# SCHOOL OF PHYSICAL SCIENCES

Postgraduate Handbook 2007



Visit us at www.sps.uq.edu.au



#### **IMPORTANT DATES FOR 2007**

#### **First Semester**

Orientation Classes Mid-semester break Classes Revision period Examination period Semester ends

#### **Second Semester**

Classes Mid-semester break Classes Revision period Examination period Semester ends

#### **Summer Semester**

#### **Public Holidays**

New Year's Day Australia Day Good Friday Easter Monday Anzac Day Labour Day Queen's Birthday Exhibition Day Christmas Day Boxing Day Monday 19 Feb - Friday 23 Feb Monday 26 Feb - Thursday 5 April Monday 9 April - Saturday 14 April Monday 16 April - Saturday 2 June Sunday 3 June - Friday 8 June Saturday 9 June - Saturday 23 June Saturday 23 June

Monday 23 July - Saturday 22 Sept Monday 24 Sept - Saturday 29 Sept Monday 1 Oct- Saturday 27 October Monday 28 Oct - Friday 2 November Saturday 3 Nov - Saturday 17 Nov Saturday 17 November

Monday 26 Nov - Saturday 9 Feb 2008

Monday 1 January Thursday 26 January Friday 6 April Monday 9 April Wednesday 25 April Monday 7 May Monday 11 June Wednesday 15 August Tuesday 25 December Wednesday 26 December

# Contents

INTRODUCTION	6
University of Queensland Graduate School School Locations and Members of Staff	7 7 8
RESEARCH HIGHER DEGREES	<b>11</b>
Research Higher Degree (RHD) Structure	13
Postgraduate Student Charter	13
Research Ethics Policy	14
Intellectual Property Policy	15
Plagiarism	16
Guidelines For The School, Advisors And Candidates	17
ADMISSION A prospective candidate should consider the following questions: Minimum Qualifications English Language Requirements (International Students only) Part-time Candidature Employment Restrictions on Full-time Candidates Application Procedures Transfer from Masters by Research Candidature (MPhil) Transfer of PhD candidature from another Institution Students with a Disability Financial Assistance Extensions to Scholarships Employment Other Funding Tutoring Finance Matters Recreation Leave	25 27 27 28 28 29 29 30 30 30 31 32 36 37 37 37 38 38
CANDIDATURE	<b>39</b>
Before Enrolling	40
Enrolment	40
Confirmation of Candidature	41
Poster Day	44
Progress Reports	44
Variations to Candidature	45
<b>THESES</b>	<b>49</b>
Preparation of a Thesis	50
Writing a Thesis	50

Thesis Preparation and Binding	51
Examination	53
COURSEWORK DEGREES	<b>56</b>
FEE-HELP (Higher Education Loans Programme)	57
Graduate Certificate in Science (Gcsc)	58
Graduate Diploma in Science (Gdipsc)	59
Master of Science (Msc)	60
Master of Science Program List	61
Field of Study - Financial Mathematics	61
Field of Study — Mathematics	63
Field of Study — Physics	65
Field of Study — Statistics	67
Master of Mineral Resources (Mminres)	69
GENERAL INFORMATION Alcohol on Campus Library Photocopying from Books and Journals Seminars Email Forwarding Occupational Health and Safety University Health Service Accidents on Campus Loss and Theft Smoking Fire First Aid	<b>72</b> 73 73 73 74 74 75 75 76 76 76 76 77 77

The information provided in this handbook supplements, but does not replace the information on rules and procedures published in the official 2007 Program and Course Information web page and on the Graduate School web page www.uq.edu.au/grad-school.

Whilst all due care has been taken in compiling this publication any conflict between the information provided in this handbook and the information provided in the Official University of Queensland publications, the latter will take precedence.

# INTRODUCTION



# The School of Physical Sciences

The School of Physical Sciences comprises the Disciplines of Earth Sciences, Mathematics and Physics and became a school in 2000 after a restructure of the Engineering, Physical Sciences & Architecture (EPSA) Faculty.

The School of Physical Sciences employs approximately 50 full-time academic staff at lecturer level or above, supported by 18 administrative and technical staff and a number of research staff.

The School offers postgraduate qualifications by research or coursework, and is actively seeking to expand both types of postgraduate enrolments.

There are two research programs:

- Master of Philosophy (MPhil);
- Doctor of Philosophy (PhD).

There are four coursework programs:

- Graduate Certificate of Science (GCSc);
- Graduate Diploma of Science (GDipSc);
- Master of Science (MSc);
- Master of Mineral Resources (MMinRes).

The School's Academic staff offering supervision of MPhil and PhD students are involved in many areas of fundamental and applied research, and there are strong research interactions with many other University schools and research centres, off-campus organisations and industries. As a result, it is common for students to have joint or associate supervision from outside the School. Further information can also be obtained from the School's website www.sps.uq.edu.au

### University of Queensland Graduate School

As a research higher degree student, you are part of the UQ Graduate School which administer the PhD and MPhil degrees. The offices of the Graduate School are located in the Cumbrae-Stewart building (72). The Director of the Graduate School and the Dean of Postgraduate Students is Professor Alan Lawson.

#### School Locations and Members of Staff

Finance Office Building: Ground Level, Physics Annexe (6).

Student Administration Building: Ground Level, Steele Building (3).

School Office Building: Ground Level, Physics Annexe (6).

Telephone: +61 (0) 7 3346 7681 Facsimile: +61 (0) 7 3365 3328 Email: student@sps.uq.edu.au

Office Hours: Mon-Fri: 8.30am-4.30pm

Mailing Address:

School of Physical Sciences The University of Queensland St Lucia Queensland 4072 AUSTRALIA

Web Page: www.sps.uq.edu.au

# Head of School - Professor of Physics

Professor Halina Rubinsztein-Dunlop (#53139) Telephone: +61 (0) 7 3365 3139 Email: halina@physics.uq.edu.au

# Personal Assistant to Head of School

Jo Hughes (#53405) Telephone: +61 (0) 7 3365 3405 Email: jo@physics.uq.edu.au

# School Manager

Chris Shannon (#53272) Telephone: +61 (0) 7 3365 3272 Email: c.shannon@sps.uq.edu.au

#### **Administration Assistant**

Claire Nitsch (#67681) Telephone: +61 (0) 7 3346 7681 Email: claire@sps.uq.edu.au

#### Systems Programming Manager

Leslie Elliott (Room 67-546)(#52023) Telephone: +61 (0) 7 3365 2023 Email: Ije@maths.uq.edu.au

### **Student Administration**

Cath Carkeet (#56065) Student Administration Manager Telephone: +61 (0) 7 3365 6065 Email: c.carkeet@sps.uq.edu.au

Allison Golding (#52673) Student Administration Officer Telephone: +61 (0) 7 3365 2673 Email: a.golding@sps.uq.edu.au

#### Finance

Lawrence Amato (#52151) Finance Manager Telephone: +61 (0) 7 3365 2151 Email: I.amato@sps.uq.edu.au

Andrew Carthy (#52157) Accounts Clerk Telephone: +61 (0) 7 3365 2157 Email: a.carthy@mailbox.uq.edu. au

Sheila Saunders (#54463) Accounts Clerk Telephone: +61 (0) 7 3365 4463 Email: s.saunders@sps.uq.edu.au

#### Personnel

Joanne Ryan (#69934) Human Resource Officer Telephone: +61 (0) 7 3346 9934 Email: j.ryan@uq.edu.au

#### Communications and Marketing Officer

Nelle Ross (#69935) Telephone: +61 (0) 7 3346 9935 Email: n.ross@sps.uq.edu.au

# Student Liaison Officer

Peter Adams (#53276) Telephone: +61 (0) 7 3365 3276 Email: pa@maths.uq.edu.au

#### **Discipline Locations**

Earth Sciences is located in the Steele Building (3) Secretary: Mrs Fiona Krohn Phone: +61 (0) 7 3365 1180 (#51180) Fax: +61 (0) 7 3365 1277 Email: f.krohn@sps.uq.edu.au Web: www.earth.uq.edu.au

Mathematics is located in the Priestley Building (67) Secretary: Ms Kathy Lyons Phone: +61 (0) 7 3365 3277 Fax: +61 (0) 7 3365 1477 Email: k.lyons@sps.uq.edu.au Web: www.maths.uq.edu.au

Physics is located in the Physics Annexe (Building 6) Secretary: Mrs Jennifer Robinson Phone: +61 (0) 7 3365 3424 Fax: +61 (0) 7 3365 1242 Email: robinson@physics.uq.edu.au Web: www.physics.uq.edu.au

# RESEARCH HIGHER DEGREES



Working towards an MPhil or PhD is very different from undergraduate coursework, although you may have had a small taste of what it is like from your Honours project work. Your advisor/s will be there to offer support and guidance throughout your candidature, and should be able to help with ideas to pursue. In the early stages of your project you will be expected to work independently, exploring your own ideas and learning how to communicate the results of your research to others, by publishing in international journals and presenting seminars and conference papers. It is meant to be a testing experience and will almost certainly involve feelings of inspiration and exhilaration at times, and feelings of frustration and even desperation at others. It is encouraging to be part of a large friendly group of more than 140 research students who are experiencing similar highs and lows as yourself, and with whom you can celebrate or commiserate, and generally compare experiences and offer mutual support.

You will be provided with a desk and somewhere to shelve books and store files, probably in a room shared with other research students. This will be your 'second home' for approximately the next 3 years. You will get keys to your room, the photocopying room and your Discipline's common room (if applicable). You will also get a computer account and ready access to your Discipline's computer facilities and you will also have access to the University's extensive library facilities, including on-line access to many top-rank journals and databases. You will be able to obtain appropriate stationery as you need it. Above all, you will be regarded as an important member of the School's research team.

If you are joining us from interstate or overseas, or are generally feeling lost, please make contact with the Discipline Postgraduate Coordinator on your arrival. He/she will see that you are introduced to some other research students within your area. The School runs information/welcome sessions for new research students near the start of each semester, as does the Physical Sciences & Engineering Library.

### Research Higher Degree (RHD) Structure

A candidate for a RHD must be an enrolled student in this University and is required to carry out research at the University for a specified period under the direct supervision of one or more members of academic staff.

All RHD candidates will be examined on the basis of a thesis. A candidate has one or more research advisors who, in consultation with the candidate, arranges a course of supervised research designed to suit the individual requirements and interests of the candidate.

### Postgraduate Student Charter

One of the major functions of a university is to provide education and training in research and scholarship. Indeed, universities are the only institutions that are funded to engage in research training for degree purposes. The institutional purpose is to graduate students whose research skills equip them to perform successfully in both academic and industrial environments in a global context. In turn, the work of postgraduate research students is essential for the intellectual vibrancy of the institution and constitutes a powerful driver of research capability.

University research training involves the active participation of both staff and students. The task of ensuring that it is conducted in the most efficient and effective manner is shared by all parties: the institution, its academic staff, and students, all have legitimate expectations of each other.

University policy in the area of research and research training is designed to provide a set of principles and statements of good practice with respect to matters such as supervision, school management, infrastructure support, monitoring of progress, and examinations. The policies incorporate reasonable student expectations about their research training. This Charter builds upon and supplements the Student Charter and other University policies that detail the University's position on research training. The purpose of this document is to set out the expectations of students in relation to higher degree research training and the corresponding approach the University expects of research students. It is important that the Postgraduate Research Student Charter be read in conjunction with the Student Charter which can be found at www.uq.edu.au/hupp/index. html?page=25166

### **Research Ethics Policy**

One of the hallmarks of the academic profession is the commitment by the members of its community to high standards of good conduct. These standards need to be expressed by a code of conduct. A suitable code also serves to acknowledge expertise where it exists and to engender trust and faith in the profession. Members of the University research community require such a code and should at all times maintain standards of conduct worthy of professionals working in a particular field of endeavour.

Twelve principles are espoused. Collectively, they are intended to formalise The University of Queensland's commitment to the proper conduct of research in all its manifestations. They are:

- integrity;
- the good image of the University and the academic community;
- right to knowledge and its obligations;
- competence and due care;
- general principles of sound research design;
- ethical consideration;
- confidentiality in research involving humans;
- intellectual property;
- conflict of interest;
- dissemination of ethical principles;
- publication of results and timely reports;
- improper conduct.

For further information, please refer to the Handbook of University Policies and Procedures at www.uq.edu.au/hupp/index.html?page=25155

### Intellectual Property Policy for staff, students and visitors

The University of Queensland (UQ) is dedicated to fostering a research culture in which commercialisation, technology transfer and entrepreneurial endeavour are critical aspects. Increasingly, the University recognises the importance of commercialising Intellectual Property (IP) in the creation of wealth and other benefits. The value of Intellectual Property is attested to by its role in attracting research funding, promoting linkages with industry, and in the financial rewards and social benefits resulting from its successful commercialisation.

The University is in the privileged position of being able to use its research expertise, not only to extend knowledge, but also to help to build knowledgebased industries. The result of this is employment growth and national wealth generation, and the delivery of new products and processes to the Australian community. Effective management of IP becomes, therefore, one of the most critical steps in the University's scholarly endeavours and in the translation of research into national wealth. In this regard, the University is committed to improving the understanding of intellectual property rights among its staff and students.

This Policy regulates the protection, management and commercialisation of University IP and provides specific guidance to University staff, students and visitors on IP-related matters. The University recognises the need for the underlying interests of staff, students and the wider community to be taken into account when dealing with its intellectual property.

This Policy ensures the University's compliance with the National Principles of Intellectual Property Management for Publicly Funded Research.

For further information, please refer to the Handbook of University Policies and Procedures at www.uq.edu.au/hupp/index.html?page=25152

### Plagiarism

Plagiarism involves the use of other peoples' ideas and works without acknowledging the source of the information.

To avoid plagiarism, you must give credit whenever you:

- quote from a person's actual spoken or written words;
- use another person's ideas, opinions or theories in an assignment etc.;
- paraphrase another person's spoken or written word.

To avoid unintentional plagiarism you can:

- use quotation marks around everything that comes directly from a text or article;
- summarise ideas and arguments in your own words;
- check that you have correctly paraphrased the original ideas;
- check your summary against the original text.

For a full description of plagiarism, please refer to the Handbook of University Policies & Procedures (HUPP) at www.uq.edu.au/hupp/index. html?page=25128

#### **Guidelines For The School, Advisors And Candidates**

### **Responsibilities of the School**

- 1. The School Postgraduate Coordinator is responsible for matters concerning RHD students including supervision and progress.
- 2. The School Postgraduate Coordinator should not only advise the prospective student on the range of research expertise of academic staff, but should clearly articulate School expectations, practices and standards with respect to supervised research. While it should be recognised that unforseen eventualities beyond the student's or the School's control sometime intervene to delay completion, the School should nevertheless emphasise the student's commitment to intensive work and to the time-frame in which the degree should be completed. Conditions of postgraduate scholarships and awards should be emphasised.
- 3. The School Postgraduate Coordinator should ensure that an induction session for new and prospective students is provided which outlines facilities available for postgraduates within the School (including library services), and to the School policy of graduate seminars. There will be hand-out information available.
- 4. When considering applications for admission to provisional candidature, the School Postgraduate Coordinator should ensure that the research area is of interest to the advisor/s, is within the range of the advisor/s methodological and theoretical expertise, and can be adequately supervised when the advisor/s other academic commitments are taken into account.
- 5. The School Postgraduate Coordinator should ensure that appropriate staff member/s are available as an advisory team, to supervise the student until the end of their candidature. If an advisor takes study leave or is absent from the School, arrangements for alternative supervision must be resolved to the satisfaction of the student and School. Joint supervision is an effective way of meeting these contingencies.
- 6. Members of staff would ordinarily be expected to have no more than 5 full-time equivalent supervisions. Academic staff with heavy administrative burdens should consider carefully the number of supervisions undertaken.

- 7. Through consultation with advisors, the School Postgraduate Coordinator should monitor progress of RHD candidates and ensure that they report regularly throughout their candidature. Approximately 12 months (24 months for part-time students) after admission to provisional candidature, the student is required to prepare a research proposal for the School. This would then form the basis of the report to be submitted to the School Postgraduate Coordinator with the application for confirmed candidature. Thereafter the School should ensure that each candidate prepares at least one substantial piece of work in the form of a report, draft chapter or work-in-progress seminar.
- 8. In the case of students converting from MPhil to PhD, the School Postgraduate Coordinator is expected to provide the Graduate School with evidence of satisfactory progress in the masters research and justification of the conversion including the PhD research outline. The candidate will need to present a new research proposal.
- 9. The Discipline Postgraduate Coordinators should formulate and make available to prospective and new students general guidelines regarding authorship of publications within the Discipline.
- 10. The School should provide an appropriate physical and intellectual environment for all students. Students should be encouraged to participate in research seminars and be given every opportunity to become an integral part of the research milieu of the School and the Discipline.
- 11. In the event of the advisor/student relationship breaking down, it is the responsibility of the School Postgraduate Coordinator to resolve the problem, if necessary in consultation with the Graduate School, and seek alternative arrangements.

#### **Responsibilities of the Advisory Team**

- 1. Advisors are expected to provide continuing guidance to Higher Degree candidates on the research being undertaken and on meeting time-lines.
- 2. Supervision of research students is not only a complex teaching task, it should be regarded as a shared enterprise in which both advisor and student have an intellectual investment. Proposed research projects should therefore be of mutual interest. Prospective advisors should have a sufficient range of theoretical and methodical expertise to offer the student proper supervision. There should be adequate time to supervise when other academic commitments are taken into account.
- 3. The advisor needs to be well acquainted with the candidate's academic background so that if the proposed project needs additional skills and knowledge, the candidate can be informed how these might be acquired.
- 4. The advisor should alert the commencing candidate to commonly encountered tasks, processes and standards expected of doctoral programmes in the particular field. This is a useful framework for helping the student to develop and refine a topic which can be researched and written up within the required time-frame.
- 5. Once the topic is refined to the satisfaction of the student and the advisor, the advisor should assist the student to formulate a framework for the research and time estimates for the completion of various stages. Having such a framework, which may be modified as the research proceeds, gives a sense of focus, helps student and advisor to check progress. The framework should be used to guide the student, but should not constrict the development of the research.
- 6. From the onset of candidature, advisors and students should ensure that they confer at what are agreed by them to be appropriate and regular intervals. This is particularly vital in the first year and for part-time students. Such agreements may be re-negotiated from time to time as the candidature proceeds. Meetings may be minor and frequent and/or more formal and less frequent. In this context, it is helpful for the advisor to make explicit the purpose of the

meeting. It is a useful practice to keep a diary of supervisions with dates and details of discussions. In addition to informal meetings, it is important that major reviews take place at least six monthly in order that the student's achieved work can be assessed within the overall shape of the study and the time-frame for completion. Both advisor and student should then be in a position to be able to report when required on progress and to judge when some intervention may be desirable.

- 7. Early in a student's candidature, the advisor must make an assessment of a student's written work. If the advisor considers that further work is required in areas such as composition and grammar for the student to be successful in completing the degree, the advisor should then provide advice and assistance as to how an appropriate standard can be achieved. The advisor should continue to monitor the student's progress in order to resolve any on-going difficulties.
- 8. The advisor is expected to read any written work thoroughly, and to provide regular feedback on the student's work. It is vital that criticism is given in a constructive, supportive and sensitive fashion. The advisor needs to recognise that doing a research degree is an emotional as well as an intellectual commitment. Students will be discouraged by continual harsh criticism. Supervision sessions should be structured so that it is relatively easy to exchange ideas.
- 9. The advisor has a responsibility to ensure that both full-time and part-time candidates are included in the academic life of the School. Candidates are encouraged to take part in School and/or inter-School seminars, conferences, informal functions and the like. Reports from conferences etc., should be conveyed to the School and research students. Postgraduates should be encouraged to publish their work, jointly with advisors when appropriate. A supportive environment and a sense of collegiality are important influences in timely completion of research projects.
- 10. At the beginning of candidature, the advisor has the responsibility for initiating discussions with a view to making mutually satisfactory arrangements regarding intellectual property, including patents and authorship of any publications arising from the candidate's

work. The School Postgraduate Coordinator should be notified that these discussions have taken place. Arrangements should reflect the responsibility of the advisor in fostering the student's career. Any restrictions on publication rights due to confidentiality or other intellectual property protection requirements need to be clearly outlined at the outset, and reviewed during the project as appropriate.

- 11. Advisors should ensure that they and the candidates under their supervision are familiar with the University's Code of Conduct.
- 12. It is important not to lose sight of the personal dimension of the advisory relationship. A candidate's progress may be impeded by personal crises to which the advisor should be responsive. The supervisor should know where help might be sought within the University and what to do if there is a needs to suspend candidature or negotiate an extension.
- 13. There are some instances when the supervisory relationship breaks down. In such cases, the supervisor should see to it through the School Postgraduate Coordinator, that other arrangements are made to the satisfaction of the student.

# **Responsibilities of Candidate**

Research higher degree candidature may be considered as a three-way interaction between the School, advisor/s and student. While the School and advisor/s are expected to provide many forms of support and guidance, the ultimate responsibility for managing the project and obtaining the degree rests with the candidate.

- All candidates should observe the University's rules, regulations and requirements (both specifically relating to the degree and other requirements), and consult the University's RHD website (www. uq.edu.au/research/orps/index.html?id=) for guidance especially when making applications for variations of candidature.
- 2. Through either the orientation session held by the School or by consulting with their advisor, commencing candidates should become quickly familiar with:
  - o the nature and limitations of RHD research in their field;
  - the facilities (including support for fieldwork if necessary) available for postgraduates in their School and the University; and
  - the dimensions of the project, the time-frame for completion, and the normal stages encountered along the way.
- 3. From the onset of candidature, students should ensure that they confer with their advisors at what are agreed mutually to be appropriate and regular intervals. Candidates should keep advisors informed of their research activities, progress and problems.
- 4. Around 12 months full-time (24 months part-time) after admission to provisional candidature, the candidate is due for confirmation. See page 41 for further information.
- 5. After proceeding to confirmed candidature, candidates should present to their advisor at least one significant piece of written work annually. Student and advisor should also undertake a major review of work completed at least six-monthly so it can be assessed within the overall shape of the study and the time-frame for completion.
- 6. Should a candidate be unable to resolve serious problems with the advisor/s, he or she should first ask the School Postgraduate

Coordinator to help. If the P/G Coordinator is unable to resolve the problem, the Head of School should be approached. It is important that these steps be taken without delay so that progress is not unduly impeded. In cases where the advisor and the School Postgraduate Coordinator are one and the same person then the School's Student Liaison Officer is available for consultation.

 It is expected to be a full-time commitment unless enrolment is parttime. Part-time students should ensure that they continue to have sufficient time available each week as agreed with their advisor/s.

No other commitments should impact on the time commitment to the RHD programme. It is the responsibility of the advisor, School Postgraduate Coordinator and the student to ensure that paid work will not jeopardise the completion of the course of study in the time allowed.

- 8. While it is recognised that teaching experience may be beneficial if candidates wish to pursue an academic career, they should not be required to undertake demonstrating or tutoring if this will hold back their higher degree studies.
- 9. Candidates should apply to the School Student Administration office before any planned leave of absence, period of study away, change of status, change of title, change of advisor.
- 10. In preparing the thesis, candidates should bear in mind the following:
  - they are expected to be familiar with the literature in the particular field and assess it critically;
  - they should formulate a clear hypothesis or overall question, and should support their conclusions with adequate data or evidence and analysis;
  - the evidence presented should be relevant to the main hypothesis being investigated; and

- candidates should pay particular attention to the final presentation of the thesis. Not only should the final version be carefully checked for errors, but it should be clearly structured and easy to follow. A high standard of written English should be attained.
- 11. In writing up their research, candidates must avoid the following:
  - the fabrication of data claiming results where none have been obtained;
  - the falsification of data altering results to confirm the hypothesis;
  - plagiarism, including the direct copying of textual material, the use of data or ideas from other people without adequate attribution; and
  - attribution to others who have not in fact contributed to the research.
- 12. At the onset of their candidature, candidates should clarify with the advisor and the University regarding intellectual property, including patents and authorship of any publications arising from their work. They should be informed by the advisor in writing of any limitations on publication or communication of their work consequent upon commercial agreements at the outset of the candidature or as soon as such commercial agreements have been reached.

# ADMISSION



Before recommending a student for admission to RHD candidature the School Postgraduate Coordinator and the proposed advisor must be well satisfied that the following questions can be answered in the affirmative.

- Does the student have the necessary prerequisites for admission to candidature?
- Does the student appear to have the capacity required to undertake a RHD course successfully?
- Is the research project proposed appropriate for the required degree?
- Is your School the most appropriate one in which the research should be undertaken?
- Is the project feasible in terms of time, facilities, equipment and source material?
- Is the research project of direct interest to both the student and the advisor?
- Is the proposed advisor sufficiently expert in the proposed area of research to offer the student proper supervision?
- Is the workload of the advisor such as to allow sufficient time to give proper supervision to the student?
- If it is expected that the proposed advisor will be absent on study leave, will alternative supervision be available?

# A prospective candidate should consider the following questions:

- Have you discussed the research project thoroughly with the proposed advisor and do you know in what other academic activities you will be involved?
- Have you discussed with your proposed advisor your respective roles in the work?
- Are you satisfied that your advisor will devote adequate time to you?
- Have you looked sufficiently deeply into the research background and active research interests of the proposed advisor?
- Do you know enough about the research environment of the School in which you wish to work?
- Do you know what School facilities will be available to you throughout your candidature?

#### **Minimum Qualifications**

The minimum requirement for admission to PhD candidature is a four-year honours degree with Honours Class I or IIA from an Australian University or a qualification considered by the School Postgraduate Coordinator as equivalent. MPhil requires a four-year honours degree or equivalent.

# English Language Requirements (International Students only)

Applicants must meet the University's English language entry requirements. This can be done by undertaking the International English Language Testing System (IELTS) or the Test of English as a Foreign Language (TOEFL).

#### **Tests and scores**

The following scores fulfil the English language requirements for entry to most University of Queensland programs.

IELTS - Academic\*\* Minimum Overall Score 6.5 Minimum Writing Score 6.0

TOEFL - Computer based Minimum Overall Score 237 Minimum TWE\*\*\* 4.5

TOEFL - Paper Based Minimal Overall Score 570 Minimum TWE\*\*\* 5.0

\*\***Note:** Occupational Therapy, Physiotherapy and Veterinary Science: IELTS overall 7, writing 6, speaking 7; Speech Pathology: IELTS overall 7, writing 6, speaking 8. \*\*\***TWE** = Test of written English

### Part-time Candidature

An applicant for admission as a part-time candidate must satisfy the School Postgraduate Coordinator and their advisor that adequate time is available to devote to their research and to maintain regular contact with their advisor and the School.

Periods of provisional and confirmed candidature for part-time candidates are twice those set for full-time candidates. International candidates should be aware that student visas are for full-time study only.

### **Employment Restrictions on Full-time Candidates**

A PhD or MPhil program in the School of Physical Sciences is a demanding undertaking requiring performance to the full extent of the candidate's ability. It is therefore expected to be a full-time commitment unless enrolment is part-time.

Professional development is considered an integral part of the PhD or MPhil training program, and might include tutoring. No other commitments should impact on the time commitment to the PhD or MPhil program. It is the responsibility of the advisor, School Postgraduate Coordinator and the student to ensure that paid work will not jeopardise the completion of the course of study in the time allowed.

A full-time candidate may undertake up to 18 hours of paid employment per week if the principal advisor and school postgraduate coordinator are satisfied that the candidate's progress is not being affected by the paid employment; otherwise, the candidate must change to part-time status.

In addition to the restrictions on employment that apply because of candidature, some scholarships also involve employment restrictions and scholarship holders should check the conditions of their awards before accepting employment. The Scholarships Office can provide advice on employment restrictions in relation to postgraduate scholarships.

### **Application Procedures**

Applicants for higher degree candidature should obtain information from the relevant Discipline Postgraduate Coordinator about the School's research activities and potential advisors who are qualified and available to accept candidates for supervision, prior to lodging a formal application.

### Applications from Australian Citizens, Australian Permanent Residents & NZ Citizens

An application form must be lodged though the School's Student Administration office. The application must be approved by the advisor/s, School Postgraduate Coordinator and the Dean of Postgraduate Students. The official letter of offer is then prepared by the University and contains advice on enrolment procedures.

### **Applications from International Students**

New international students should complete an International Student Application for Research Studies - PhD or MPhil or an International Student Application for Graduate Coursework Studies lodged with the International Education Directorate. A non-refundable fee of AUD\$50 must be paid when lodging the applications. The application for research candidature also includes an expression of interest in applying for Scholarships. Students are required to apply separately for International Postgraduate Research Scholarships (IPRS) later in the year. Applicants are required to meet English language requirements.

### **Joint School Applicants**

Cross-disciplinary research applicants may be offered a joint enrolment in more than one school. In such cases the application form provides for the nomination of the school which will take primary responsibility for administering the candidature.

# Transfer from Masters by Research Candidature (MPhil)

Students who have completed 12 months or more of a MPhil degree at this University, and who are qualified for admission to the PhD program, may be admitted to confirmed PhD candidature. International research master's candidates should check that their visa and sponsored funding arrangments do not impose any restrictions to undertaking a PhD.

### Transfer of PhD candidature from another Institution

PhD students at other institutions who wish to transfer their candidature to the School of Physical Sciences must satisfy all PhD entry requirements. The School may make a case on an individual basis for the probationary period to be reduced, or recommend admittance into confirmed candidature on the basis of work completed at another institution.

### Students with a Disability

The School of Physical Sciences welcomes students with disabilities. The Disability Program is part of Student Support Services and is located in the Student Union Complex. It operates to facilitate equitable academic access for students with disabilities (including temporary and chronic medical conditions).

Disability Advisers assist the University community to achieve an inclusive environment through consultation, liaison and the provision of services and facilities for students. Access services and facilities include advisory and educational requirements, production of alternative format print, notetaking and interpreting, participation assistance, and the provision of assistive technology and equipment. For further information, visit their web site at www.sss.uq.edu.au/index.html?id=1208, or phone: +61 (0) 7 33651508.

Confidentiality - Information provided to a Disability Adviser is treated in confidence and will not be released to anyone without your permission.

### Financial Assistance

There is a variety of scholarships available to support research studies. A small number of School scholarships may be available, normally at a lower level than an APA or UQPRS. See the School website for application forms.

#### Australian Postgraduate Award (APA)

Each year the Australian Government makes available a number of awards for up to three years of full-time postgraduate study towards a MPhil or PhD. These awards, called Australian Postgraduate Awards (APA), are administered by the relevant university, in this case The University of Queensland. The value of the award in 2007 was \$19,616.

Eligibility:

- you must be an Australian citizen, Australian permanent resident or New Zealand citizen as at 15 October of the applying year;
- you may be of any age;
- you must enrol for a full-time research higher degree before the required date;
- you must hold or expect to hold a Bachelor's degree with Honours Class I, or a qualification deemed equivalent, by 31 December of the applying year. This qualification must be in a relevant field;
- you may submit one application form per year only;
- if you have previously held an Australian Government research scholarship (eg APA, APAI) for more than six months, you are eligible for the UQPRS only.

# University of Queensland Postgraduate Research Scholarship (UQPRS)

Eligibility:

- Awards are only available to those who have a Bachelor's degree with Honours Class I or equivalent results.
- You must be an Australian citizen, Australian permanent resident or New Zealand citizen as at 15 October of the applying year.
- You may be of any age.

There are only a limited number of Awards and competition varies from year to year. In recent years the cut-ff for awards has been around the bottom of First Class Honours or equivalent. More information on these awards is available from the Scholarships website at www.uq.edu.au/grad-school/index.html?page=9258

# University of Queensland Joint Research Scholarships (UQJRS)

This scholarship program enables schools, centres or institutes (through their Head of School/Postgraduate Coordinator) to nominate high quality commencing or enrolled research higher degree candidates. The UQ Graduate School shares the costs for these scholarships with schools, centres or institutes. The value of the award in 2007 was \$19,616. There are usually two rounds for this scholarship annually.

# University of Queensland Confirmation Scholarships (UQCS)

This scholarship program will enable Schools/Centres/Institutes that directly enrol research higher degree students to nominate recently confirmed candidates for a co-funded scholarship. Two scholarship rounds will be run each year.

Objectives:

- to enable students who have demonstrated the strength of their research potential during their first year of research higher degree candidature to work on their research higher degree full-time with scholarship support;
- to reaffirm the importance of UQ's Confirmation of Candidature process by rewarding those who have performed outstandingly during this important stage of candidature;
- to increase the number of scholarships for confirmed research higher degree students by sharing the costs between the UQ Graduate School and the Schools or other funding sources.

There are usually two rounds for this scholarship annually.

# Scholarships for International Students

An international student is a person who is not an Australian citizen, an Australian permanent resident, or a New Zealand citizen, and who is enrolled in, or proposes to enrol in, a program of study at an institution in Australia. Temporary residents of Australia and permanent residents of New Zealand are classified as international students.

# International Postgraduate Research Scholarships (IPRS)

This award is funded by the Commonwealth Government Department of Education, Science & Training (DEST). The aim of the scholarship is to attract top quality international postgraduate students to undertake a research higher degree in Australia. The IPRS covers the tuition fees payable for each year of the approved program.

Applicants may be citizens of any overseas country (except New Zealand) and must intend to undertake a research higher degree.

The closing date for the IPRS is the end of August each year.

# University of Queensland International Living Allowance Scholarships (UQILAS)

The UQILAS provides a living allowance for the duration of the approved program. This award is available only to those students eligible to apply for an IPRS.

All enquiries from prospective international students regarding these awards should be directed to; International Education Directorate Ph: +61 7 3365 7941 Fax: +61 7 3365 1794 Email: study@uq.edu.au Web: www.uq.edu.au/international/ or visit the Student Centre on campus.

# School of Physical Sciences Research Student Conference Funding

AWARD

A total award of \$2,000 will be granted for conferences within Australia

and/or overseas per student per candidature.

ELIGIBILITY

- Students must be enrolled in either MPhil or PhD in the School of Physical Sciences or one of the School's Centres.
- Students who are jointly funded with another School/Centre outside SPS will have the grant funded on a pro-rata basis (ie if you are funded jointly by SPS 50% and ITEE 50%, the maximum funding allowable will \$1,000)
- Only students who have had their candidature confirmed are eligible.
- Assistance will NOT be granted to students who are on extended status ie overtime
- Preference will be given to students who are making a presentation at a conference or to those presenting a paper).

#### CONDITIONS

- Preference will be given to students who have presented a poster at the School's annual Poster Day.
- Preference will be given to full-time students. Part-time students can make a case for assistance and may be funded on a pro-rata basis;
- Assistance will not be granted to students who are in full-time employment;
- The application for assistance must be supported by the supervisor see application form;
- Applications are accepted during the course of the year on an ad-hoc basis.
- Funding for airfares bookings must be made through Campus Travel and an official UQ purchase order must be raised through the School finance office.
- Reimbursement for expenses incurred in attending the conference will only be made on presentation of original receipts and tax invoices.
- A total contribution of \$2,000 is the maximum funding awarded.
- Amounts exceeding this limit will need to be provided by supervisors grant or by the student.
- Risk assessment form must be completed and submitted with this application. The form is online at http://www.sps.uq.edu.au/ documents/2006/Forms/absencestaffnew.pdf

### Extensions to Scholarships

Extensions are given for APAs and University funded scholarships only in extenuating circumstances. Applications are to be made to the Scholarships Office at the Office of Research and Postgraduate Studies (Ext 54838).

If it becomes necessary to seek an extension to a School funded scholarship, the application must be made in writing to the Head of School. Any proposed extension must be discussed with your supervisor and the length of the extension agreed upon.
## Employment

Full-time scholarship holders are expected to devote themselves to their studies full time. You are not required to undertake employment as part of the scholarship. You may however, undertake a strictly limited amount of paid employment, provided it does not interfere with your study program. The maximum is 270 hours a year during normal working hours of 9.00 am to 5.00 pm, Monday to Friday. Employment outside Monday to Friday 9.00 am to 5.00 pm need not be included in the calculation of the 270 hours.

Employment may only be undertaken with the permission of your advisor and Head of School/Postgraduate Coordinator.

## **Other Funding**

You may receive additional funds for fieldwork, equipment, overseas travel and other expenses not covered by the scholarship. You may also receive income from part-time work undertaken within the guidelines set out above.

APA holders may hold other awards, scholarships or living allowances provided that the amount is not greater than 75% of the APA stipend rate. If the amount is greater than 75%, and you hold a UQ scholarship, you must obtain the approval of the Dean of Postgraduate Students.

You cannot receive a salary while in receipt of the award. "Salary" includes time release for full-time candidature on salary.

## Tutoring

The School offers postgraduate students the opportunity to tutor as a further means of financial support. All research students may apply to do paid part-time tutoring in order to supplement their scholarship support. It is not possible to earn enough by this means to remove the need for a scholarship.

New postgraduate students are normally offered a position for one semester, but in following semesters, positions are competitive and depend upon performance. The School contact for tutoring information is Professor Peter Adams on 3365 3276, room 67-547 (email: pa@maths. uq.edu.au).

Performance as a tutor will be evaluated by the School. This will be based on feedback from lecturers and from students tutored in previous semesters. Application forms for employment as a tutor are available from the School of Physical Sciences webpage: www.sps.uq.edu.au.

Tutor training will be conducted at the beginning of each semester.

## Finance Matters

Enquiries about scholarship appointments/payments, letters to the Taxation Department requesting tax-exemption as appropriate, casual salary claims for tutoring, casual (tutoring) appointments, and financial matters generally should be directed to the School of Physical Sciences Finance Office, Level G, Building 6 (Physics Annexe)(email: accounts@sps.uq.edu.au).

#### **Recreation Leave**

Candidates are entitled to 20 days paid recreation leave each year of the scholarship. Recreation leave may be accrued, but must be taken during the period of your scholarship. The agreement of your advisor and Head of School/Postgraduate Coordinator must be obtained before recreation leave is taken: there is no need to inform the Scholarships Office.

It is a School requirement to obtain approval for leave prior to commencement of leave. The necessary form to complete and submit to the School Office in Physics Annexe is found online at http://www.sps.uq.edu.au/documents/2006/Forms/absencestaffnew.pdf.

## CANDIDATURE



PhD and MPhil candidates have a responsibility to be aware of and to abide by the Research Higher Degree Office regulations, the advice contained in this booklet including the Code of Conduct.

## **Before Enrolling**

Students should consult relevant members of the academic staff with regard to their research interests. Potential advisors are likely to have projects that may interest you. If you have ideas of your own, you are encouraged to suggest your own topic.

You should aim to select an advisor and topic prior to submitting an enrolment application. The University will not confirm admission to the degree until they have received this information.

Once a research topic and advisor/s have been chosen, the candidate should complete the following forms:

- application for Admission and Enrolment;
- proposal for a Research Project.

These forms are available from www.uq.edu.au/grad-school/candidatureforms. Your proposed principal advisor and associate advisor both MUST sign the appropriate section on the School Recommendation on an Application form. Please return this form to the School Student Administration Office. It will then be forwarded to the Research Higher Degree Office for action.

### Enrolment

Initial enrolment and commencement may be at any time during the year. Continuing PhD & MPhil students are automatically enrolled by the Research Higher Degree office each year of candidature.

# Concurrent Enrolment in Graduate Certificate Programs (coursework) for confirmed PhD Candidates

PhD candidates are able to enrol concurrently in Graduate Certificate programs under certain conditions. Students may choose from areas complementary to their current discipline with the potential to focus on a subject area. Alternatively students can choose a program that develops personal or professional skills relevant to future aspirations. Enrolment will be on a HECS basis to eligible students.

For further information visit www.uq.edu.au/grad-school/concurrentenrolment-in-graduate-certificate-programs-for-confirmed-phdcandidates

#### **Confirmation of Candidature**

Except in some special cases, all RHD students are admitted as provisional candidates. Provisional candidature usually lasts up to 12 months (24 months for part-time students) except where an extension is officially approved. The School informs each Discipline Postgraduate Coordinator of the students who require confirmation approximately 8 weeks before confirmation is due. Your principal advisor and the Discipline Postgraduate Coordinator are asked to make a recommendation to the School Postgraduate Coordinator about the status of your candidature. This recommendation will be one of the following:

- confirm your candidature;
- extend your provisional candidature to a specified date;
- defer confirmation;
- terminate your candidature.

As part of this process, the University requires that you develop a written document, which provides an adequate basis for the School Postgraduate Coordinator to make a decision about your potential to complete a RHD degree within the required time. You will also be required to make an oral presentation of your proposal.

The School of Physical Sciences (SPS) has established some well-defined milestones during your candidature to keep you on track. The first of these, Confirmation of Candidature, is a University requirement. This comes up after 1 year of full-time, or 2 years of part-time study towards the PhD, and after 6 months of full-time, or 1 year of part-time for the MPhil. When students enrol in a higher degree, they are usually admitted as provisional candidates. After one year, the Head of School is asked whether your candidature should be confirmed or terminated, or if provisional candidature should be extended.

The website www.uq.edu.au/grad-school/candidature-forms at the Office of Research and Postgraduate Studies (ORPS) contains all the official forms, guidelines, and documents you will need during your candidature. Included is the Confirmation of Candidature Form which your Advisor and the School Postgraduate Coordinator will complete, as well as the current Guidelines for Confirmation of Candidature.

The confirmation procedure involves the following steps.

## Written Document

Your written documentation will consist of a 6-8 page research proposal (literature survey and bibliography, a description of your project and progress to date) and a 1-2 page timetable for completion of your thesis within a three-year timeframe. This will assist you in taking stock of your achievements and with the future planning of your work. The School also requires, in support of your summary, a copy of your written work. This could be in the form of a research paper, a review of the literature relevant to your field, or any of the technical work which you have submitted to your advisor in the past year for comment. In the unlikely event that you have not submitted any written work to your advisor within your first year of candidature, you should take the opportunity to do so at this time. Your written materials should be submitted to the Discipline PG Coordinator at least one week prior to your oral presentation.

## **Oral Presentation**

Your oral presentation will consist of a short talk (15-20 minutes) on your project to the relevant Discipline Postgraduate Coordinator, and a small panel of academic staff from your discipline. This will be followed by an informal interview: you and your Principal Advisor will be interviewed

together, and then each separately. This will give the interview panel the opportunity to assess your progress, to broach any issues raised by you, and to clarify any points raised by your Principal Advisor in his/her report. (If you have given a recent talk on your project of similar or greater length, attended by the Discipline Postgraduate Coordinator and a suitable panel of academic staff, they may judge this as sufficient to meet the requirement, in which case only the interview need take place.)

One copy of your written materials should be submitted to the School Office (Student Administration, Steele Building) following your interview. You will be contacted by your Discipline PG Coordinator at the appropriate time, with further details about the oral presentation and interview, as well as clarification of the procedures peculiar to your discipline.

#### Interview

Some possible questions that the committee may ask of the candidate during the confirmation interview are:

- Does your advisor provide you with appropriate guidance with respect to literature in your research area?
- Do you feel comfortable raising issues with your advisor that concern you?
- Have you and your advisor worked out the degree to which he/she will be involved in the research?
- Is your advisor available for discussions/consultations when needed?
- Does your advisor engage you in constructive discussions about your progress?
- Does your advisor read your work in a timely manner and give you useful feedback?
- Has your advisor/postgraduate coordinator given you an adequate introduction to the procedures, laboratories and personnel in your discipline?

The Discipline Postgraduate Coordinator will prepare his/her recommendation to the School Postgraduate Coordinator on the advice of the confirmation committee and your principal advisor. You are encouraged to discuss all matters relating to confirmation of candidature with your advisory team and the Discipline Postgraduate Coordinator.

## Poster Day

Every year the School holds a poster day for its postgraduate students. This is usually held on the Friday afternoon in the last week before the midsemester break in second semester. All staff and postgraduate students are invited to attend, along with several invited guests from outside the School. This will give you the opportunity to present your most recent work to a general audience. Presentation of a poster is compulsory for all students who are in their 2nd year of candidature. All postgraduate students are encouraged to present a poster. Prizes are awarded for the best posters. A social BBQ is held towards the conclusion of Poster Day.

#### **Progress Reports**

All PhD and MPhil candidates are required to submit an annual progress report in which the candidate, advisors and the School Postgraduate Coordinator comment on the academic progress made towards the development and submission of a thesis. The reports are then reviewed by the Graduate School.

The annual report is issued in May every year to active candidates and to candidates on an approved period of interuption. The only exceptions are candidates who commenced thier PhD or MPhil less than three months before the date the reports are issued and candidates who have submitted their thesis to Thesis Examinations for examination.

Candidates dowload reports through mySI-net, and are advised by email when the progress report is available for download.

Progress reports are sent directly to the candidate by the Graduate School, one month approximately prior to the due date. The due date will be sometime in May. Progress reports provide an opportunity for both student and advisor to review and evaluate progress on the project and can alert the School Postgraduate Coordinator of any difficulties in candidature. The candidate should read the advisors comments and is required to sign after completion of the advisors section.

NOTE: It is a condition of your candidature to return progress reports as directed, particularly for those students who are recipients of a scholarship. For all students, non-return may lead to you being withdrawn from candidature by the Research Higher Degree Office.

#### Variations to Candidature

The following variations to candidature require approval by your advisor and School Postgraduate Coordinator. Changes normally cannot be backdated particularly where DEST census dates are affected:

- leave to study away from the University (remote status);
- change in attendance status between full-time and part-time;
- change of project and/or of school in which the candidate is enrolled;
- change of advisory team or appointment of additional advisors;
- early submission of thesis.

#### Interruption to Candidature

An interruption may be applied for using the Change of Candidature Status form. Interruption may be granted for sickness or for any other reason which prevents the candidate carrying out research.

It is the student's responsibility to formally apply for interruption at the time required. The submission date is adjusted for any periods of interruption so that candidates have the maximum benefit of their enrolment and the opportunity to complete on time. Normally the maximum time allowed for interruption is 12 months during your candidature.

### **Remote Status**

Candidates planning to spend periods of time undertaking research more than 250 kilometres away from the University are considered remote candidates and need to apply on the Change to Candidature Status form. Enrolment continues as usual and the submission date does not alter.

#### Change in Attendance Status between Full-time and Part-time

If candidates are unable to continue working on their research full-time, but wish to continue at a reduced level, it may be appropriate to apply for a change to part-time candidature on the Change to Candidature Status form. The School Postgraduate Coordinator must be satisfied that the candidate has adequate time available to carry on the research and make good progress. Scholarship holders should check the conditions of their scholarship to determine eligibility and options if they convert to part-time candidature.

International candidates should be aware that student visas are for fulltime study only.

With a change to full-time status, candidates should state their ability to complete the degree in the required time, noting employment and other commitments.

#### **Change of Project**

If the student and the advisor decide that a major change in the direction of the research or a new project is necessary, notification should be made to the School. The notification, on the Change to Candidature Status form, should include the change in topic. Please note that a new research proposal will need to be submitted on the Proposal for a Research Project form.

#### Change of Advisor/School

A candidate may apply at any time through the School Postgraduate Coordinator for a change in advisor/s or school using the appropriate form.

#### Withdrawal from the Degree

A PhD or MPhil candidate may withdraw from the degree by submitting the Change to Candidature Status form through their advisor and the School Postgraduate Coordinator.

#### **Termination of Candidature**

The Graduate School on the recommendation of the School Postgraduate Coordinator, may after giving the candidate an opportunity to be heard, terminate, suspend or vary the conditions of candidature at any time, for failure to meet any prescribed condition.

### Advice to Candidates about Problems during Candidature

Throughout candidature, students can expect support and guidance to be

readily at hand within the School. If problems arise it is appropriate that candidates consult with their advisor and then if necessary, the School Postgraduate Coordinator or the School Liaison Officer. Perhaps very occasionally it may be found that a complex problem cannot be resolved satisfactorily within the School and then candidates may wish to seek additional advice. In these instances the Dean of the Graduate School would be happy to offer any assistance with a view to resolving the difficulty.

#### **Student Grievances**

The University of Queensland seeks to provide students with an education of the highest quality. It is also committed to the fair and equitable treatment of all students. Should you feel that you have a grievance, you may expect a fair hearing of your claim in as timely a manner as possible. If you have a complaint concerning, for example, an academic or administrative decision or the behaviour of a member of staff, you should discuss it with the person concerned. Alternatively, speak with the Head of the relevant Discipline or the Head of School. You might ask for advice from a member of the Equal Opportunity Unit or the University's Counselling Service, or from an adviser in one of the student associations.

The School expects that in most cases, the discussion of the grievance with the apropriate member of staff will result in a prompt resolution which both parties will find acceptable.

#### **School Student Liaison Officer**

The School Student Liaison Officer is there to help students who need guidance and/or advice on anything to do with their research studies. The Liaison Officer is Professor Peter Adams (#53276), email: pa@maths. uq.edu.au.

## Supervision

The research of each candidate is supervised by members of the academic staff who have appropriate research experience and a continuing active participation in research.

The advisory team of each students needs to consist of at least 2 advisors. This can be made up either of one advisor who will be designated as the principal and another who will be the associate or there can be 2 principals if required. The associate advisor usually has a lesser role in the management of the candidates thesis. External advisors may also be appointed.

Both student and advisor/s have an obligation to ensure that they confer on a regular basis throughout the candidature. Before any prolonged absence of the advisor, arrangements satisfactory to the School Postgraduate Coordinator must be made for the appointment of a suitable replacement advisor.

A candidate for the degree of Doctor of Philosophy or Master of Philosophy may not be a supervisor of any other candidate of the same degree.

#### Definitions

- Advisor an appropriately qualified member of staff of the University.
- Principal Advisor the advisor who has the primary responsibility for supervision of the candidate.
- Associate Advisor an advisor who has a secondary or a lesser role than the principal advisor in supervision of the candidate's thesis.
- External Advisor a suitably qualified person, not a member of the University, who is appointed specifically for a particular candidate





#### Preparation of a Thesis

Candidates are strongly advised to discuss with their advisors the style of writing to be used in the thesis before writing begins.

In all cases the advisor should be consulted at the beginning of the work. The stages of investigation and writing are likely to vary according to the nature of the subject and should be worked out in consultation with the advisor.

The thesis should include general discussion of the candidate's results and findings, and of their significance in relation to the current state of knowledge in the field. In some disciplines it will be appropriate to concentrate the review of the literature and extended general discussion in introductory and concluding chapters, in other disciplines the review and discussion shoud be distributed throughout the thesis.

The candidate should, at the stage of thesis preparation, be able to express herself/himself with precision, clarity and conciseness.

The advisor must be consulted on the general form and the content of the thesis up to the stage of the final draft.

#### Writing a Thesis

The University has a website to help you with your thesis writing at www. tedi.uq.edu.au/phdwriting/

#### **Presentation of Research**

All 2nd year candidates are required to make a presentation of their research findings in the annually run School Poster Day. All other research students are encouraged to participate. Refer to Poster Day on page 44

## **Published Material**

Peer reviewed papers that have been published or accepted for publication during candidature and contribute to the argument of the thesis may be incorporated into the thesis provided they include work that is substantively that of the candidate. Such papers can be directly bound into the thesis or form a single chapter without editing. Where papers are included, the thesis must contain in addition an introduction to the aims and design of the research project work and an independent and original discussion that are entirely the candidate's own work. More detail is available from the following link at www.uq.edu.au/grad-school/index.html?page=13971.

### Thesis Preparation and Binding

Theses should normally be bound using temporary binding to facilitate the incorporation of amendments which might be required by the examiners.

The thermal binding method is recommended with covers strong enough to resist damage by bending or knocking. Further information on thesis binding is available from www.uq.edu.au/grad-school/index.html?page=9533

### **Notice of Intention to Submit Thesis**

One month prior to the expected submission date of the thesis, the candidate is required to submit their intent to submit on the Notice of Submission form. This form is available from www. uq.edu.au/grad-school/downloads/theses/Notice\_of\_Submission.doc

Candidates who require a **confidentiality agreement** should have the Pre-Examination Form (confidential) completed and signed by the School Postgraduate Coordinator, and send it to the Theses Examinations Office prior to the submission of the thesis. This form is available from http://www.uq.edu.au/grad-school/downloads/theses/PreExamination\_Confidential. doc.

Advisors are required to seek agreement from potential examiners to provide reports to the Theses Examination Office within 8 weeks of receipt of the thesis. The School Postgraduate Coordinator should check with examiners to ensure there is no conflict of interest with the student, advisor, or approach to the topic.

#### Thesis Submission

Five copies of the thesis in temporary binding are required and should be submitted as follows:

- Three copies submitted to the Theses Office.
- One copy to the School Student Administration Office, Steele Bldg.
- One copy to be retained for candidates own use during the examination

Upon submission of the thesis for examination, the principal advisor is required to forward the Pre-Examination form to the School Student Administration Office for processing and approval by the School Postgraduate Coordinator. This form certifies that the thesis comprises only the candidate's original work and that due acknowledgement has been made to all other material used. The principal advisor will be required to certify that the thesis is prima facie ready to go forward with examination and that it embodies the candidate's own work.

#### Examination

#### **Nomination of Examiners**

The principal advisor needs to nominate 2 examiners for a PhD thesis, who both MUST be external to the University, and 2 examiners for a MPhil thesis, one of which may be internal.

A candidate should not be informed of the identity of examiners, but has the right to state that he or she would not wish any particular individual to act as their examiner.

The School Postgraduate Coordinator should make a point of asking completing candidates whether there are any potential examiners to whom they may have an objection.

Once agreement from potential examiners has been sought, the supervisor must complete one of the Pre-Examination forms as outlined below and send it to the School Student Administration Office for processing.

- 1. pre-Examination Form (Standard);
- 2. pre-Examination Form (Oral);
- 3. pre-Examination Form (Confidential).

The above forms are required either before or on the day of submission. You can access these forms from www.uq.edu.au/grad-school/index. html?page=9777&pid=9221

Failure to observe these procedures can unduly delay the examination process.

### Chair of Examiners (PhD only)

The Chair of Examiners makes recommendations to the School Postgraduate Coordinator based on the reports submitted by the two external examiners, but does not have a vote in deciding the outcome of the examination and does not submit a report on the thesis.

The candidate's advisor may not act as Chair of Examiners under any circumstances. The Chair of Examiners is appointed from senior academic members of the discipline. They will remain as Chairperson until the end of the examination.

## **Duration of Examination**

Examiners are asked to complete their report within 8 weeks. The examination process, from submission of the thesis until candidates are contacted by the Graduate School with a result or notification of a delay, will usually take a minimum of 3 to 4 months. Examiners are then requested to submit a written report on the thesis.

#### **Examiners Report**

Examiners are requested to submit a written report on the thesis and to award a result from the following:

- the thesis be accepted as satisfactory no corrections or changes required;
- provided the minor errors listed the report are corrected to the satisfaction of the School, the thesis be accepted as satisfactory (candidate is given 2 months to make corrections);
- provided passages referred to in the report are revised or defended to the satisfaction of either the School or the School and the examiner, the thesis be accepted as satisfactory (candidate is given 6 months to make corrections);
- the thesis does not meet the standard expected for the degree but the candidate should be allowed to revise and resubmit. (candidate is given 12 months to revise and resubmit);
- MPhil in lieu (PhD only). The candidate should be offered the award of MPhil forthwith or the candidate should be offered the award of MPhil after further corrections have been made;
- the thesis be rejected and the degree NOT be conferred (the student will not be permitted to resubmit the thesis in a revised form).

#### Amendments to a Thesis

The majority of theses require some form of amendment before the degree is awarded. The Graduate School informs candidates of the corrections required. Candidates are required to consult with their advisor.

## **Disagreement between Examiners**

Where there is insufficient agreement between the examiners' reports, and the Chair of Examiners and the School Postgraduate Coordinator believe resolution is possible, the examiners may be invited to consult to achieve consensus. If the examiners are unable to agree, a third examiner will be appointed.

#### Resubmission

Where a resubmission is required, the candidate is usually given 12 months to re-write the thesis and resubmit for a second examination. The same format should be used, and documentation submitted as for the first examination.

#### **Notification of Result**

- Candidates are considered eligible to pass once the Graduate School has received confirmation from the School Postgraduate Coordinator stating that all corrections, additions and amendments specified by the examiners (if any) have been completed.
- 3 permanent bound copies of the thesis incorporating any necessary amendments or revisions must be submitted.

Once these requirements have been fulfilled, the candidate will receive a letter stating that they have successfully completed all the requirements for the degree.

## COURSEWORK DEGREES



The postgraduate coursework programs GCSc, GDipSc and MSc provide the opportunity for graduates of any university, with a sufficiently strong background in the relevant field of study, to acquire specialised skills at an advanced level, and a corresponding qualification. The programs normally occupy one, two and three semesters of full-time study or up to four times those periods if taken part-time.

Graduate Certificate in Science (GCSc)	(8 units)	1 semester
Graduate Diploma in Science (GDipSc)	(16 units)	2 semesters
Master of Science (MSc) (For applicants with a four-year undergraduate degree)	(16 units)	2 semesters
Master of Science (MSc)	(24 units)	3 semesters

They can be taken sequentially. For example, a student may enrol in the GCSc. Upon completion they may then enrol in the GDipSc in a following semester and the MSc in another semester after that. These programs are full fee-paying. Fees are charged at \$900 per unit in 2007 for domestic students and International students pay \$13,750 per semester.

If you obtain a MSc with sufficiently good grades and wish to undertake research, you may subsequently be accepted for entry into MPhil or PhD.

### FEE-HELP (Higher Education Loans Programme)

FEE-HELP is a loan system that covers up to the full cost of tuition fees, to a maximum amount of \$50,000. Domestic students in fee paying places who are Australian citizens or holders of a permanent humanitarian visa are eligible for FEE-HELP. Domestic students who are New Zealand citizens or holders of a permanent non-humanitarian visa are not eligible for FEE-HELP.

Following are schedules for the three coursework programs, together with the lists of courses from which you can choose.

You should discuss your plans with the School Postgraduate Coordinator or Discipline Postgraduate Coordinator before attempting to enrol.

### Graduate Certificate in Science (GCSc)

#### **Program Information**

This program provides advanced theoretical and practical knowledge in a range of specialised scientific fields, through lectures, workshops, projects and directed study. Students can develop understanding of specialised fields in which they have little previous knowledge, or extend their previous expertise.

#### **Program Requirements**

A student is required to obtain 8 units from courses in the Program List for the relevant field of study. To obtain credit for a course, a grade of at least 4 is required.

### Official Rules for the Graduate Certificate in Science

1. Enrolment requirements: To enrol, a student must —

(a) (i) hold an approved degree; or

(ii) have completed post-secondary study and 2 years relevant work experience approved by the Executive Dean; and

(b) satisfy the Executive Dean that, based on the student's academic record, the student is suitably qualified for admission.

**2. Field of study:** A student must undertake the program in a field approved by the Executive Dean.

3. Program requirements: #8 from the GCSc list in the chosen field.

#### 4. Maximum credit available for previous study: See GAR 1.6

## Graduate Diploma in Science (GDipSc)

#### **Program Information**

This program provides advanced theoretical and practical knowledge in a range of specialised scientific fields, through lectures, workshops, projects and directed study. Students can develop understanding of specialised fields in which they have little previous knowledge, or extend their previous expertise.

#### **Program Requirements**

A student is required to obtain 16 units from courses in the Program List for the relevant field of study. To obtain credit for a course, a grade of at least 4 is required.

### Official Rules for the Graduate Diploma in Science

#### 1. Enrolment requirements

To enrol, a student must —

- a) hold a graduate certificate in science in the chosen field from this University; or
- b) hold an approved degree; or have completed post-secondary study and 2 years relevant work experience approved by the Executive Dean;
- c) satisfy the Executive Dean that, based on the student's academic record, the student is suitably qualified for admission.

#### 2. Field of study

A student must undertake the program in a field approved by the Executive Dean.

#### 3. Program requirements

#16 from the GDipSc list in the chosen field.

#### 4. Maximum credit available for previous study: #6 (See GAR 1.6)

### Master of Science (MSc)

#### **Program Information**

This program provides advanced theoretical and practical knowledge in a range of specialised scientific fields, through lectures, workshops, projects and directed study. Students can develop understanding of specialised fields in which they have little previous knowledge, or extend their previous expertise.

#### **Program Requirements**

Program requirements should be read in conjunction with the Program rules and General Award Rules.

#### Official Rules for the Master of Science

#### 1. Enrolment requirements

To enrol, a student must —

- a) hold an approved degree which, for the #16 program, must be equivalent to a 4-year degree; and
- b) satisfy the Executive Dean and Head of School that, based on the student's academic record, the student is qualified for admission.

#### 2. Field of study

A student must undertake the program in a field approved by the Executive Dean.

#### 3. Program requirements

- a) #16 program: #16 from the MSc program list; or
- b) #24 program: #24 from the MSc program list

#### 4. Maximum credit available for previous study: #8(See GAR 1.6)

## Master of Science Program List

NOTE: Before enrolling in any course listed in the Program List, you should seek academic advice from the discipline postgraduate coursework advisor, and obtain enrolment permission from the School Student Administration Office.

### Field of Study - Financial Mathematics

For the Graduate Certificate in Science (Plan code: FNMATX5138), a student is required to obtain #8 from the courses listed under the heading, Field of Study - Financial Mathematics, Part B.

For the Graduate Diploma in Science (Plan code: FNMATX5240), a student is required to obtain #16 including:

- a) #10 from the courses listed under the heading, Field of Study -Financial Mathematics, Part B, and
- b) #6 from the courses listed under the heading, Field of Study -Financial Mathematics, Part C, or listed under the heading Field of Study - Mathematics, Part B.

For the Master of Science #16 (Plan code: FNMATX5389) a student must consult the Program Coordinator for approval of an appropriate plan to obtain #16 from the courses listed under the heading Field of Study - Financial Mathematics.

For the Master of Science #24 (Plan code: FNMATX5244), a student will be required to obtain #24 including:

- a) #8 from the course list under the heading Field of Study Financial Mathematics, Part A; and
- b) (b) #10 from the courses listed under the heading Field of Study
  Financial Mathematics, Part B; and
- c) (c) #6 from the courses listed under the heading Field of Study
  Financial Mathematics, Part C, or listed under the heading Field of Study Mathematics, Part B.

## Part A

MATH7020 <sup>2</sup>	Project or Thesis in Financial Mathematics	(#8 Units)
MATH7021 <sup>3</sup>	Project or Thesis in Financial Mathematics	(#8 Units)

#### Part B

FINM7401	Finance
MATH7039	Financial Mathematics
MATH7049	Computation in Financial Mathematics
MATH7091	Financial Calculus
STAT7304	Probability Models & Stochastic Processes I

Candidates who have a knowledge equivalent to these courses may substitute another course listed under the heading, Field of Study -Financial Mathematics, Part C or listed under the heading, Field of Study - Mathematics Part B with the permission of the Head of School of Physical Sciences.

### Part C

FINM6402	Empirical Finance Honours
FINM7402	Corporate Finance
FINM7403	Portfolio Management
FINM7403	Portfolio Management
FINM7406	International Financial Management
	8

### Field of Study — Mathematics

For the Graduate Certificate in Science (Plan code: MATHEX5138), a student is required to obtain #8 from the courses listed under the heading, Field of Study - Mathematics, Part B.

For the Graduate Diploma in Science (Plan Code: MATHEX5240), a student is required to obtain #16 from the courses listed under the heading, Field of Study - Mathematics, Part B.

For the Master of Science #16 (Plan Code: MATHEX5389), a student must consult the Program Coordinator for approval of an appropriate plan to obtain #16 from the courses listed under the heading, Field of Study - Mathematics.

For the Master of Science #24 (Plan code: MATHEX5244), a student is required to obtain #24

- a) #8 from the courses listed under the heading Field of Study -Mathematics, Part A; and
- b) #16 from the courses listed under the heading Field of Study Mathematics, Part B.

### Part A

#8 from

MATH7010 <sup>2</sup>	Project or Thesis; or (#8 Units)
MATH7011 <sup>3</sup>	Project or Thesis (#8 Units)

## Part B

MATH7039	Financial Mathematics
MATH7049	Computation in Financial Mathematics
MATH7091	Financial Calculus
MATH7105⁴	General Relativity
MATH7106⁴	Advanced Mathematical Methods & Models A
MATH7107⁵	Advanced Mathematical Methods & Models B
MATH7133⁵	Algebraic Methods of Mathmatical Physics
MATH7134	Mathematical Biology
MATH7144⁵	Advanced Hamiltonian Dynamics & Chaos
MATH7201⁵	Applications of Scientific Computing

MATH7202⁵	Advanced Techniques in Numerical Linear Algebra
MATH7205⁴	Advances in Scientific Visualisation and Graphics
MATH7206 <sup>4</sup>	Issues in Computational Biology & Bioinformatics
MATH7232	Operations Research & Mathematical Planning
MATH7301⁵	Advanced Algebra
MATH7302⁵	Combinatorial Designs
MATH7303⁴	Advanced Combinatorics
MATH7304 <sup>4</sup>	Number Theory
MATH7331	Graph Theory & Geometry
MATH7333	Abstract Algebra & Number Theory
MATH7401⁵	Advanced Analysis
MATH7402 <sup>4</sup>	Advanced Ordinary Differential Equations
MATH7403⁵	Advanced Partial Differential Equations
MATH7404 <sup>5</sup>	Functional Analysis
MATH7405⁴	Measure Theory
MATH7406 <sup>4</sup>	Control Theory
MATH7701	Special Topics I
MATH7702	Special Topics II
MATH7703	Special Topics III
MATH7704	Special Topics IV
STAT7301	Mathematical Statistics
STAT7302	Applied Statistics
STAT7303	Experimental Design
STAT7304	Probability Models & Stochastic Processes I
STAT7404	Stastical Consulting & Professional Practice
STAT7502 <sup>4</sup>	Advanced Statistics I
STAT7503⁵	Advanced Statistics II
STAT7504 <sup>4</sup>	Advanced Probability & Stochastic Processes I
STAT7505⁵	Advanced Probability & Stochastic Processes II
STAT7701	Special Topics I
STAT7702	Special Topics II
07477700	On a sight Tarriage III

STAT7703 Special Topics III

or up to #4 from late year courses approved by the Executive Dean.

#### Field of Study — Physics

For the Graduate Certificate in Science (Plan code: PHYSCX5138), a student is required to obtain #8 from the courses listed under the heading, Field of Study - Physics, Part B.

For the Graduate Diploma in Science (Plan code: PHYSCX5240), a student is required to obtain #16 from the courses listed under the heading, Field of Study - Physics, Part A or Part B.

For the Master of Science #16 (Plan Code: PHYSCX5389), a student must consult the Program Coordinator for approval of an appropriate plan to obtain #16 from the courses listed under the heading, Field of Study - Physics.

For the Master of Science #24 (Plan code: PHYSCX5244), a student is required to obtain #24:

- a) #8 from the courses listed under the heading, Field of Study Physics, Part A; and
- b) #16 from the courses listed under the heading, Field of Study Physics, Part B.

#### Part A

#8 from

PHYS7710 <sup>2</sup>	Project (#2 units); or
PHYS7711 <sup>3</sup>	Project (#2 units).

- PHYS7720<sup>2</sup> Research Project (#4 units); or
- PHYS7721 <sup>3</sup> Research Project (#4 units).
- PHYS7730<sup>2</sup> Advanced Research Project (#6 units); or
- PHYS7731 <sup>3</sup> Advanced Research Project (#6 units).

#### PHYS7800<sup>2</sup> Advanced Experimental Physics (#2 units); or

PHYS7801<sup>3</sup> Advanced Experimental Physics (#2 units).

## Part B

#16 from -	
PHYS7000	General Topics in Physics
PHYS7001	General Topics in Physics
PHYS7002	Special Topics in Physics
PHYS7003	Special Topics in Physics
PHYS7004	Special Topics in Physics
PHYS7021	Statistical Mechanics
PHYS7033 ⁵	Condensed Matter Physics: Electronic properties of
crystals	
PHYS7042	Quantum Physics
PHYS7051	Electromagnetic Theory III
PHYS7060 <sup>₄</sup>	Laser Physics
PHYS7072 ⁵	Techniques of Experimental Physics & Data Analysis
PHYS7073	Computational Physics
PHYS7080	Astrophysics
PHYS7090 ⁴	Quantum Optics & Stochastic Processes
PHYS7241	Advanced Quantum Theory
PHYS7250	Advanced Electromagnetic Theory

PHYS7270 <sup>4</sup> Advanced Computational Physics

or up to #4 from late year courses approved by the Executive Dean

## Field of Study — Statistics

For the Graduate Certificate in Science (Plan code: STATSX5138). a student is required to obtain:

- a) at least #6 from courses listed under the heading, Field of Study - Statistics Part B; and
- b) no more than #2 from courses listed under the heading, Field of Study Mathematics Part B.

For the Graduate Diploma in Science (Plane code: STATSX5240), a student is required to obtain:

- a) at least 12 from courses listed under the heading Field of Study Statistics Part B; and
- b) no more than #4 from courses listed under the heading, Field of Study Mathematics Part B.

For the Master of Science #16 (Plan Code: STATSX5389), a student must consult the Program Coordinator for approval of an appropriate plan to obtain #16 from the courses listed under the heading, Field of Study - Statistics.

For the Master of Science #24 (Plan code: STATSX5244), a student is required to obtain #24 comprising:

- a) at least #4 from courses listed under heading Field of Study Statistics Part A;
- b) at least #12 from courses listed under heading Field of Study Statistics Part B; and
- c) at most #4 from courses listed under the heading Field of Study Statistics Part C.

### Part A

at least #4 from -

STAT7010 <sup>2</sup>	Project or Thesis I (#8 Units)
STAT7011 <sup>3</sup>	Project or Thesis I (#8 Units)
STAT7620 <sup>2</sup>	Thesis in Biostatistics (#8 Units)
STAT7621 <sup>3</sup>	Thesis in Biostatistics (#8 Units)
STAT7622	Project in Biostatistics (#4 Units)

## Part B

at least #12 from -

PUBH7600	Introduction to Epidemiology
STAT7301	Mathematical Statistics
STAT7302	Applied Statistics
STAT7303	Experimental Design
STAT7304	Probability Models & Stochastic Processes I
STAT7502⁴	Advanced Statistics I
STAT7503⁵	Advanced Statistics II
STAT7504⁴	Advanced Probability & Stochastic Processes I
STAT7505⁵	Advanced Probability & Stochastic Processes II
STAT7601	Mathematical Background for Biostatistics
STAT7602	Health Indicators & Health Surveys
STAT7603	Data Management & Statistical Computing
STAT7604	Principles of Statistical Inference
STAT7605	Clinical Biostatistics
STAT7606	Design of Experiments and Clinical Trials
STAT7607	Linear Models
STAT7608	Categorical Data & Generalised Linear Models
STAT7609	Survival Analysis
STAT7610	Longitudinal & Correlated Data
STAT7611	Bioinformatics & Statistical Genetics
STAT7612	Clinical Trials & Meta-Analysis
STAT7613	Bayesian Statistical Methods
STAT7701	Special Topics I
STAT7702	Special Topics II

STAT7703 Special Topics III

Part C at most #4 from any course listed in the Field of Study -Mathematics part (b) or up to #4 from late year courses approved by the Executive Dean.

#### Endnotes

- 1. Approval from the Executive Dean, Head of School or Program Coordinator required.
- 2. Code for student in year courses commencing in semester 1. Students must re-enrol in the same code in semester 2.
- 3. Code for student in year courses commencing in semester 2. Students must re-enrol in the same code in both semesters 1 and 2 of the following year.
- 4. Course is offered in even-numbered years only.
- 5. Course is offered in odd-numbered years only.

#### Master of Mineral Resources (MMinRes)

#### **Program Information**

This program enables graduates to obtain an advanced knowledge in specialist plans related to the minerals industry. Students gain analytical skills that enable critical assessment of alternative solutions to complex industry problems. Graduates are equipped with an understanding of particular sections of the industry, and focus on investigating and resolving design and operational problems in a safe and efficient manner. The Master of Mineral Resources provides professional postgraduate education in areas that impact directly upon the efficient technical, scientific and commercial management of the minerals industry.

#### **Program Requirements**

A student is required to obtain #24 from courses under the heading of the relevant field from the MMinRes List. Refer to MMinRes rules for further information.

#### **Official Rules for the Master of Mineral Resources**

#### 1. Enrolment requirements

To enrol, a student must

- a) have completed one of the mineral resources suite of programs in the relevant field; or hold an approved degree; and
- b) satisfy the Executive Eean that, based on the student's academic record, the student is suitably qualified for admission.

#### 2. Field of study

A student must undertake the program in a field approved by the Executive Dean.

#### 3. Program requirements

#24 from the MMinRes list.

**4. Maximum credit available for previous study** #8 (See GAR 1.6) The School of Physical Sciences manage the field of exploration in this degree.

## **Exploration**

This field is concerned with exploration geology and geophysics. Admission normally requires a Bachelor of Science in Earth Sciences, although graduates with bachelors degrees in the physical sciences (physics and mathematics) and work experience in geology are welcome to apply. Many courses are conducted through directed reading and personal tuition rather than through set classes. This enhances the flexibility of choice of component courses.

### Program List for Master of Mineral Resources (Exploration)

#### **Exploration**

A student is required to obtain -

For the GCMinRes (Exploration Plan code: EXPLOX5041), #8 from Part A.

for the GDipMinRes (Exploration Plan code: EXPLOX5097), #16 comprising: #12 from Part A, and #4 from Part B.

for the MMinRes (Exploration Plan code: EXPLOX5196), #24 comprising: #16 from Parts A and/or B, and #8 from Part C.

Part A

ERTH7002	Special Topics I
ERTH7003	Special Topics II
ERTH7004	Special Topics III
ERTH7005	Special Topics IV
ERTH7111	Ore Deposits & Exploration Geology
ERTH7311	Exploration Geochemistry
ERTH7411	Basin Analysis in Exploration
ERTH7510	Geophysical Signal Processing
ERTH7520	Exploration Seismology
ERTH7711	Applied Structural Analysis
GEOM7000	Remote Sensing of Environment
GEOM7001	Advanced Remote Sensing of Environment
GEOM7002	Advanced Geographical Information Systems
GEOM7005	Concepts in Geographical Information Systems
70	

STAT7201	Analysis of Scientific Data
STAT7202	Probability Models for Science

Plus up to #4 from courses in other fields of the MMinRes with the approval of the Executive Dean.

Part B

ERTH7001 <sup>1</sup>	Project or Thesis
ERTH7201 <sup>2</sup>	Project or Thesis

Part C

ERTH7000 <sup>1</sup>	Project or Thesis
ERTH7200 <sup>2</sup>	Project or Thesis
MINE7010 <sup>3</sup>	Project or Thesis VI
MINE7029 <sup>2</sup>	Project or Thesis V

#### Endnotes

<sup>1</sup> Code for student in year courses commencing in sem 1. Students must re-enrol in the same code in sem 2.

 $^{\rm 2}$  Code for student in year courses commencing in sem 2. Students must re-enrol in the same code in both sem 2 and sem 1 of the following year.

<sup>3</sup> Code for students completing the course in one semester.

## **GENERAL INFORMATION**


# Alcohol on Campus

Alcohol is only permitted on University premises under strict conditions. Students planning to hold a function at which alcohol will be consumed in the buildings or grounds are required to apply for a permit. Application forms are available from the discipline secretaries. The application should be submitted at least *four weeks* before the function, and after the permit is obtained, it should be *available for immediate inspection* by university security officers at any time during the function.

#### Library

The University Library occupies several sites at St Lucia and beyond. It is likely that the Physical Sciences and Engineering (PS&E) and Biological Sciences (Biol Sciences) branches will be most relevant for you during your candidature. You will find the staff there friendly and helpful. They often run workshops for research students and staff, which will be advertised to you by email.

## Photocopying from Books and Journals

Most journals may be borrowed from the library, and individual papers can be photocopied for research purposes. Some journals, especially physics journals, cannot be taken from the library.

No one is likely to object if you photocopy a few pages from a book for your own research use. However, please be aware that there are copyright laws which apply to photocopying generally. In particular, photocopying whole books is certainly against the law.

## Seminars

It is expected that you will have the opportunity to present seminars on your work during your candidature, at least once per year. These will be within your Discipline, or more likely to one of the specialist seminar series running during the year. Your supervisor will probably ask you to do these from time to time, but don't be afraid to take the initiative and ask for the opportunity yourself.

You should try to get feedback from the audience after each presentation. Developing good presentation skills is an important part of the MPhil or PhD experience.

In particular, you are required to present a one-hour Exit Seminar within six months prior to the intended date of submission of your thesis. This is not part of the formal examination process for the MPhil or PhD, but should help you to consolidate your ideas about the whole project.

# Email Forwarding

Occasionally you will receive official correspondence from the Graduate School, or other University offices. Increasingly, official University correspondence is now done via e-mail, and through your account on student.uq.edu.au. If you do not read your student e-mail account regularly, it is your responsibility to arrange to have your e-mail redirected from this account to an account that you read regularly. Further information and instructions on how to forward your e-mail is available from www.uq.edu. au/cgi-bin/forward.pl

## Occupational Health and Safety

Students are required to observe the University's Occupational Health and Safety Policy. Students are responsible for adopting study and work practices in a safe manner and which does not impact adversely on the environment. Students should check with their advisors of special safety issues that may apply to their work. Students should familiarise themselves with relevant procedures to minimise the risk of injury. All injuries must be reported to your advisor.

The School's Workplace Health and Safety Officer is Mr Andrew Carthy (+61 (0) 7 3365 2371 or by email: a.carthy@mailbox.uq.edu.au)

#### University Health Service

The Health Service (www.ems.uq.edu.au/health), situated on the Ground Level of the Gordon Greenwood Building is available to current students and staff of The University of Queensland, and to families of international students. Families of staff and of local students need to find their own GP in their local area.

# Accidents on Campus

In the event of an injury or accident on campus, once the person is removed from danger (if safe to do so), phone Security on 53333 immediately. Security are equipped with emergency equipment and will make an assessment of the situation on arrival. The patient may then be taken either to the University Health Service for treatment, or in case of particularly serious injury, to hospital. The phone number of the Health Service is 56210. You may phone this number for immediate advice over the phone in the case of emergency.

If you sustain an injury while participating in a class, in particular while tutoring, you should inform the lecturer in charge immediately and attend the University Health Service for treatment. A Workplace Accident, Injury and Incident Report should be completed. This form is available from the School Finance Office.

Employees injured at work also need to complete a Compensation Claim Form for Workers and Employers, which should be forwarded to the Salaries Section. Both these forms are available from the School Finance Office.

## Loss and Theft

Unfortunately, theft does occur occasionally from University premises. In the event of loss or theft, the full circumstances should be reported to your Discipline Secretary as soon as possible. The University and the School attempt to provide security for property but cannot accept responsibility for any losses. *Please take responsibility for ensuring that your valuables are secure.* 

# Smoking

Smoking is forbidden in all University buildings, including lifts and fire escapes.

# Fire

All staff and students should familiarise themselves with escape routes and locations of fire-fighting appliances. In the event of fire you must obey the instructions of staff or other authorised office of the University. A list of fire wardens will be visible in your building. Please familiarise yourself with these.

# First Aid

A first aid kit is located in the School office and within each Discipline. For any first aid enquiries, please refer to the First Aid Officers within each Discipline:

- Earth Sciences Mr Andrew Carthy ext 52371 Room 3-209
- Mathematics Dr Andy Wilkins ext 53266 Room 67-447 and
- Dr Joseph Grotowski ext 53260 Rm 67-346
- Physics Mr Alan Reid ext 52334 Room 6-111

School of Physical Sciences The University of Queensland Ground Floor, Physics Annexe (6) St Lucia Campus Qld 4072 Phone: +61 7 3346 7681 Fax: +61 7 3365 3328

CRICOS Provider No. 00025B