in argument and sense of protocols of scholarship.

Subject to satisfactory performance at a credit level or better average grades, students may continue with their postgraduate studies by subsequently enrolling in a Master of Construction Project Management degree program and may be granted advanced standing.

Advanced Standing

No advanced standing nor exemption will be given for the Graduate Certificate Program.

8127 Master of Property and Development

MPD

Typical Duration

1.5 years

Minimum UOC for Award

72 units of credit

Typical UOC per Session

24 units of credit

Program Director: Dr Jinu Kim

Program Description

Each year the nation commits more than half its capital outlays to land development, building and infrastructure. The real estate industry is rapidly moving from essentially responding to client requirements for structures

to providing business solutions and sustainable communities. This makes property a key sector of the economy. The property and development program offered at UNSW is designed to meet the needs of those who wish to work at the cutting edge of these changes, and assemble a suite of courses that stretch their imaginations and capabilities.

In a collaborative arrangement between the Faculty of the Built Environment, peak industry associations and other Faculties, UNSW offers a Master of Property and Development to meet these objectives. The program should appeal to people seeking careers in development, investment and management of property and infrastructure and the professions that serve this industry. It also provides valuable education to those seeking a broader base to careers in architecture and landscape architecture, construction, engineering, urban planning and law.

In response to the rapid changes in the field of property, this program offers four areas of specialisation: a generalist Master of Property and Development or specialisations in Valuation, Investment and Property or Asset and Facilities Management.

Career Opportunities and Accreditation

Graduates from this program have an opportunity to engage the property profession and Industry in a wide range of activities, such as valuation, property development, property analysis, property finance, property agency, property management, and asset and facilities management. The program also provides for graduates to become members of professional institutions such as the Australian Property Institute (API) and the Royal Institution of Chartered Surveyors (RICS), subject to the relevant institutions designated practical experience requirements.

Program Objectives and Learning Outcomes

Please contact the Faculty of the Built Environment for information regarding the Program Objectives and Learning Outcomes.

Program Structure

Students can undertake a generalist Master of Property and Development (plan code **RESTAS8127**), or choose one of the following specialisations:

Development and Investment (plan code **RESTBS8127**)

Assets and Facilities Management (plan code **RESTCS8127**)

Valuation (plan code **RESTDS8127**)

To qualify for the Master of Property and Development programs students will be required to complete a program of study totaling 72 UOC as adjusted by advanced standing provisions. Since most courses are of 6 UOC, students must usually complete 12 courses. Each course involves about 120 hours of work on the part of a student. Modes of delivery vary. Most require attendance at classes in either block or week-by-week mode. The variety of delivery forms provides flexibility and opportunity to undertake study outside the usual sessions. In conventional mode the degree requires three full-time sessions of study, however, the variety of modes of delivery enables some pathways through these programs to be completed within twelve months. This is only possible for students beginning their studies in the first session of the academic year.

Master of Property and Development (Generalist program, plan RESTAS8127)

Core Courses

SUSD0001	Sustainable Development and the Urban Environment	(6 UOC)
BENV7720	Land and Environment Law	(6 UOC)
REST0006	Property Development	(6 UOC)
BENV7721	Planning and Land Policy	(6 UOC)
REST0010	Modern Property	(6 UOC)
REST0001	Property Investment	(6 UOC)

Elective Courses

Any 36 UOC from UNSW postgraduate programs can be selected subject to Program Director's approval.

Students may take a 12 UOC research project in place of 12 UOC of electives subject to Program Director's approval.

Master of Property and Development in Development and Investment (plan RESTBS8127)

Core Courses

SUSD0001	Sustainable Development and the Urban Environment	(6 UOC)
BENV7720	Land and Environment Law	(6 UOC)
REST0006	Property Development	(6 UOC)

BENV7721	Planning and Land Policy	(6 UOC)
REST0001	Property Investment	(6 UOC)
REST0010	Modern Property	(6 UOC)

Extended Core Courses

To enable students to graduate with the Development and Investment specialisation they must complete the courses indicated below:

CONS0014	Project Management	(6 UOC)
CONS0015	Building Construction	(6 UOC)
REST0004	Property Finance	(6 UOC)
UDES0006	Case Studies in Urban Development and Design	(6 UOC)

CONS0015 Building Construction must be taken by students with an undergraduate degree NOT in a Built Environment discipline. Students from a Built Environment background do not need to complete this course. The Program Director will make this determination.

Elective Courses

Students from a Built Environment background are required to complete 18 UOC of electives. Students from a non-Built Environment background are required to complete 12 UOC of electives only as they are taking an additional extended core course, CONS0015 Building Construction. Electives can be selected from any UNSW postgraduate program subject to the Program Director's approval.

Students may take a 12 UOC research project in place of 12 UOC of electives subject to Program Director's approval.

Master of Property and Development in Asset and Facilities Management (plan RESTCS8127)**Core Courses**

SUSD0001	Sustainable Development and the Urban Environment	(6 UOC)
BENV7720	Land and Environment Law	(6 UOC)
REST0006	Property Development	(6 UOC)
BENV7721	Planning and Land Policy	(6 UOC)
REST0001	Property Investment	(6 UOC)
REST0010	Modern Property	(6 UOC)

Extended Core Courses

To enable students to graduate with the Asset and Facility Management specialisation they must complete the courses indicated below:

CONS0015	Building Construction	(6 UOC)
SUSD0003	Energy & the Built Environment	(6 UOC)
SUSD0004	Human Factors, Sustainability and Habitability	(6 UOC)
REST0007	Asset and Facilities Management	(6 UOC)

CONS0015 Building Construction must be taken by students with an undergraduate degree NOT in a Built Environment discipline. Students from a Built Environment background do not need to complete this course. The Program Director will make this determination.

Elective Courses

Students from a Built Environment background are required to complete 18 UOC of electives. Students from a non Built Environment background are required to complete 12 UOC of electives only as they are taking an additional extended core course, CONS0015 Building Construction. Electives can be selected from any UNSW postgraduate program subject to the Program Director's approval.

Students may take a 12 UOC research project in place of 12 UOC of electives subject to Program Director's approval.

Master of Property and Development in Valuation (plan RESTDS8127)**Core Courses**

REST0004	Property Finance	(6 UOC)
REST0005	Valuation 1	(6 UOC)
BENV7720	Land and Environment Law	(6 UOC)
REST0015	Statutory Valuation	(6 UOC)
REST0006	Property Development	(6 UOC)
REST0017	Urban Economics	(6 UOC)

Extended Core Courses

To enable students to graduate with the Valuation specialisation they must complete the courses below:

CONS0015	Building Construction	(6 UOC)
REST0016	Specialist Valuation	(6 UOC)
REST0010	Modern Property	(6 UOC)
REST0001	Property Investment	(6 UOC)

The Building Construction course must be taken in place of an elective by students from a non Built Environment background.

Elective Courses

Students from a Built Environment background are required to complete 18 UOC of electives. Students from a non Built Environment background are required to complete 12 UOC of electives only as they are taking an additional extended core course, CONS0015 Building Construction. Electives can be selected from any UNSW postgraduate program subject to the Program Director's approval.

Students may take a 12 UOC research project in place of 12 UOC of electives subject to Program Director's approval.

Academic Rules**Admission Requirements**

Admission is available to students with an appropriate degree or equivalent from an approved university in relevant fields such as building, construction management, construction economics, civil engineering, mining engineering, material engineering, architecture, urban planning, quantity surveying, property development, real estate, or equivalent, together with evidence of performance at credit level or better average grades in their first degree. Documented evidence of professional experience is desirable and is considered as an advantage in selecting applicants.

Advanced Standing

At least 50% of program requirements must be completed at UNSW for the award of a UNSW postgraduate coursework degree or diploma in the Faculty of the Built Environment. Advanced Standing to a maximum of 50% of Program requirements may be granted for completed or partially completed postgraduate awards from UNSW or from another institution. When considering the granting of advanced standing on the basis of previous postgraduate study at another institution, the program authority will take into account the quality of the institution and the quality, level and content of postgraduate courses previously undertaken.

8131 Master of Urban Development and Design**MUDD****Typical Duration**

1.5 years

Minimum UOC for Award

72 units of credit

Typical UOC per Session

24 units of credit

Program Director: Dr Bruce Judd

Program Description

A one calendar year (three sessions) full-time or two calendar year (five sessions) 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 full time program involves two academic sessions of study plus a summer term and includes a compulsory field project based in a major international city. Alternatively, the recommended part time, two calendar year program involves one year of core and elective lecture/seminar courses followed by one year of design studio and related courses. Graduates of the program are eligible for membership of the Urban Design Chapter of the Planning Institute of Australia (PIA).

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 a field 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.

Program Objectives and Learning Outcomes

The objectives of the MUDD program are to:

- provide a high quality postgraduate education for built environment and related professionals wishing to establish a career in the field of urban design;

- provide an interdisciplinary understanding of the role of urban design within the context of the broader social, economic and environmental aspects of urban development;
- provide an international perspective on urban design with an emphasis on the Asian-Pacific region of which Australia is part through inclusion of a compulsory international field project;
- to provide a balance between theory and practice in urban design through an equal emphasis on lecture/seminar and studio based courses;
- to develop skills in communication of urban design through a variety of media including publications, exhibitions and web based communication;
- provide a pathway to professional accreditation in urban design.

The learning outcomes of the MUDD program are:

- A sound theoretical understanding of the theory and principles of urban design and their relationship to the broader social, economic and environmental urban processes;
- An ability to analyse complex urban environments and the constraints and opportunities these impose on urban development, design and planning;
- A sound understanding of the urban design process including analysis, structure planning, master planning and development of guidelines;
- Development of a 'vocabulary' of urban design paradigms and case studies and their use in the design process;
- Enhanced design skills appropriate to the disciplinary background of students;
- An ability to work in a multidisciplinary design teams;
- Well-developed urban design communication skills, both written, verbal and visual;
- Ability to apply urban design skills in an another (international) cultural context;
- Employability within a private consulting firm or government agency involved in urban design practice or administration.

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 program. The nature of contribution to studio-based design projects will be determined according to academic and professional background.

To qualify for the Master of Urban Development degree, students are required to complete eight core courses and one elective course to accumulate a total of 72 UOC.

The compulsory core includes four lecture/seminar based courses, three project based studio courses, and a communications course. The typical pattern for core and elective courses is a two hour lecture/seminar format over 14 weeks. Studio courses typically involve two three hour studio sessions per week over 14 weeks with the exception of the compulsory International Field Project which requires full time attendance for two weeks in a studio location overseas.

Elective opportunities are limited to Session 1 for full-time students. Students are encouraged to select electives from those listed below which have been specifically selected for the program. However students may be permitted, with the approval of the Program Director, to select electives from other programs offered within the Faculty or other faculties of the University.

The Summer Term includes case studies of major urban projects (UDES0006), the International Field Project studio (UDES0003), and a communications course (UDES0010) involving the preparation of an annual exhibition and publication.

Program of Study for Full-time Candidates:

Session 1

UDES0001	Urban Design Studio	(12 UOC)
UDES0004	History and Theory of Urban Development and Design	(6 UOC)

Electives (6 UOC)

Session 2

UDES0008	Planning and Urban Development	(6 UOC)
UDES0009	Urban Landscape & Heritage	(6 UOC)
UDES0002	Urban Design Studio	(12 UOC)

Summer Term

UDES0010	Communication in Urban Design	(6 UOC)
UDES0003	Urban Design Studio	(12 UOC)
UDES0006	Case Studies in Urban Development and Design	(6 UOC)

Recommended Program of Study for Part-time Candidates:

Year 1

Session 1

UDES0004	History and Theory of Urban Development and Design	(6 UOC)
Electives		(6 UOC)

Session 2

UDES0008	Planning and Urban Development	(6 UOC)
Electives		(6 UOC)

Year 2

Session 1

UDES0001	Urban Design Studio	(12 UOC)
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Session 2

UDES0002	Urban Design Studio	(12 UOC)
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Summer Term

UDES0010	Communication in Urban Design	(6 UOC)
UDES0003	Urban Design Studio	(12 UOC)
UDES0006	Case Studies in Urban Development and Design	(6 UOC)

Recommended Elective Courses

ARCH7304	Architecture and the City	(6 UOC)
BENV7142	CAD and Visualisation	(6 UOC)
BENV7143	Advanced Visualisation	(6 UOC)
BENV7148	Object Based CAD Modelling	(6 UOC)
CONS0003	Project Quality Management	(6 UOC)
CONS0007	Principles and Practice of Management	(6 UOC)
REST0004	Property Finance	(6 UOC)
REST0010	Modern Property	(6 UOC)
SUSD0001	Sustainable Development and the Urban Environment	(6 UOC)
SUSD0004	Human Factors, Sustainability and Habitability	(6 UOC)

Note: Most elective courses are offered in only one session per year. Some courses may not be offered every year. Additional electives may also be offered in a particular session. Students are advised to contact the Program Director prior to enrolment for information about the availability of courses in a particular session.

Academic Rules

Advanced Standing

At least 50% of program requirements must be completed at UNSW for the award of a UNSW postgraduate coursework degree or diploma in the Faculty of the Built Environment. Advanced Standing to a maximum of 50% of program requirements may be granted for completed or partially completed postgraduate awards from UNSW or from another institution. When considering the granting of advanced standing on the basis of previous postgraduate study at another institution, the program authority will take into account the quality of the institution and the quality, level and content of postgraduate courses previously undertaken.

8132 Master of the Built Environment (Sustainable Development)

MBAEnv(SustDev)

Typical Duration

1.5 years

Minimum UOC for Award

72 units of credit

Typical UOC per Session

24 units of credit

Program Director: Associate Professor Deo Prasad

Program Description

The built environment is the physical expression of economic and social development of society. Creating sustainable built environments that satisfy environmental, social and economic objectives are widely accepted in principle, and a degree of understanding about sustainability has developed in many countries. Yet achieving sustainability is a complex

task and the challenge has moved from sustainability education i.e. the need to inform about the need, to education *for* sustainability i.e. how to implement sustainable development programs. There is a growing body of principles and techniques to help achieve this in relation to the built environment, and there is still a lot to learn. Education for sustainability is about empowering professionals to take on the challenge. It is transformative rather than just transmissive; it is holistic and seeks critical thinking. The task begins with developing ways of thinking as well as considering the differing value systems and cultures that influence the ways communities shape their built environments. The Master of the Built Environment (Sustainable Development) at UNSW provides the opportunity to explore these challenges in depth and adapt them to the needs of diverse professional and cultural settings. Australia offers a useful setting in which to explore these issues and at the same time undertake comparative study. Sydney, Australian's global city, is a hybrid of European, American and Asian influences. Its urban economy blends economic development with the protection of its biodiversity and scenic environment, together with a concern for social equity and lifestyle quality that operates in a distinctive structure of governance, one that allows a sovereign state within a federation to manage urban and rural development. This program takes a global view and places it in a local context. It provides tools for thought, analysis and decision making to achieve a sustainable built environment.

Admission Requirements

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 program, subject to satisfactory performance.

In exceptional circumstances other academic qualifications may also be considered.

Program Objectives and Learning Outcomes

Please contact the Faculty of Built Environment for information regarding the Program Objectives and Learning Outcomes.

Program Structure

To qualify for the Master of the Built Environment (Sustainable Development) students will be required to complete a program of study totalling 72 units of credit (UOC) as adjusted by advanced standing provisions. Since most courses apart from the Graduate Project and Design Studio are of 6 UOC, students must usually complete 8 courses in addition to the project. Each course involves about 160 hours of work on the part of a student. Modes of delivery vary with some courses requiring attendance at classes in either block or week-by-week mode. The variety of delivery forms provides flexibility and opportunity to undertake study outside the main semesters. In conventional mode the degree requires three full-time sessions of study. The Masters program requires students to complete:

- Four core courses totalling 24 UOC
- A research project totalling 18 UOC (in which case an additional core SUSD0006 Research Design is needed) OR
- A Design Studio course totalling 12 UOC
- Three to six electives totalling 18 to 36 UOC depending on the research or design pathway. Students electing to take a research project rather than a studio course must complete a course in research methods relevant to their project before the final semester of enrolment in that project. This requirement has the effect of reducing the electives for such students from 36 UOC to 18 UOC.

Core Group

SUSD0001	Sustainable Development and the Urban Environment	(6 UOC)
SUSD0002	Resources, Materials and Sustainability	(6 UOC)
SUSD0003	Energy & the Built Environment	(6 UOC)
SUSD0004	Human Factors, Sustainability and Habitability	(6 UOC)

Project

SUSD0005	Graduate Project	(18 UOC)
or		
SUSD0007	Design Studio	(12 UOC)

One of the following courses may be substituted for SUSD0007 on arrangement with the Program Director.

ARCH7103	Architecture Design Project 1	(12 UOC)
ARCH7104	Architecture Design Project 2	(12 UOC)

UDES0002	Urban Design Studio	(12 UOC)
UDES0003	Urban Design Studio	(12 UOC)

SUSD0006 Research Design is compulsory for those students choosing to undertake SUSD0005 Graduate Research Project.

Below are the recommended electives. Students may undertake other relevant postgraduate courses with permission from the Program Director. Such courses are not limited to those offered by UNSW. The University has formal links with 17 Australian and overseas Universities through the U21 Program, to facilitate study at other institutions. Within UNSW, the following faculties and schools may offer relevant courses: Faculty of Arts and Social Sciences, Institute of Environmental Studies, School of Civil and Environmental Engineering and School of Biological, Earth and Environmental Sciences.

Electives

The following are some recommended electives. Please check the FBE website for a complete, current list of electives.

BENV7190	People and Urban Space
BENV7191	Urban heritage Conservation
BENV7720	Land and Environment Law
CONS0014	Project Management
GBAT9103	Environmental Management
GEOH9011	Environmental Impacts Assessment
GEOH9015	Population, Health and Environment
GEOH9018	Transport Applications of Geographical Information Systems
REST0006	Property Development
REST0007	Facilities Management
UDES0006	Case Studies in Urban Development and Design

Note: Some electives may not be offered every year.

All courses are 6 UOC unless otherwise stated.

The sequence of courses is governed by prerequisites for some courses.

Note also that with the agreement of the Program Director suitable postgraduate electives may be selected from other faculties at UNSW, in particular:

- Institute of Environmental Studies
- School of Civil and Environmental Engineering
- School of Arts and Social Sciences
- School of Biological, Earth and Environmental Sciences

Academic Rules

Advanced Standing

At least 50% of program requirements must be completed at UNSW for the award of a UNSW postgraduate coursework degree or diploma in the Faculty of the Built Environment. Advanced Standing may be granted for completed or partially completed postgraduate awards from UNSW or from another institution. When considering the granting of advanced standing on the basis of previous postgraduate study at another institution, the program authority will take into account the quality of the institution and the quality, level and content of postgraduate courses previously undertaken.

5132 Graduate Diploma in Built Environment (Sustainable Development)

GradDipBEnv(SustDev)

Typical Duration

1 year

Minimum UOC for Award

48 units of credit

Typical UOC per Session

24 units of credit

Program Director: Associate Professor Deo Prasad

Program Description

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.

This program is an advanced interdisciplinary coursework program which provides opportunities for graduates from a wide range of backgrounds (e.g. 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 program is available to suitably qualified local and international students and provides opportunities for full-time or part-time study.

Admission Requirements

Admission is available to students with a first degree or equivalent from a recognised tertiary institution in any relevant field together with evidence of a capacity to achieve credit level or better grades consistently. Professional experience is also considered in selecting applicants.

Program Objectives and Learning Outcomes

Please contact the Faculty of the Built Environment for information on the Program Objectives and Learning Outcomes.

Program Structure

The Graduate Diploma is a one year full-time or two years part-time postgraduate diploma comprising four core courses and four electives totalling 48 UOC.

Core Courses

SUSD0001	Sustainable Development and the Urban Environment	(6 UOC)
SUSD0002	Resources, Materials and Sustainability	(6 UOC)
SUSD0003	Energy & the Built Environment	(6 UOC)
SUSD0004	Human Factors, Sustainability and Habitability	(6 UOC)

Below are the recommended electives. Students may undertake other relevant postgraduate courses with permission from the Program Director. Such courses are not limited to those offered by UNSW. The University has formal links with 17 Australian and overseas universities through the U21 Program, to facilitate study at other institutions. Within UNSW, the following faculties and schools may offer relevant courses: Faculty of Arts and Social Sciences, Institute of Environmental Studies, School of Civil and Environmental Engineering and School of Biological, Earth and Environmental Sciences.

Electives

The following are some recommended electives. Please check the FBE website for a complete, current list of electives.

BENV7190	People and Urban Space
BENV7191	Urban heritage Conservation
BENV7720	Land and Environment Law
CONS0014	Project Management
GBAT9103	Environmental Management
GEOH9011	Environmental Impacts Assessment
GEOH9015	Population, Health and Environment
GEOH9018	Transport Applications of Geographical Information Systems
REST0006	Property Development
REST0007	Facilities Management
UDES0006	Case Studies in Urban Development and Design

Note: Some electives may not be offered every year.

All courses are 6 UOC unless otherwise stated.

The sequence of courses is governed by prerequisites for some courses.

Note also that with the agreement of the Program Director suitable postgraduate electives may be selected from other faculties at UNSW, in particular:

- Institute of Environmental Studies
- School of Civil and Environmental Engineering
- School of Arts and Social Sciences
- School of Biological, Earth and Environmental Sciences

Academic Rules

Advanced Standing

At least 50% of program requirements must be completed at UNSW for the award of a UNSW postgraduate coursework degree or diploma in the Faculty of the Built Environment. Advanced Standing may be granted for completed or partially completed postgraduate awards from UNSW or from another institution. When considering the granting of advanced

standing on the basis of previous postgraduate study at another institution, the program authority will take into account the quality of the institution and the quality, level and content of postgraduate courses previously undertaken.

Upgrading and Articulation

A postgraduate coursework student enrolled in an articulated program may apply to progress from the Graduate Certificate to Masters level with full credit for courses completed in earlier programs in the sequence, provided that the earlier awards are not conferred. Applications for progression through a particular articulated program will be refused if six years have elapsed since completion for the earlier award.

7332 Graduate Certificate in Built Environment (Sustainable Development)

GradCertBEnv(SustDev)

Typical Duration

1 year

Minimum UOC for Award

24 units of credit

Typical UOC per Session

12 units of credit

Program Director: Associate Professor Deo Prasad

Program Description

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 program is an advanced interdisciplinary coursework program which provides opportunities for graduates from a wide range of backgrounds (e.g. 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.

Admission Requirements

A Bachelor degree or equivalent in an appropriate discipline. In exceptional circumstances other academic qualifications may also be considered.

Please note that the Graduate Certificate is not available to international students as it can only be undertaken on a part-time basis.

Program Objectives and Learning Outcomes

Please contact the Faculty of the Built Environment for information on the Program Objectives and Learning Outcomes.

Program Structure

The Graduate Certificate is comprised of four core courses for a total of 24 units of credit.

SUSD0001	Sustainable Development and the Urban Environment	(6 UOC)
SUSD0002	Resources, Materials and Sustainability	(6 UOC)
SUSD0003	Energy & the Built Environment	(6 UOC)
SUSD0004	Human Factors, Sustainability and Habitability	(6 UOC)

Academic Rules

Advanced Standing

No advanced standing or exemption will be given for the Graduate Certificate Program.

Further Information

Upgrading and Articulation

A postgraduate coursework student enrolled in an articulated program may apply to progress from the Graduate Certificate to Masters level with full credit for courses completed in earlier programs in the sequence, provided that the earlier awards are not conferred. Applications for progression through a particular articulated program will be refused if six years have elapsed since completion for the earlier award.