

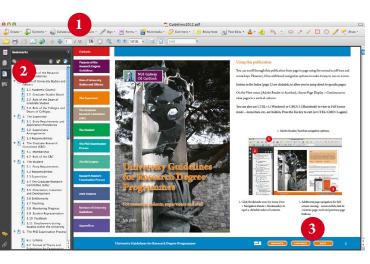
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Entries in the Index (page 2) are clickable, to allow you to jump direct to specific pages.

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- Click Bookmarks icon (or menu View > Navigation Panels > Bookmarks), to open a clickable index of contents.
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1. Adobe Reader/Acrobat navigation options.

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Every effort has been made to ensure that the contents of the University Guidelines for Research Degree Programmes are accurate.

Preface

We, in the Graduate Studies Office, are pleased to bring you these revised set of guidelines for research degree programmes. The initial sets of guidelines were developed following a comprehensive consultative process, involving University officers and representatives of research supervisors and students from across the University, and are updated annually.

In revising the guidelines, we have endeavoured to further clarify the issues raised and to ensure that the guidelines and the associated regulations fully concur.

These Guidelines are designed to promote the sense of a 'community of scholars' which is a hallmark of a high-quality university. We have many partners in the development of graduate training. Vice-Deans of Graduate Studies appointed in each College have contributed to the coordination of graduate training across the University and have inputted into the revision of these guidelines. We acknowledge the input of the Registrar and Deputy President, Academic Secretary, the Standing Committee of Academic Council and the Graduate Studies Board who reviewed and approved the updates. Internally, CELT has advised and supported the development of graduate training and externally we have active collaborations with the Deans of Graduate Studies in the other six Universities.

However, these Guidelines will not be efficacious in themselves. To ensure implementation of these guidelines, while endeavouring to keep the administrative burden as low as possible, we have relied on the cooperation of staff across the University. We would like to acknowledge particularly the efforts of everybody in Postgraduate Admssions, Records & Registration, Examinatons Office, Fees Office, ISS, Research Accounts and Academic Affairs all who have assisted Graduate Studies. Further revisions which occur after the printing and online publishing of these guidelines will be included in the annual update of the guidelines. We encourage feedback from all involved in graduate research and training in the University so that we can attain and maintain the highest standards.

To contact the Graduate Studies Office, please send an email to: graduatestudies@nuigalway.ie

June 2017

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1. Purpose of the Research Degree Guidelines

The purpose of these guidelines is to provide students, supervisors, examiners and other university staff with the necessary information to ensure best practice in the management of the research degree process. The guidelines have been produced in consultation with academic staff and students and approved by Academic Council. Central to the achievement of this purpose is the regular revision of these Guidelines to take account of feedback and evolving practice nationally and internationally.

These guidelines should be used in conjunction with the Regulations for Higher Research Degrees (Appendix 1) the forms used in the administration of PhD/ MD/Research Masters degrees (Appendix 2), the online PhD examination system, regulations and forms governing research Master's degrees which are available in the calendars of the individual colleges and regulations for the MD which are to be found in the College of Medicine, Nursing and Health Sciences calendar:

http://www.nuigalway.ie/colleges/mnhs/collegecalendar.html

Also in conjunction with the research degree guidelines, the policies and documents available on the Research Office website should be consulted: http://www.nuigalway.ie/research-office/

2. Role of University Bodies and Officers

2.1 Academic Council

As the University body responsible for overseeing all matters relating to the operation of academic activities, Academic Council oversees the operation of postgraduate research programmes, including standards and procedures. Council approves all major revisions of these guidelines and the relevant regulations.

2.2 Graduate Studies Board

The Graduate Studies Board will consider and recommend to the Standing Committee of Academic Council in the following areas:

- General matters of academic policy and practice relating to postgraduate study and research in line with overall objectives, policy and regulations of the University
- Formation of graduate schools
- Structure of postgraduate research degree programmes
- New postgraduate research degree programmes and major changes to existing postgraduate research degree programmes
- Structures, credit frameworks, content and assessments of graduate modules
- Annual reports on progression and completion rates for graduate research students
- Revision of the University guidelines in relation to research degree programmes and approval of local guidelines
- Promotion of postgraduate research programmes
- Strategy for graduate studies
- Such matters as the Standing Committee of Academic Council may refer.

2.3 Role of the Dean of Graduate Studies

The Dean of Graduate Studies, acting with the Secretary for Academic Affairs and the Standing Committee of Academic Council, is responsible for the overall management of the operation of University postgraduate research programmes. The Dean is responsible for:

- Making an annual report on the operation of all of the University's postgraduate research programmes to Academic Council (normally at the last meeting of the calendar year)
- 2. Making such revisions as are necessary to these guidelines, and preparing and revising all relevant regulations and other documents such as operational procedures and forms
- 3. Ensuring that feedback from research students, supervisors, local graduate research committees and examiners is analysed and considered, and that any necessary consequent changes in guidelines or regulations are drafted and approved
- 4. Working with the College Deans and relevant Vice Deans to ensure that all local guidelines and procedures conform to those of the University
- Overseeing and monitoring the operation of the research Master's and PhD/ MD examination processes.

2.4 Role of the Colleges and Deans of Colleges

As the local body responsible for overseeing all matters relating to the operation of academic programmes, each College oversees the detailed operation of postgraduate research programmes, including local standards and procedures. To facilitate comparability and the maintenance of good standards, any supplementary local guidelines should be kept to a minimum. *All local guidelines must agree with these University Guidelines, and may contain extra information and provisions relevant to the discipline in question. In the absence of local guidelines formally approved by the Graduate Studies Board and the Standing Committee of Academic Council, these University Guidelines apply.*

2.4.1 The College Dean/Vice Dean

The Dean of a College is responsible for the overall supervision of the operation of the College's postgraduate research programmes, but may delegate specific duties and responsibilities to a Vice Dean. In the context of postgraduate research degrees, in each College there is a Vice Dean who is responsible for:

- 1. Working with the Dean of Graduate Studies and the postgraduate sections of Academic Affairs
- 2. Ensuring that feedback from research students, supervisors, local graduate research committees and examiners is provided to the Graduate Studies Board.

2.4.2 The College

The College approves all substantive revisions of local guidelines following consultation with the Dean of Graduate Studies and the Graduate Studies Board. Starting from the premise that a single (or a minimum) set of guidelines and procedures is sufficient to cover all circumstances in a College, all applications for the approval of variant guidelines are examined critically and, if justified, are approved by the Graduate Studies Board. Where more than a single set exists, a College monitors all equally. If approved, links to local College guidelines will be available on the relevant College website.

2.4.2.1 Annual Report of Research Degree Programmes

An annual report on the operation of each College's postgraduate research programmes is prepared by the Dean (or a designated Vice Dean) and submitted to the Dean of Graduate Studies. It is prepared by the middle of the first semester and includes accounts of feedback from research students and research supervisors for the previous year. The report also summarises the information received in the Yearly Progress Reports. The report should include and comment on completion rates and completion times for each School which are available at this weblink.

2.4.2.2 Yearly Progress Reports

The College is responsible for ensuring that Yearly Progress Reports are received on each research student who is registered in the College in that year (see Annual Progress Review, Section 5.8.3) including any student who has discontinued their studies. The recommendation of the Graduate Research Committee (Section 5.4) is made to the relevant sub-committee of the College and, following consideration of this recommendation, a formal decision on progression will be made by the sub-committee. Outcomes regarding Transfers, Leave of Absence or Withdrawals need to be communicated by College to central academic administration. A candidate can appeal a decision not to allow progression to the Standing Committee of Academic Council.

3. The Supervisor

As a supervisor, you are the person who is responsible for providing guidance on the research carried out by the student. Where co-supervision is appropriate, for example, for interdisciplinary or co-operative projects, a primary supervisor must be identifiable. The primary supervisor takes full responsibility for the overall management of the student's training and research project, and for relevant administrative matters. Training in research supervision is offered by CELT within the Diploma in Academic Practice and by the Graduate Studies Office.

All research supervisors, particularly those who have not yet supervised a PhD to successful completion, are recommended to attend supervisor training as part of their professional development, e.g. relevant modules provided by CELT and/or supervisor workshops provided by the Graduate Studies Office. PhD supervisors who have not yet supervised a PhD to successful completion are strongly encouraged to attend supervisory training during, or prior to, their first year of supervising. A range of books for research supervisors and students can be consulted in the Graduate Studies office, or in the James Hardiman Library (see list in Appendix 6).

As a postgraduate research project supervisor you should meet the following criteria:

- be an active scholar and researcher with good records of achievement and publication
- have a PhD in a suitable academic area, or an equivalent record of achievement.

3.1 Entry Requirements and Application Procedures

The following conditions apply to student entry:

• To be eligible to enter on a programme of study and research for the degree of PhD, a candidate must have reached a high honours standard at the examination for the primary degree or presented such other evidence as will satisfy the Head of School and the College of his/her fitness.

The application, together with the recommendation of the Head of School, shall be considered by the College in which the programme is to be pursued. The title of the thesis, or a short description outlining the nature of the work, must be provided to the College when the candidate is being recommended for acceptance. If the candidate's application is approved by the College, he/ she must register as a PhD candidate either as full time or part-time as set out in the regulations (Appendix 1).

3.2 Supervisory Arrangements

The following conditions apply to the approval of supervisors:

- 3.2.1. The College, on the nomination of the Head of School, will assign a permanent member of University academic staff to be the primary supervisor of the candidate's research.
- 3.2.2. The College may allow for co-supervision of the thesis. In the case of cosupervision, one of the supervisors need not be a member of the staff of the University.
- 3.2.3. The College may assign a member of the University's research staff as primary supervisor of a candidate's research, with a permanent member of the University's academic staff as co-supervisor, where the research being undertaken by the candidate is funded from a research project on which the member of research staff is the Principal Investigator.
- 3.2.4. Honorary Clinical academic staff are eligible to be a primary supervisor for research degrees, within the area of clinical specialisation, with a fulltime academic consultant or fulltime permanent academic staff member being co-supervisor in the College of Medicine, Nursing and Health Sciences. Honorary Clinical academic staff are required to abide by the University Guidelines for Research Degree Programmes and Regulations for Higher Research Degrees.
- 3.2.5. Senior researchers may undertake graduate student supervision following approval of their application as Honorary Research Lecturers. Nominations

for Honorary Research Lectureships, to include the curriculum vitae of the nominee, are made by the Head of the relevant School, or Director of the relevant Research Institute, and the Vice-President for Research to the Personal Professorship Promotions Board. The appointment is made by the President, acting on a positive recommendation from the relevant College, which will, in turn, have received the positive recommendation of the Personal Professorship Promotions Board. Persons appointed to Honorary Research Lectureships shall, if requested to do so by the relevant University authority, carry out appropriate student supervision. Full details on the approval process for appointment in an adjunct post are available in the Academic Planning and Resource Committee document.

http://www.nuigalway.ie/registrar/AcademicRestructuring.html

- 3.2.6. The name(s) of the supervisor(s) and the names of the three members of the candidate's Graduate Research Committee nominated by the Head of School in consultation with Head of Discipline must be forwarded when the candidate's name is submitted to the College for approval.
- 3.2.7. Unless permission is given to the candidate by the Head of School, on the recommendation of the relevant supervisor and GRC member, to work elsewhere under the general direction of the primary supervisor, the research will be carried out in the School mainly responsible for the subject area concerned but, where the research is interdisciplinary in nature, there shall be due co-operation between the main School and the other School(s) involved. If off-campus for more than 3 months in any academic year, the Student, Supervisor, and GRC member, are to complete form GS 090 (Off Campus Research Student Form) and submit to the Head of School for approval. The Head of School is to send the completed form to the Vice Dean for Graduate Studies. This decision is communicated by the Vice Dean of Graduate Studies to the next Graduate Studies Board meeting for noting. A student who has registered for a joint degree with another institution, with whom a formal memorandum of understanding has been signed, will spend a period of time at the partner institution.

- 3.2.8. The facilities required for a particular research project vary greatly across the Colleges. In some areas, direct access to complex instrumentation, a cohort of skilled co-workers and a large annual consumables budget are prerequisites; in others, access to research materials is a priority or travel to research sites. Therefore in all cases:
 - Research students are not recruited unless the minimum facilities and consumable budgets required for the completion of the proposed project are available
 - If fieldwork is necessary to conduct primary research, then the requisite Health and Safety requirements are evaluated prior to the initiation of the project. Further information on the University's Fieldwork Code of Practice is available at http://www.nuigalway.ie/healthsaf/index.php
 - James Hardiman Library, Information Solutions and Services, Buildings Office and other relevant University services and support suppliers are informed, by the supervisor, prior to recruitment, of research student numbers with special requirements and the nature of such requirements.

3.3 Responsibilities

The commitment and expertise of the supervisor(s) is critical to the success of a postgraduate research project. Your specific responsibilities include:

- Supporting the student in the development or refinement of a research project and/or plan of work
- Ensuring that the student has been introduced to the members of their Graduate Research Committee at the beginning of his or her studies
- Providing advice and guidance about the direction of the research project and the strategies that might be used to achieve the research goals
- Advising the student on his/her specific, transferrable and generic training needs and the regulations governing the Structured PhD/MD programme within their College

- Advising the student on his/her responsibilities, entitlements and duties at the beginning of his/her studies (see Sections 5.2, 5.6 and 5.7)
- Providing guidance on the standard of work expected for a research Master's/ MD or PhD degree and communicating clearly to the student how s/he is performing, particularly when the required standards are not being met
- Monitoring student progress (see Section 5.8)
- Ensuring that lines of communication with the student are efficient, that regular contacts are maintained, and that all important understandings and decisions are recorded and agreed. (see sample Student/Supervisor meeting GS form, Appendix 2). There should be clear and agreed frequencies of consultations between you and your student
- Providing feedback on written or oral presentations that are given by the student
- Providing the student with opportunities to meet other researchers in the field by facilitating his/her attendance at conferences as appropriate and as permitted by resources
- Providing encouragement, advice and assistance with the presentation of conference papers and the publication of scholarly papers emanating from the research project, while ensuring that the student gets appropriate recognition for his/her efforts (e.g., authorship on papers and acknowledgements at seminars)
- Ensuring that the research is conducted in a safe manner and to high ethical standards
- Ensuring that adequate supervision is in place for students during any extended periods of absence by the supervisor
- Organising and overseeing the Examination Process (see Section 6 for details).

4. The Graduate Research Committee (GRC)

Every research student and supervisor also has the support of a committee that is charged with ensuring compliance with basic good practices. This is called the 'Graduate Research Committee'.

4.1 Membership

On student registration, the name(s) of the supervisor(s) and the names of the three members of the candidate's GRC, nominated by the Head of School in consultation with Head of Discipline, must be forwarded when the candidate's name is submitted to the College for approval. All research students to have a Graduate Research Committee in place. Decisions on GRC membership take into consideration relationships with cognate research institutes and centres, and the mix of research projects in the unit. The committee consists of three members of academic staff, which may include an external member from another university. A supervisor may not be a member of the student's Graduate Research Committee. Membership of the GRC does not preclude you from also being an internal examiner for the same student. In the case of supervisors who have not yet supervised a PhD to successful completion, the Graduate Research Committee should include an experienced supervisor.

During the course of the research degree, it may be necessary to change the membership of a student's GRC, following consultation with the supervisor. The College should approve the revised membership of the GRC.

4.2 Role of the GRC

The committee supports both the student and supervisor by:

- Acting in an advisory capacity to the student and as an additional source of encouragement
- Acting in an advisory capacity to the supervisor on academic/technical/ ethical/safety matters that arise during the course of the project
- Being available for consultation by the student on any project-related matters
- Monitoring informally the total workload of the student (including the research project work, required teaching, additional duties in the unit and other commitments) and, as appropriate, gives advice or intercedes
- Formally monitoring student progress through an annual review process involving a meeting with the student (Section 5.8.3) and making recommendations to the College on student progression, re-registration for another degree (Master's, MD or PhD) or exit (Section 5.8.4 5.8.7) A meeting of the GRC and the student must take place in the first year, irrespective of the time of year the student commences their study, and each subsequent year until the student has graduated or formally withdrawn from the University. This applies to students whether full or part-time.
- Acting, in the first instance in a supportive informal way, to facilitate the clarification and resolution of student/supervisor problems at an early stage, and, in the event of a persistent or intractable problem, engages in a more formal way (perhaps with extra external inputs) to find a resolution
- Advising the College when action is deemed necessary because of issues raised by the student or the supervisor(s)
- Ensuring there is a mechanism in place for a change of supervisor during the course of the research degree, should it be deemed necessary.
- Advising the student and supervisor(s) when a project is becoming prolonged
- Acting promptly to ensure the continuity of the research project if the supervisor becomes incapacitated, retires or resigns

- Discussing with the supervisor(s) the choice of external and internal examiners and approving the examiners before the approval of the Head of School and the College can be sought (Section 6)
- In order to ensure prompt, effective action a designated member of a GRC may act on behalf of the entire committee in cases where he/she deems that quick action is essential.

5. The Student

You as a student are central to the research endeavours of the University and during the period of research you will experience intellectual excitement, opportunities for prolonged engagement with difficult issues and ultimately the capacity to undertake independent research. PhD, MD and research Master's study is about scholarship, research and creativity; it involves supervisors, examiners and administrators; and graduate education forms an increasingly important part of universities' activities.

5.1 Entry Requirements

To be eligible to enter on a programme of study and research for the degree of PhD you must have reached a high honours standard at the examination for the primary degree or presented such other evidence as will satisfy the Head of School and the College of your fitness.

To be eligible to enter on an MD programme of study candidates should normally have a high honours standard in Medicine from NUI Galway or possess qualifications deemed by the University to be equivalent.

The application, together with the recommendation of the Head of School, shall be considered by the College in which the programme is to be pursued. The title of the thesis, or a short description outlining the nature of the work, must be provided to the College when your candidature is being recommended for acceptance. If your application is approved by the College, you must register as a PhD candidate for the period set out below:

In the case of a full-time candidate you must register for a period of four years and attend such a programme of study as may be prescribed by your College. The relevant College may reduce this period where the thesis has been approved for examination prior to the end of the four-year period, provided, however, that the minimum period of registration for candidates with a Master's qualification is not less than two years and not less than three years for all other candidates. Fees will be applied until the end of the semester in which the thesis is submitted.

- a. In the case of a part-time candidate, you must register for a period of six years and attend such a programme of study as may be prescribed by your College. The relevant College may reduce this period where the thesis has been approved for examination prior to the end of the six-year period. Fees will be applied until the end of the semester in which the thesis is submitted.
- In the case of a full-time or part-time candidate, you must register and carry out research in the University and within a partner University with whom the University has agreed through a memorandum of understanding to offer a joint degree. The period of registration and the fee schedule that applies is that of (a) or (b) above depending on full or part-time status.
- c. You must comply with Regulations and pass such examinations, if any, as may be prescribed in your College.

For candidates with a Master's qualification, or those of advanced standing, who are undertaking a PhD, the minimum period required will be two years full-time (or part-time equivalent). Such a student must be registered full-time (or parttime equivalent) until the thesis is submitted.

Formal definitions of full-time and part-time students are taken into account in the calculation of fees, project timetables, and estimations of progress and completion times. See Section 6.8 and 7.2.3 for completion time limits for research PhD and Master's degree, respectively. For further details see the PhD Degree Regulations (Appendix 1). For further details on the MD degree please go to Section 7.

5.2 Responsibilities

Success in graduate research requires commitment, dedication and a willingness to accept constructive criticism and expert supervision. In particular, you must accept full responsibility for all the contributions that you are expected to make, for example:

- Becoming familiar with the University and local guidelines pertaining to graduate degrees
- Acquiring the special and generic skills necessary for the project and for preparation of the thesis
- Fulfilling all the requirements if you are registered for a Structured PhD in your College
- Working efficiently on the project
- Becoming familiar with norms and guidelines on issues of direct relevance to the communication of research findings such as plagiarism and the correct usage of quotations, and the importance of the explicit acknowledgement of the work of others
- Communicating progress, and difficulties should they arise, regularly with your supervisor and your GRC
- Recording accurately and carefully in the required formats all relevant tasks being carried out, and producing timely progress reports as required
- Participating in relevant academic tutoring, demonstrating and other teaching assignments
- Disseminating results of your research at conferences and in print.

5.3 Supervision

Your supervisor(s) is the person who is responsible for providing guidance on your research. You may have co-supervisors for interdisciplinary or co-operative projects or where one of your supervisors holds an Adjunct post (see Section 3.2).

Also, in the case of co-supervision, one of the supervisors may be drawn from the academic staff of other Universities. In all cases of co-supervision, one of the supervisors is named as the primary supervisor. The primary supervisor takes full responsibility for the overall management of your training and research project, and for relevant administrative matters. For the specific responsibilities of your supervisor see Section 3.3.

5.4 The Graduate Research Committee (GRC)

Every research student and supervisor has the support of a committee that is charged with ensuring compliance with basic good practices. This is called the 'Graduate Research Committee' (GRC). The GRC is nominated by the Head of School in consultation with Head of Discipline and its membership is approved by the College when you register for your degree. See Section 4.2 for details of the role of the GRC.

5.5 Orientation, Induction and Development

Orientation and induction programmes are held at the beginning of the academic year, and in some Colleges at the beginning of the second semester, and attendance is obligatory. Please consult your College guidelines for further information.

The purpose of the induction programme is to promote awareness of all aspects of your research degree, including the preparation of research plans, performance monitoring and examination procedures. What may constitute a 'reasonable workload' and 'standard attendance' are also discussed. In addition, your teaching contribution as part of the training of your research degree, your rights and responsibilities, potential intellectual property issues, the rights and responsibilities of supervisors, plagiarism, safety and ethical considerations, definitions of research misconduct, basic work conditions and regulations, and the supports available from careers and other student services are explained.

5.5.1 Development of Research Skills

The Irish Universities Association (http://www.iua.ie/) has issued an 'Irish Universities' PhD Graduates' Skills' document which describes the desired learning outcomes and skills that PhD students may develop during their studies. The structured PhD has a strong focus on developing a range of skills which will assist you greatly in your career after your graduate and is also designed to meet the needs of an employment market that is wider than academia. Students develop these skills through their research and structured training. You will find this document in Appendix 4.

Your development is supported by the University through seminars and accredited skills training courses. For a list of online training courses and books see Appendix 5 and Appendix 6.

5.5.2 Structured PhD Programmes

Structured PhDs are now offered in each College.

The core component of the structured PhD programme is the advancement of knowledge through original research. It is recognised that doctoral education is an individual journey.

The purpose of structuring doctoral education is to create a supportive environment, which is achieved by:

- Formal accredited structured training to support the student's research. Every PhD student must complete 30 ECTS of such training during their PhD programme. Students select modules in consultation with their supervisor. The two main types of modules are:
 - advanced discipline-specific modules and
 - generic/transferrable/professional skills modules, further information on such modules is available at http://www.nuigalway.ie/graduate-studies/ currentstudents/gsmodules/. Online resources are available on Blackboard to support these modules (see Appendix 5).

Flexible delivery and assessment are key features of Structured PhD modules.

- 2. Every research student, in addition to a supervisor, has their own Graduate Research Committee (GRC) of three academic staff members. The formal role of the GRC is to review the student's progress annually and to make a recommendation to the College on progression into the next year of the programme. The GRC also provides informal support to the student during the PhD programme.
- 3. The programme of modules should be discussed with the student's supervisor and agreed by the GRC. Fulltime students will normally take modules to a weighting of 30 ECTS over Years 1-3 of their PhD programme. In exceptional circumstances students may be allowed to take modules in Year 4, subject to the agreement of the student's GRC. In the case of part-time students, the GRC will specify an appropriate schedule for taking the modules of the programme.
- 4. The Structured PhD Programme requires successful completion and examination of the research thesis and 30 ECTS of modules, approved by the student's Graduate Research Committee (GRC). Students will not be allowed present her/his thesis until the GRC has verified that she/he has successfully completed approved modules to a total of 30 ECTS.
- 5. The University Marks and Standards for structured PhD programmes can be found at (QA236 Postgraduate Marks and Standards, pages 9-12) http://www.nuigalway.ie/academic-records/new_website/marks_standards/ creating_marks_and_standards.html

For further information on the Structured PhD in individual Colleges follow the links below:

College of Arts, Social Sciences and Celtic Studies http://www.nuigalway.ie/colleges-and-schools/arts-social-sciences-and-celticstudies/phd-research-degrees/structured-phd/

College of Business, Public Policy & Law http://www.nuigalway.ie/business-public-policy-law/cairnes/courses/ research/business-public-policy-law.html

College of Engineering & Informatics

http://www.nuigalway.ie/engineering-informatics/postgraduatestudents/ structuredphdprogramme/

College of Medicine, Nursing & Health Sciences http://www.nuigalway.ie/colleges/mnhs/research.html

College of Science

http://www.nuigalway.ie/science/postgraduatestructuredprogrammes/

Some structured PhD programmes may involve inter-institutional collaboration. Further information available at:

http://www.nuigalway.ie/graduate-studies/currentstudents/gsmodules/

5.6 Entitlements

You should feel free at any time to approach for advice your supervisor, any member of your GRC, the head of the unit, the Vice Dean for Graduate Studies of the College or the Dean of the College or the Dean of Graduate Studies.

It is essential that your entitlements, duties and responsibilities are communicated clearly to you at the beginning of your studies by your supervisor. These include:

- Entitlements including stipends, insurance and any additional benefits Fees and other charges and whether they are covered by the financial support for the project
- Attendance and reporting requirements
- Relevant codes of behaviour and practice
- Activities relating to teaching, tutoring, supervision and mentoring.

5.7 Teaching

Contributing to teaching is an integral part of the training of a research Master's or PhD student. Teaching assists you in the acquisition of generic and transferable

skills, and is an important element in the formation of a research graduate. There is an accredited blended-learning training course on demonstrating/tutoring on offer and as this is fundamental to your development, you can register for these without prior permission, whether within a structured PhD or not (GS506) There is also a book (*In At The Deep End – Starting to Teach In Higher Education*) which is available through the Graduate Studies Office to assist you in improving your teaching skills.

Your teaching is subject to the following conditions:

- Normally (where the programme length is four years) all PhD students should make contributions *over six semesters or three academic years* to cognate academic programmes, without extra payment. However, funded students must comply with the terms of any funding award.
- Subject to a maximum of 120 h per year
- For students registered for research Master's degrees, the number of hours required is determined locally, but normally is the same as for 'early years' PhD students.

With respect to such activities, which are simultaneously contributing to your training and to the teaching mission of the University, a number of points should be kept in mind:

- Quite a wide range of activities may be included such as taking tutorial groups, demonstrating at practical classes, co-supervising undergraduate projects and student mentoring
- Hours may be included that are spent in class preparation, advising, monitoring student projects, and correcting projects, notebooks or essays and will vary according to School/Discipline norms
- Particular internal schemes for financing research students who also make agreed, predefined contributions to teaching may have duties and conditions that fall outside the terms of these guidelines

• For students who are self-financing and not benefiting from a tax-free exemption, payment for all tutoring, demonstrating and supervision duties is allowed.

5.8 Monitoring Progress

As with other sections of these guidelines, many specific additional details are decided locally to ensure that fundamental discipline-specific matters are allowed but the guidelines given below are common to all students.

5.8.1 Initial Measures

There is an initial formal meeting between you, the primary supervisor and any co-supervisor(s), at which:

- The proposed topic of research (or the process leading to definition of your research project) is explained and discussed in detail, with attention given to expected standards of work
- Monitoring procedures are clarified
- Consideration is given to any questions and concerns that you may have.

A plan of research is developed, and agreed jointly and formally by you and the supervisor(s) as early as is feasible, and reviewed regularly. Your supervisor will inform you of your training needs, and assist you in drafting a personal development plan and agreeing the courses you take as part of your structured PhD.

5.8.2 Assessment of Progress

Effective supervision and monitoring of research students depends on regular, informal communications between you and your supervisor(s). These often take the form of research group/discipline or more public presentations of interim results and findings.

Formal meetings with minutes of recommendations are also necessary to ensure all important understandings and recommendations are recorded and agreed (see the Student/Supervisor Meeting Form GS 030 - Appendix 2).

5.8.3 Annual Progress Report

During the summer period each year your supervisor is responsible for providing a written report on your progress to your GRC. This report must be provided irrespective of the date of commencement of your studies and for each year you are registered until you graduate or formally withdraw from your studies. Each report must contain the following information:

- The approximate number, duration and significance of meetings with you that have occurred during the period in question
- An indication of what you have achieved during the preceding period
- Any communications of your work or relevant articles submitted for publication in this period (indicating whether this could have been expected).
- Results (Pass/Fail) of all modules (including external where relevant) which the student has registered for in that year as part of the structured PhD.

Shorter reports may be submitted by your supervisor in your first year if you commence your research in the second semester.

You are also responsible for providing a report to the GRC on your progress. The content and length of this report is usually specified in local guidelines. In your fourth year, it may be a summary of the progress you have made in writing your thesis. In the first three years of your degree it is recommended that you give a formal public presentation (approximately 10 minutes) on your progress to date and future plans to your GRC, and other academic staff. A public presentation for all students in a given cohort will help you identify your progress relative to your peers. Every year you must have a meeting, normally in person, of at least 15 minutes with your GRC to discuss the reports submitted by you and your supervisor, and any other inputs before a recommendation is reached on your progression. Research students past their time limit (i.e. after 4 years for a full-time PhD, 6 year part-time PhD, after 2 years for full-time Masters and 3 years part-time Research Masters students) should meet more frequently with their GRC e.g. quarterly. The completion plan is to be the focus of GRC meetings in the final year and any

years over the time limit. If either you or members of your GRC are away from the University, then this meeting may take place by video conference or by Skype.

Based on careful consideration of all inputs your GRC makes one of the following recommendations:

- Continue with PhD/MD/Research Masters
- Continue but further review necessary
- Transfer to Another Programme (*Indicate which Programme*)
- Leave research degree programme
- Student has discontinued studies
- Thesis has been submitted

Normally, the GRC gives timely advance notice of possible outcomes to you and your supervisor(s). The GRC will submit their recommendation to a subcommittee of College and following due consideration of this recommendation, a formal decision on progression shall be made by the sub-committee. A candidate may appeal a decision not to allow progression to the Standing Committee of Academic Council. The Dean of Graduate Studies and the Graduate Studies Board will be informed of all decisions made on progression. The College will communicate the formal decision to you. If progress is satisfactory you will be recommended to 'Continue with PhD/MD/Research Master's. Following the Postgraduate Examinations Boards, a transcript will be available to the research postgraduate student.

In cases where your engagement, progress and/or commitment are found to be wanting, you are given formal notice of this by the GRC. You will be given an opportunity to re-submit an updated report (based on recommendations by the GRC) and re-present for a further meeting before a final decision is made. You should be aware, that should matters of a serious disciplinary nature arise, Academic Council is empowered to withdraw the acceptance of a candidate, at any time, on the recommendation of the College concerned (see Regulations, Appendix 1).

5.8.4 Transfer between Research Master's and PhD Degrees

Based on the Yearly Progress Report (see Section 5.8.3 above), your GRC may recommend to the College that you transfer from a research Master's Degree to a PhD. A recommendation from the GRC is required before the College can consider a transfer application by any student.

Following the Yearly Progress Report (see Section 5.8.3 above), where your engagement, progress and/or commitment are found to be wanting, your GRC may recommend to the College that you transfer from PhD student status and reregister for a research Master's degree. A student registered for a PhD degree may apply to transfer to a research Master's Degree at any time during their studies.

5.8.5 Leave of Absence

A variety of reasons may require that students take a leave of absence for a period of time during their research. A leave of absence policy was developed and approved in April 2008 which is applicable to all students. International students resident in Ireland on a student visa must seek advice from the International Office before they consider making any application for a leave of absence as any leave of absence could seriously affect their legal status in Ireland.

Principles

Research graduate students are normally expected to complete the degree for which they are registered within the prescribed period of time as outlined in the regulations. In instances where students experience extenuating circumstances (medical or personal), they are eligible to apply for a leave of absence. When submitting an application for leave of absence the research graduate student must obtain approval from their primary supervisor. All requests for leave of absence must have the recommendation of the School in which the research graduate student is registered, normally indicated by the signature of the Head of School. Where the Head of School does not approve, the student may appeal directly to the Dean of College, supplying all relevant documentation. Finally, applications for leave of absence must be approved by the College in which the student is registered. Students should communicate with their supervisor as soon as is reasonably possible should they identify a possible need for leave of absence. Discretion will be exercised by Colleges when considering applications. Circumstances that may be considered acceptable include:

Medical (illness, disability, maternity leave etc)

Extenuating personal circumstances (family bereavement, etc)

Students with extenuating circumstances will be treated in a sensitive manner and their privacy will be respected.

Original medical certificates will be maintained by the School and reported to the College. The Dean of Graduate Studies may review original certificates on request. The student will maintain a status throughout their leave of absence on the Student Record System. A student who is externally funded should consult firstly with their supervisor who then consults with the funding agency regarding the leave of absence. Students should be aware of any implications a leave of absence will have on their funding. In exceptional circumstances, Colleges may consider a retrospective application for leave of absence on a case-by-case basis where a student has been unable to formally apply for leave of absence in advance.

Application Process

Application must be made on form GS 080 (Appendix 2) - Application Form for Leave of Absence (Research Graduate Students) and should state clearly the reasons and the duration of the proposed leave of absence. This form should be completed, signed by the student, and primary supervisor, and submitted for recommendation and signature to the Head of School and sent to the College. The College shall retain the original application form and inform the student, supervisor and Head of School in writing, of the decision regarding leave of absence. GS 081- Leave of Absence Credit Note form should be completed by the College following approval of the GS 080. The GS 081 form should then be submitted by College to the Fees Office. The College is responsible for informing the Academic Administration & Registration Office, Graduate Studies Office, the Fees Office, and Research Accounts Office of all approved leaves of absence, to

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facilitate formally updating the student's record. Where the primary supervisor or Head of School does not support the student's application, the student may appeal to the Dean of College, supplying all relevant documentation.

Duration

Leave of absence will *not* normally be granted for any period longer than one year or shorter than one month. On return to formal studies in the University, research graduate students are responsible for notifying Academic Records and Registration to update their registration status following the end of their approved leave of absence. If a student needs to extend their leave of absence, they need to re-apply for another period of leave. A student may not normally be on leave of absence for more than two years throughout the period of their degree programme.

Status

During an approved leave of absence, the student's participation in his/her research programme is suspended. Fees are not payable by the student for leave of absence approved for an academic year. For leave of absence less than one year, the student is liable for fees in that academic year but will be granted the appropriate time credit at the end of their research degree programme. During leave of absence the student will not normally be entitled to supervision or use of any University facilities including the library. Students should be prepared to discuss the implications of their leave of absence for joint research projects, publications, laboratories, teaching contribution etc. with their primary supervisor (who should consult with Head of Discipline as appropriate), and/or other members of their Graduate Research Committee.

Full-time research students should consider that in on-going but less critical circumstances, a change of mode of attendance to part-time status may be an appropriate alternative. In some cases consideration might be given to making an application for an alternative award. In all cases these options should be discussed with the appropriate services available to the research graduate students.

5.8.6 Withdrawal from Studies

Should the actions or behaviour of a student be found to be unacceptable, Academic Council has the right to remove the student from his/her programme of studies at any time during the academic year. This decision will only be made after consultation with the student, supervisor and GRC.

A student who is considering withdrawing from the programme should communicate with his/her supervisor and/or GRC and may seek the advice of the Dean of Graduate Studies before taking this option. Students should complete the 'Postgraduate Research Degree Programme Withdrawal Form' which is available on the Student Information Desk website at http://www. nuigalway.ie/sid/ and the Exit Survey http://www.nuigalway.ie/graduate-studies/ currentstudents/surveys/ which may help the University make any changes in processes which could assist future students. If you are in receipt of funding, it is important to inform the Funding Agency and Fees/Research Accounts Office as appropriate.

5.9 Student Representation

Students and their interests are represented at different levels within the university. At the highest level, a postgraduate representative sits on Údarás na hOllscoile (NUI Galway's Governing Authority). There are places for two postgraduate students on the Academic Council each academic year. The students' union postgraduate officer and one graduate student nominated by the students' union (on an annual basis) are represented on the Graduate Studies Board. A postgraduate representative also sits on the Board of each School. For further information see the Student Guide, which is available on the Graduate Studies website:

http://www.nuigalway.ie/graduate-studies/currentstudents/newstudentguides/

5.10 Feedback

The opinions of graduate students are important to the university. Your feedback

is used to improve services for current and future students. An exit survey for students completing their studies is available at http://www.nuigalway.ie/graduate-studies/currentstudents/surveys/

5.11 Employment during Studies within the University

In addition to the 120 hours of teaching requirements, registered full-time students may undertake a maximum of 130 hours of paid work per year, either for their School or any other area of the University where work is available. Such work, where available, is to support you only for the period of your studies and such work will cease on completion of, or at the write-up stage, of the degree. You must be aware and acknowledge acceptance that any opportunity for work is available only for the period that you remain a registered student and actively pursuing your research degree. Students will sign an undertaking (see form GS 010 for full-time research students and GS 020 for part-time research students) which states that the work is related to their status as a registered research student whilst actively pursuing their research. Registered part-time - self-funded students can work up to 820 hours per year, under the same conditions as above for a full time student. The total workload undertaken by the student will be monitored, and repeated offences of exceeding the limits outlined will not be condoned. These regulations apply to you from the period you register as a research student until you complete your degree. You are also required to comply with the HR policies on part time employment:

http://www.nuigalway.ie/human-resources/staff/

6. The PhD Examination Process

The examination of a student for a PhD degree, coming at the end of four years of intense study/research/creativity, needs to be a sophisticated and carefully considered process. These guidelines for the PhD examination take into consideration best practice, nationally and internationally.

6.1 Criteria

To be awarded a PhD, a candidate must demonstrate that, in pursuance of an agreed project, he/she has met all of the following criteria:

- Has made a significant contribution to knowledge and scholarship
- Has demonstrated a capacity for original and critical thought
- Can display an appropriate depth and breadth of knowledge and understanding of the relevant field(s) of study in the thesis and at the *viva* examination
- Has gained significant expertise with respect to basic and advanced methodologies and techniques
- Has presented a thesis with the appropriate structure and written style
- Has completed work that is suitable for publication.

Evidence as to whether or not these criteria are met is found in the thesis, but the oral examination or *viva* is critical to confirmation that the required standards have been achieved.

6.2 Format of Thesis and Submission for Examination

The candidate must follow the directions on format, layout and presentation of a thesis, as described below. Two copies of the PhD thesis, spiral or gum bound, must be lodged with the Examinations Office (unless otherwise stated by the supervisor, such as the case of two external or internal examiners). Each copy of the thesis must be accompanied by:

- a. 'Summary of the Contents', not exceeding 300 words in length
- b. Copy of the completed form EOG 020.

6.2.1 Thesis submission

A final draft of the thesis may be submitted for examination only after the candidate has received approval for examination by his/her primary supervisor and a member of the candidate's GRC on Approval for Examination form (EOG 020). A 'Summary of the Contents', not exceeding 300 words in length, must accompany the thesis. Where a candidate considers that approval for the submission of the thesis has been withheld unreasonably, s/he may appeal to the Standing Committee of Academic Council.

6.2.2 Declaration Regarding the Work

The candidate must certify that the thesis is all his/her own work and he/she has not obtained a degree in this University, or elsewhere, on the basis of this work. If the thesis is based on a group project, then the student must indicate the extent of his/her contribution, with reference to any other theses submitted or published by each collaborator in the project, and a declaration to this effect must be included in the thesis. This declaration should follow the Table of Contents.

6.2.3 Directions on Format, Layout and Presentation

The PhD thesis should not normally exceed 80,000 words, inclusive of appendices, footnotes, tables and bibliography. It is university policy that the practice of engaging professional editorial services to assist in writing the thesis is not permitted.

There must be a title page which shall contain the following information:

- a. The full title (and subtitle, if any)
- b. The volume number and total number of volumes, if more than one

- c. The full name of the candidate, followed, if desired, by any degree and/or professional qualification(s)
- d. The name(s) of the supervisor(s), School(s), component Discipline(s), Institution
- e. The month and year of submission.

Format and Layout

The 'Table of Contents', which should not be over-detailed, shall immediately follow the title page. The text must be printed on good quality (110g/m²) A4 size paper. Line-spacing should be a maximum of one-and-half; text must be left justified with a left-hand margin of 4 cm and may be right justified. An easily-readable layout and double-sided printing are recommended for the body text. For double sided printing ensure that the right hand margin is also adequate for binding (i.e. a margin of 4 cm). More compact formats, with smaller font sizes, are usually appropriate for certain sections, such as reference lists, bibliographies and some kinds of appendices. Pages must be numbered consecutively, with page numbers located centrally at the bottom, and chapter headers at the top, of each page. Diagrams, graphs, photographs and tables should be properly numbered and located in relation to the text. The copies of the thesis presented initially for examination must be spiral or gum-bound.

6.2.4 Third-Party Copyright

You need to identify all material in your thesis that is subject to third-party copyright. Material subject to third-party copyright includes, for example, published articles, diagrams, tables, figures created by another author and inserted in the thesis to illustrate an argument.

You need to obtain permission from the copyright owners to include this material in your thesis before it is published online. You should seek such permissions in good time, and well in advance of thesis submission.

Before submitting an article which is intended to form part of an article-based PhD thesis a candidate should ensure that the publisher will allow the author's final version of the article to be made freely available electronically. For articlebased PhDs, articles must not be included with the publishers' copy-editing, formatting and pagination. Different publishers have different policies in relation to authors making published material freely available electronically.

Your thesis in online format should correspond exactly to its publication in printed format. If, however, it is not possible to obtain permission for an item subject to third-party copyright, such material should be removed from the thesis in its online format, with a note to this effect.

The Research Support Librarian provides advice and online materials, including standard sample copyright request letters, to assist in copyright clearance. See also http://aran.library.nuigalway.ie/xmlui/ethesis.html

6.2.5 Upload Procedure

ARAN is the University's system, managed by the Library, for online publication of theses. When ready to upload the electronic version of the thesis, the candidate should email aran@nuigalway.ie to request a password for their ARAN account to be created. It will be necessary to provide your name, School, supervisor and NUI Galway email address. On notification that an account has been created, you should log on at http://aran.library.nuigalway.ie/ using your NUI Galway email address. The file format for online publication is PDF. The final version of the thesis must correspond to the printed version and must be saved in PDF prior to upload. However, where copyright clearance has not being obtained for any third party content, this content must be replaced by a placeholder to this effect. An online workflow enables the candidate to upload his/her thesis to the ARAN system. Once uploaded, a number of process checks are conducted by Library staff prior to enablement of public access to the thesis. If, however, you have been granted an embargo, the full text of your thesis will not be made available publicly until after the embargo period has elapsed, but you must still upload the thesis to ARAN.

For further advice please go to this link: http://aran.library.nuigalway.ie/xmlui/ethesis.html

6.2.6 Article-based PhD

PhD theses may be presented for examination in either monograph style or in an article-based format. The monograph style is where the work is usually laid out as a series of chapters, typically having the structure of introduction, literature review, methodology, results and conclusions. The article-based PhD is based on a collection of papers (including published papers or papers submitted or accepted for publication) which describe a coherent programme of research undertaken by the student while registered for the PhD. It also contains a short introductory chapter, explanation of the research question, relevant literature and methodology and a concluding chapter. The student's contribution to each article must be made explicit. The article-based format is most often adopted in the general disciplines of Science, Engineering and Medicine while the monograph is usually preferred in the Humanities and Social Sciences. Both formats for the presentation of the research work are equally valued and both are subject to the same examination process and must meet the academic standards for the award as given in Section 6.1. The article-based PhD format has both advantages and disadvantages. The advantages include wider and earlier dissemination of research results, and experience for the student in writing research articles. The disadvantages include the time delay in acceptance of articles in some research fields and the strict restrictions on the length of research articles which may lead to the omission of methodologies normally included in a monograph. A monograph has the advantage of more readily supporting the development of a sustained argument, with the synthesis of the relevant literature and an integrated discussion of the methodology. The critical and theoretical review of the papers in an article-based PhD must achieve this end. All other guidelines apply to students irrespective of the format of the thesis that is submitted.

Precise guidelines on article-based formats are developed in the five Colleges of the University. The online version of these guidelines should be consulted on the relevant College website. As a general guideline, a minimum of three peerreviewed articles should be included with the PhD candidate normally being first author on the major part of the work. Joint publications may be included, but the candidate must make explicit their contribution to the work. Candidates must agree the final content of the thesis, including the number of published papers with their supervisor(s). The article-based PhD must also include a comprehensive introduction to the overall research topic with the appropriate bibliography. The discussion should refer to how the objectives of the research were met in each of the articles included. Supplementary appendices of the methodologies used may be necessary if sufficient detail is not included in the thesis to allow repetition of the research.

6.3 Examiners and Chair of the viva

6.3.1 Arrangements for the Examination

The smooth operation of the examination process depends on all concerned understanding their roles, and on well-defined procedures. A brief outline of the process follows. The primary supervisor is responsible for organisation of the overall examination process and for checking that the candidate, examiners and chair have been supplied with the information necessary for understanding their roles. The Examinations Office is responsible for processing the submitted thesis and the subsequent Examiners' Report. The examiners submit a report according to an agreed format, after the examination of the thesis and the candidate at the *viva*, and this report is considered by the Standing Committee of Academic Council. At the meeting of the Standing Committee, members of the Committee, having given detailed consideration to the criteria for examination (Section 6.1), discuss the contents of the report. A decision is made to accept the report as is, or to modify the recommendations, or to request re-submission of a revised report. The final approval of the recommendation of the examiners is decided by the Standing Committee and the minutes of the outcomes are sent to the Academic Council. After the completion of any necessary corrections, successful candidates are sent a letter by the Registrar and Deputy-President confirming the award of the PhD degree. Detailed information on the exact processes and procedures is given below.

6.3.2 Approval of Examiners

The examination of a PhD research thesis involves at least two examiners, one external and one internal, and has two stages: the examination of the thesis and the oral or viva examination of the candidate. All examiners participate fully in the two stages of the process: the examination of the thesis and the *viva* examination of the candidate. The primary supervisor discusses with the GRC the choice of the external and internal examiners. The candidate is informed in good time when potential examiners and the overall make-up of the Examination's Board are being considered. At that stage, while providing a rationale for doing so, a candidate may object to the appointment of a particular examiner. If an examiner is recommended for appointment despite an objection from the candidate, a written rationale for the recommendation is supplied to the College by the primary supervisor. Following the consultation outlined above, the primary supervisor submits an online 'Approval of Examiners' request (Appendix 2). The recommended examiners must be first approved by a member of the GRC, and then the Head of School, before approval of College can be granted. The examiners, with the letter of appointment, will be asked to declare any potential conflicts of interest that he/she may have.

External Examiner

The external examiner shall be an expert of international standing in the field of study of the thesis. A short *curriculum vitae* of the external examiner will be provided, by the supervisor, to the College to accompany the online request for the approval of Examiners. The process of identifying the external examiner should commence at least six months in advance of the submission of the thesis.

External examiners should normally be appointed from outside the Republic of Ireland. Because of the University's alliance with the University of Limerick the external examiner shall not be drawn from the University of Limerick, except with the approval of Standing Committee, under clearly defined and exceptional circumstances, where the expertise required cannot readily be found elsewhere. The external examiner must be independent of the university and of the conduct of the research and must not have any real or perceived conflict of interest in examining the thesis. The external examiner, with his/her letter of appointment, will be asked to declare any potential conflicts of interest that he/she may have.

Diversification in the range of persons appointed as external examiners is encouraged, though it is recognised that there may be a particular reason for availing of the expertise of a particular extern for a number of theses within a given period. Colleges must submit an annual report listing all external examiners approved and their affiliation for review by Standing Committee of Academic Council.

A short written preliminary report is prepared by the external examiner before the *viva* and sent to the chair and only then should the examiners confer. These reports should include an initial judgement on the thesis and any major issues arising.

Except in exceptional circumstances, the *viva* should be held on campus with all examiners physically present. Where it is not possible for the *external* examiner to attend in person, an application for the participation of the extern by video conference must be made two months in advance of the proposed date of the *viva*. The student must agree to the *viva* being held by video conference and the approval of a GRC member, Head of School, Dean of College and Dean of Graduate Studies obtained through the online PhD examination system.

A second external examiner is appointed:

- a. When the candidate to be examined is or has been within the past 4 years a member of staff of the University, full-time or part-time, except when the staff member has been appointed in the six months prior to approval of examiners. There is no requirement for candidates who are or have only been tutors or demonstrators (or have undertaken similar roles, as adjudged by the Head of School) to have two external examiners. *A second external examiner is not required in the case of externally funded PhD candidates who are required to have a contract of employment with the University for the duration of the funding award.*
- b. When the work being examined, because of its nature, justifies this. For example, where the research is multi-disciplinary.

Because of their specific expertise, external examiners have a critical role and normally lead the oral examination process. If there is more than one external

examiner, the whole Board selects one to lead the process.

Internal Examiner

Any member of academic staff who has appropriate expertise and experience may act as an internal examiner. Membership of the GRC does not preclude a member of academic staff from also being an internal examiner for the same student. As a general principle, neither Emeritus nor Adjunct Professors should act as an internal examiner. However, it was agreed that a College could make a recommendation to the Standing Committee for exceptions to the principle on a case by case basis, such a recommendation to be made in good time so that the Standing Committee would be in a position to give the recommendation due consideration. Honorary Clinical Lecturers in the School of Medicine are eligible to be internal examiners of postgraduate research theses. The central role of external examiners should not take away from the role of the internal examiners, who are in a position to act to maintain consistently high internal standards.

A second internal examiner may be included:

- When a student's project is multidisciplinary
- When the primary examiner is otherwise suitable but has no prior experience as an examiner.

A short written preliminary report is prepared by the internal examiner(s) before the *viva* and sent to the chair and only then should the examiners confer. These reports should include an initial judgement on the thesis and any major issues arising.

6.3.3 Role of supervisor in the PhD examination

The primary supervisor is responsible for organisation of the overall examination process and for checking that the candidate, examiners and chair have been supplied with the information necessary for understanding their roles. A supervisor may not act as an examiner or chair the *viva* for his/her student. A supervisor may attend the *viva*, subject to the agreement of the examiners, chair and the student. In the case of co-supervision, only one supervisor attends; the decision on who attends is made by the co-supervisors. The supervisor, if present

at the *viva*, does not participate in the final decision and leaves the examination when final deliberations are taking place.

6.3.4 Approval of Chair of the viva

A chair of the *viva* must be nominated, and approved by the College, for each PhD examination and must be present at the *viva*. The chair will normally be the Established Professor of the relevant discipline. However, he/she may nominate another permanent member of academic staff in the discipline to act as chair. When the Established Professor is the supervisor of the candidate being examined an alternate chair must be appointed. In the event of a vacancy in the Established Professorship, the Head of School, following appropriate consultation, will appoint the chair. The candidate is informed in good time when the chair is being considered. At that stage, while providing a rationale for doing so, a candidate may object to the appointment of a particular chair.

6.3.5 Role of the Chair of the viva

The chair will not be an examiner and will not be required to read the thesis. However, the chair fulfils a very important role in the PhD examination and must know the PhD regulations, be able to advise the examiners of these regulations and has a particular responsibility to ensure they are implemented. Information sessions on the current regulations and procedures, and any updates approved by the Standing Committee of Academic Council, will be held at regular intervals to facilitate the chairs in this regard. A short written preliminary report is prepared by each examiner before the *viva* and sent to the chair and only then should the examiners confer. These reports should include an initial judgement on the thesis and any major issues arising. The chair will ensure that any issues raised in the individual reports are discussed at the *viva*.

The chair shall be present at the *viva*, meet the examiners prior to the *viva* and agree the agenda, format of the examination and procedures to be followed. The chair should introduce the examiners and the candidate and outline to the candidate the procedure for the *viva*. Normally the chair will then act as an observer and

make brief notes on the examination. (These notes may be important in the case of an appeal of the result of the PhD examination (Section 6.9). The chair may intervene if the student misunderstands a question by asking to rephrase it or may call for a short break if the candidate becomes unduly distressed. The chair is also responsible for ensuring that there is an offer of a break if the *viva* exceeds two hours. As soon as is practicable after the *viva*, the chair provides feedback to the candidate on the outcome. The chair also ensures that the report of the examination is completed satisfactorily. The chair does not directly submit the viva report on the online system, rather ensures its submission by the internal examiner via the online PhD/MD examination system. The chair ensures that the examiners are aware of the timelines for minor or major corrections or when the thesis is referred.

6.4 The Viva (Oral) Examination

The *viva* is an integral part of the examination process and candidates need to prepare for this part of the examination. A number of books on how to prepare for the *viva* are listed in the bibliography and are available for short-term loan from the Graduate Studies Office. The *viva* provides the opportunity for the candidate to elaborate on the central research question and the approach taken to investigate this. It also provides an opportunity to clarify any ambiguities that arise in the thesis, satisfy the examiners that it is the candidate's own work and satisfies the other criteria given in Section 6.1.

The *viva* is arranged by the supervisor at a time suitable for the candidate, examiners and chair. The *viva* should normally be held *within two months* of the submission of the thesis. The candidate is made familiar by the supervisor in advance with the standard format, timetable and normal length for such examinations.

Normally the *viva* should have a minimum duration of one hour and after about two hours a break should be offered. The *viva* should not normally exceed three hours. Except in exceptional circumstances, the *viva* should be held on campus with all examiners physically present. As soon as is practicable after the *viva*, feedback is given to the candidate by the chair of the *viva*.

6.5 Examination Report

Where the Examiners are in agreement, they submit a joint report with a recommendation for award or otherwise of the degree on the online system:

- Award PhD
- Award PhD, but insist on typographical corrections (1 month)
- Award PhD, but insist on corrections in content (1 month)
- Award PhD, but insist on corrections in content (3 months)
- Refer, permit submission of a revised thesis with second *viva* required (1 year)
- Award a Master's degree
- Award a Master's degree, subject to typographical corrections
- Award a Master's degree, subject to corrections in content
- Reject, with no recommendation as to resubmission.

The report must include information under each of the headings stipulated (see weblink to the online examiner system in Appendix 2). The minimum length of the report is 300 words, excluding the listing of corrections and publications arising from the research undertaken. Failure to comply with these requirements will result in inevitable delays and the resubmission of the report.

If the report does not conclude with a recommendation that a PhD be awarded to the candidate, the report should include:

- An explicit description of the areas of weakness and/or under-performance
- A clear description of the courses of action advised by the examiners before resubmission. These may include, for example, information on requirements for extra work, information on the scale of rewriting, and/or rectification of deficiencies in candidate's knowledge.

The report shall be submitted online by the internal examiner to the Examinations Office within *two* weeks of the *viva* being held.

Where the Examiners are not in agreement, separate reports must be made by

each examiner, and all reports submitted together to the Examinations Office. The reports will be considered by the Academic Council Standing Committee. In accordance with the general regulations of the University, the opinion of an external examiner as to the overall result to be awarded to a candidate shall not be overruled unless by decision of not less than two-thirds of all the members of the Standing Committee then in office.

Only reports that are received **at least five days** prior to a Standing Committee meeting will be considered at that meeting.

The National University of Ireland Galway is subject to the Freedom of Information Acts (1997 and 2003) and Data Protection Acts (1988 and 2003). Whilst every effort will be made to maintain the confidentiality of examiner reports, examiners should note that information provided is liable to be released to the subject of the report where a request is made. University regulations and forms define the appeal procedure that can be used by the candidate or the supervisor(s) in cases of disagreement with the examination outcome (Section 6.9).

6.6 Revisions

6.6.1 Award subject to minor or major corrections

Examiners generally require revisions before recommending an award for the candidate. Timelines for the completion of corrections are now in place. Where the examiners have recommended that award of the PhD be conditional on corrections being made to the thesis, the primary supervisor is responsible for monitoring the implementation of these corrections, and the internal examiner(s), (in consultation with the external examiner, if necessary) is responsible for ensuring that the changes made satisfy the requirements of the examiners. The internal examiner shall communicate in writing with the Examinations Office that the corrections are made. The timeline for the re-submission of the thesis requiring minor corrections to be made, either typographical or in content, is one month. Three months are allowed for the re-submission of a thesis which is

deemed to require major corrections in content. These deadlines may be extended by the Dean of Graduate Studies in extenuating circumstances.

6.6.2 PhD is referred

Where the PhD has been referred, formal contact should be made with the student by the Dean of College to inform the candidate of the decision of the Standing Committee of Academic Council and to ensure that they receive the examiners' report. The revised softbound thesis and a new EOG 020 form 'Approval for Examination' must be submitted to the Examinations Office. The re-examination of the thesis must be undertaken by the same examiners. The examiners may waive the requirement for the viva, following examination of the re-submitted thesis, and provided the joint report on the candidate's performance at the viva when the thesis was originally examined was positive. However, a candidate may not be failed on the re-submission without the opportunity of a second viva. The new joint examiners' report must be submitted online and considered by the Standing Committee of Academic Council. The time limit for re-submission is one year. A candidate may only re-submit once.

6.7 Final Thesis Submission

The University has adopted the policy of providing access to PhD theses in both print and online formats. Online publication enables immediate access to a thesis from anywhere in the world and offers the potential for a thesis to be cited more frequently in other research publications.

The candidate may not graduate until the revised thesis, incorporating the required changes as confirmed in writing by the internal examiner(s), has been lodged with the Examinations Office. Where the award of the PhD has been recommended, and (where necessary) when the internal examiner has confirmed in writing that all the requirements of the examiners have been met in relation to the thesis in its print and online formats, the candidate must re-submit a hard-bound print copy of the thesis to the Examinations Office. This copy of the

thesis must be submitted through the Student Information Desk to be lodged in the University Library with the appropriate accompanying form signed by the candidate (Library Submission Form, EOG 051). The original and a copy of EOG 051 form are required. All theses shall remain the property of the University. Candidates may not graduate unless they also submit an online copy to the Library, via the ARAN (Access to Research at NUI Galway) system.

The copy of the final bound thesis must be bound within boards with leaves permanently secured. The cover of the copies of the final bound thesis must bear the title of the thesis, candidate's name, degree awarded and the date of submission. The spine bears the candidate's name, the degree awarded and the date of submission.

6.7.1 Library Submission form EOG 051

Form EOG 051 provides for the submission of the thesis in print and online formats. The following should be considered before you complete the form:

Section (a) outlines the conditions under which you grant access to your thesis. These conditions have been established by reference to other institutions who have adopted the online format. This section applies if your thesis can be made accessible as soon as the award of the research degree has been confirmed.

Section (b) provides the opportunity to request a period of restricted access. The main reasons why the author of a thesis might choose to seek a period of embargo prior to full access to the thesis are:

- The author intends to publish the thesis either as a series of articles or as a monograph
- The thesis contains commercially sensitive information, the release of which might prejudice the commercial interests of any person including the author, the University or an external company.

Before completing the form, the author should discuss with their supervisor the need for a period of embargo, and the appropriate duration of such an embargo.

Applications for an embargo period should be submitted to the University Librarian in the first instance and will be considered by a group consisting of the Dean of Graduate Studies, a member of staff from the Technology Transfer Office and the University Librarian. Please note also that descriptive information (metadata), including an abstract, will be displayed on ARAN during the period of embargo; the full text of the thesis will be published on ARAN at the expiry of the embargo period. Immediately above the signature section of the form, it is essential to tick the appropriate box to indicate that all permissions regarding third party copyright have been obtained or that, if any permissions have been withheld or otherwise not obtained, an edited version of the thesis, excluding material subject to third party copyright but providing a reference to it, has been submitted for online publication.

6.8 Completion Time Limit

Full-time PhD candidates are allowed four years in which to complete the degree from the date of registration. Part-time candidates are allowed six years to complete the degree from the date of registration. Fees will be applied until the end of the semester in which the thesis is submitted (First semester is taken to end January 31st of each year). If candidates do not complete the degree within the due period from the date of registration they must re-apply to the College, presenting justification for an extension.

6.9 Appeal of the result of a PhD examination

An appeal may not question the academic judgement of the examiners. Potential grounds for appeal are as follows: circumstances affecting the candidate's performance which the examiners were not aware of at the *viva*; procedural irregularities that occurred in the conduct of the examination which give rise to doubt as to whether the same conclusion would have been reached had the irregularities not occurred; evidence of prejudice, bias, unfair or inadequate assessment in the examination process. Appeals may not be submitted on the basis of inadequate supervision; complaints of that nature should be lodged during the period of study and before the submission of the thesis.

Further information on the mechanisms for an appeal and the membership of the appeals committee is available from the Examinations Office.

6.10 Conferring

PhDs are conferred at the Spring, Summer and Winter conferring ceremonies. PhDs are not conferred at the Autumn ceremony.

When the decision has been made at Standing Committee of Academic Council to award a PhD and

- the final hard-bound thesis (with required corrections completed and confirmed by the internal examiner, when necessary),
- e-thesis and
- library submission form (EOG 051)

are submitted to the Examinations office by the relevant deadline, the PhD will be conferred at the next PhD conferring ceremony.

Deadlines are advertised on the conferring website http://www.nuigalway.ie/ conferring/

Graduands who do not meet the deadline will go forward to the next PhD conferring ceremony.

Invitations are posted to the home addresses of graduands due to confer approximately three weeks before the conferring ceremony.

PhD graduands may request to defer their graduation once only.

If a student is unable to attend his/her conferring ceremony, the degree will be conferred *in absentia*. Degree parchments for graduates conferred *in absentia* are posted to the home address within two weeks of each respective ceremony.

7. The MD Degree

The research programme leading to the MD degree is, in accordance with national and international norms, provided to encourage the development of advanced research skills in medical graduates and the medical profession, and is adapted to the particular circumstances of advanced professional training in that profession. The nature of the preparation for the degree is similar to other research doctoral degrees, but research for the degree is normally completed within a shorter period of time, typically two years of full-time research and study. The primary purpose of MD level research is to make a significant contribution to new knowledge and understanding in the theory and/or practice of an area of medicine or medical science and to develop in the student the skills and competencies required to conduct effective research.

Regulations for the MD degree are set out in the College of Medicine, Nursing and Health Sciences calendar

http://www.nuigalway.ie/colleges/mnhs/collegecalendar.html

7.1 Entry Requirements

To be eligible on an MD programme candidates should normally have a high honours standard *in the degrees of M.B., B.Ch., B.A.O* from NUI Galway or possess qualification deemed by the University to be equivalent. The application will require support of an academic staff member who is approved by the College to supervise the research in terms of its nature and scope. Candidates may be required to submit a research proposal for consideration by the School as part of their application

7.2 The MD Examination Process

The MD examination process is identical to the PhD examination process. Detailed guidelines on this examination process are provided in Section 6. For example, the same external examiner regulations apply to the MD and PhD i.e. Regulation 17 in Appendix 1', two external examiners are required for the MD examinations of staff members, and a referred MD thesis may only be re-examined once.

7.2.1 Criteria

To be awarded a MD, a candidate must demonstrate that, in pursuance of an agreed project, he/she has met all of the following criteria:

- Has made a significant contribution to knowledge and scholarship
- Has demonstrated a capacity for original and critical thought
- Can display an appropriate depth and breadth of knowledge and understanding of the relevant field(s) of study in the thesis and at the viva examination
- Has gained significant expertise with respect to basic and advanced methodologies and techniques
- Has presented a thesis with the appropriate structure and written style
- Has completed work that is suitable for publication

Evidence as to whether or not these criteria are met is found in the thesis, but the oral examination or viva is critical for confirmation that the required standards have been achieved.

7.2.2 Article-based MD

The MD thesis may be presented for examination in either monograph style or article based format.

The article-based MD is available to students on full or part time, structured MD programmes within the College of Medicine, Nursing and Health Sciences. Students registered on non-structured MD programmes will not be permitted to submit in this format. A minimum of three original, published (peer reviewed) research papers in international leading journals of appropriate impact factor for the area of research is required. If no methodological papers are part of the submission, the student must include a detailed methodological chapter. In line with University guidelines, only articles which are based on research which has been undertaken by the student while registered for the MD at NUI Galway are admissible. In addition, the MD candidate would normally be the first or leading

author on the major part of the work. Joint publications may be included but the candidate must make explicit their contribution to the work.

7.2.3 The Viva (Oral) Examination

The *viva* is an integral part of the examination process.

7.2.4 MD Examination Report

Where the Examiners are in agreement, they submit a joint report on the criteria outlined in Section 7.2.1, to a Standing Committee meeting via the online system, with one of the following recommendations and time limits:

- Award MD
- Award MD, but insist on typographical corrections (1 month)
- Award MD, but insist on corrections in content (1 month)
- Award MD, but insist on corrections in content (3 months)
- Refer, permit submission of a revised thesis with second *viva* required (1 year)
- Award a Master's degree
- Award a Master's degree, subject to typographical corrections
- Award a Master's degree, subject to corrections in content
- Reject, with no recommendation as to resubmission

The report must include information under each of the headings stipulated (see weblink to the online examiner system in Appendix 2). The minimum length of the report is 300 words, excluding the listing of corrections and publications arising from the research undertaken. Failure to comply with these requirements will result in inevitable delays and the resubmission of the report.

If the report does not conclude with a recommendation that an MD be awarded to the candidate, the report should include:

- An explicit description of the areas of weakness and/or under-performance
- A clear description of the courses of action advised by the examiners before resubmission. These may include, for example, information on requirements for extra work, information on the scale of rewriting, and/or rectification of deficiencies in candidate's knowledge.

7.2.5 Final Thesis Submission

The University has adopted the policy of providing access to level 10 theses in both print and online formats. Online publication enables immediate access to a thesis from anywhere in the world and offers the potential for a thesis to be cited more frequently in other research publications.

The candidate may not graduate until the revised thesis, incorporating the required changes as confirmed by the internal examiner(s), has been lodged with the Examinations Office.

Where the award of the MD has been recommended, and (where necessary) when the internal examiner has confirmed in writing that all the requirements of the examiners have been met in relation to the thesis in its print and online formats, the candidate must submit a hard-bound print copy of the thesis to the Examinations Office. This copy of the thesis must be submitted through the Student Information Desk to be lodged in the University Library with the appropriate accompanying form signed by the candidate (Library Submission Form, EOG 051). All these shall remain the property of the University.

MD graduands may request to defer their graduation once only.

7.2.6 Completion Time Limit

The MD programme can commence at any time in the academic year. Normal minimum duration is 24 months full time and the normal minimum duration for the part time MD is 36 months. If candidates do not complete the degree within the due period from the date of registration they must re-apply to the College, presenting justification for an extension.

Fees will be applied until the end of the semester in which the thesis is submitted.

d. The qualification for which the thesis is submitted

8. Research Master's Examination Process

The examination of an applicant for a research Master's degree is focused on the learning and achievements of a student working on an unique project.

8.1 Criteria

To be awarded a research Master's degree, a candidate must demonstrate that, in pursuance of an agreed project, s/he has met each of the following criteria:

- Has made a contribution to understanding or knowledge
- Can display an appropriate depth and breadth of understanding of the relevant field(s) of study
- Has gained a corresponding level of expertise with respect to relevant methodologies and techniques.

Evidence as to whether or not these criteria are met will be found in the thesis and an oral examination is not normally required.

8.2 Format of Thesis and Submission for Examination

The Master's thesis should not normally exceed 45,000 words, inclusive of appendices, footnotes, tables and bibliography. Please note that it is university policy that the practice of engaging professional editorial services to assist in the writing of the thesis is not permitted.

There must be a title page which shall contain the following information:

- a. The full title (and subtitle, if any)
- b. The volume number and total number of volumes, if more than one
- c. The full name of the candidate, followed, if desired, by any degree and/ or professional qualification(s). This must be the registered name, as on the student's ID card. Shortened versions or names translated into other languages will not be accepted.

- e. The name(s) of the supervisor(s), Head of School, component Discipline(s), Institution
- f. The month and year of submission.

8.2.1 Format and Layout

The title should describe the content of the thesis accurately and concisely. The 'Table of Contents', which should not be over-detailed, shall immediately follow the title page. The text must be printed on good quality (110g/m²) A4 size paper. Line-spacing should be a maximum of one-and-half; text must be left justified with a left-hand margin of 4 cm and may be right justified. An easily-readable layout and double-sided printing are recommended for the body text. More compact formats, with smaller font sizes, are usually appropriate for certain sections, such as reference lists, bibliographies and some kinds of appendices. Pages must be numbered consecutively, with page numbers located centrally at the bottom, and chapter headers at the top, of each page. Diagrams, graphs, photographs and tables should be properly numbered and located in relation to the text. The cover of the copies of the thesis must bear the title of the thesis must have a 'Summary of Contents' not exceeding 300 words in length. The copies of the thesis presented initially for examination must be spiral or gum-bound.

8.2.2 Declaration regarding the work

The candidate must certify that the thesis is all his/her own work and that he/ she have not obtained a degree in this University, or elsewhere, on the basis of this work. Work on which a degree in the National University of Ireland, or elsewhere, has already been obtained will not be accepted as the main work for a subsequent degree, but may be accepted as supplementary work. If the thesis is based on a group project, then the student must indicate the extent of his/her contribution, with reference to any other theses submitted or published by each collaborator in the project, and a declaration to this effect must be included in the thesis. This declaration shall follow the Table of Contents.

8.2.3 Submission and Completion Time Limit

Candidates must be registered at the time of submission of the thesis. Full-time candidates are allowed two years in which to complete the degree from the date of registration. Part-time candidates are allowed three years to complete the degree from the date of registration. Fees will be applied until the end of the semester in which the thesis is submitted (First semester is taken to end January 31st of each year). If candidates do not complete the degree within the due period from the date of registration they must re-apply to the College, presenting justification for an extension.

Three copies of the thesis, spiral or gum-bound, should be submitted to the Examinations office by the closing date indicated on their website (http://www.nuigalway.ie/exams/thesis/masters.html). These deadlines are to ensure that the report of the examiners is obtained prior to the Examination board meeting for the College in which you are registered.

All copies of work so presented shall remain the property of the University. Candidates will be asked to complete a form EOG 052 stating that the thesis deposited in the library shall be available for consultation under the conditions laid down by the Head of School.

8.3 Arrangements for the Examination

The smooth operation of the examination process depends on all concerned understanding their roles, and on defined procedures. The supervisor is responsible for the organisation of the examination and the provision of advice to the examiners. The Approval of Examiners (EOG 053) form, to be completed by the supervisor, is available at

http://www.nuigalway.ie/graduate-studies/currentstudents/guidelines-regulations-forms/relevantofficialformsforstudents/

8.3.1 Role of the Examiners

The examination of a research Master's thesis normally involves two examiners, one external and one internal. The candidate is informed of the appointment of examiners and overall arrangements as they are made, and may express relevant opinions via the GRC and/or directly to the supervisor. All examiners are requested to declare any potential conflicts of interest that they may have with respect to the examination.

External Examiner

The external examiner is normally a current external examiner, although this is dependent on the discipline in question. External examiners should normally be appointed from outside the Republic of Ireland. The external examiner shall not be drawn from within the NUI system or the University of Limerick, related to the University's alliance with the University of Limerick, except with the approval of Standing Committee, under clearly defined and exceptional circumstances, where the expertise required cannot readily be found elsewhere. If particular expertise in the field of study relevant to the project is required, application is made to the relevant College for the appointment of a specific external examiner. The external examiner, with his/her letter of appointment will be asked to declare any potential conflicts of interest that he/she may have. Because of their specific expertise and extra-institutional perspectives, external examiners play a critical role in the examination.

Internal Examiner

The internal examiner is an experienced permanent member of academic staff of NUI Galway, other than the supervisor. Honorary Clinical Lecturers in the School of Medicine are eligible to be internal examiners of postgraduate research thesis.

Membership of the GRC does not preclude a member of academic staff from also being an internal examiner for the same student. As a general principle, Emeritus Professors should not act as an internal examiner. However, it was agreed that a College could make a recommendation to the Standing Committee for exceptions to the principle on a case by case basis, such a recommendation to be made in good time so that the Standing Committee would be in a position to give the recommendation due consideration. The central role of external examiners should not take away from the role of the internal examiners, who are in a position to act to maintain consistently high internal standards.

8.4 Viva (Oral Examination)

If a *viva* is required (either because it is normal practice in a particular discipline area, or because it is requested specifically by the examiners) it is organised like the oral examination for a PhD degree (see Section 6.4), but normally would be significantly shorter. The examination will be organised by the primary supervisor. If significant travel or inconvenience is involved, the oral examination may be conducted by video conference. The decision as to whether a *viva* is required should be made by the external and internal Examiners in consultation with each other.

8.5 Examination Report

A short report is prepared by the External Examiner, in consultation with the Internal Examiner, on the basis of the examination of the thesis, and oral examination, if it is required. The report is submitted to the Examinations Office, for consideration at the College Postgraduate Board Examinations Meeting. The report should comment on:

- Quality of research contained in the thesis
- The contribution the thesis makes to knowledge and scholarship
- The written style and overall presentation of the thesis
- Performance of the candidate in the oral examination (if required)
- The nature of minor corrections required (if any).

This report is submitted to the University, with the accompanying form: Master's Degree by Research 'Report of the Examiners' (EOG 040) http://www.nuigalway.ie/graduate-studies/currentstudents/guidelinesregulations-forms/relevantofficialformsforstudents/ signed by both the internal and external examiners, and containing one of the following recommendations:

- Award
- Award but insist on corrections: typographical or in content
- Refer, but permit submission of a revised thesis
- Reject, with no recommendation as to resubmission.

If the report does not conclude with a recommendation that a Master's Degree by Research be awarded to the candidate, the report should include:

- An explicit description of the areas of weakness and/or under-performance
- A clear description of the courses of action advised by the examiners before resubmission. These may include, for example, information on requirements for extra work, information on the scale of rewriting, and/or rectification of deficiencies in candidate's knowledge.

8.6 Revisions

Where award of the degree is conditional on corrections being made to the thesis, the supervisor is responsible for monitoring the implementation of these corrections, and the internal examiner is responsible for ensuring that the changes made satisfy the requirements of the examiners. The candidate is required to complete any revisions as quickly as is feasible after the oral examination, to meet the deadline for the College Postgraduate Examination Board meeting. Meetings of the Board are held three times a year.

8.7 Final Thesis Submission

A hard-bound copy, bound within boards with leaves permanently secured, and bearing the candidate's name, the degree awarded and the date of submission must be submitted to the Examinations Office after the required corrections are made and will be required for Library use (the thesis is submitted to the Library after the graduation). The student will not receive a result and the student's name will not be put forward for graduation until the hard-bound copy of their dissertation is submitted.

The candidate is invited to complete the Graduate Studies exit survey at this time (see Section 5.10).

9. Joint Degrees

A framework policy on the award of joint or double degrees was approved by the Standing Committee of Academic Council in March, 2011. The availability of this provision is important towards the achievement of its internationalisation strategy and to maximise European funding opportunities for PhD students. Should the procedures for admission, progression or award of the degree diverge significantly between the partner Universities then a double degree could be awarded; ideally the award should be of a joint degree where the processes within partner Universities are broadly similar. This framework policy has been prepared with a view to enabling a small number of joint PhDs that NUI Galway may wish to approve. It does not in any way seek to limit or constrain movement of students for short-term research exchange/visits (e.g., NUI Galway/University of California exchanges) or joint supervision but rather to enable participation of PhD students in joint PhDs where there is truly a joint research programme between supervisors/institutions.

9.1 What is a Joint PhD?

There are three main types of joint PhDs (presented below in order of increasing levels of cooperation/degrees of integration between universities):

- 1. Individual doctoral programmes, also known as cotutelle agreements, involve formalised joint supervision of one candidate by two institutions. Several joint doctoral programmes use a cotutelle agreement as part of their organisational structure. They have a consortium agreement for their whole joint doctoral programme and a cotutelle agreement for each individual candidate.
- 2. Joint doctoral programmes a doctoral programme developed and/or provided by two or more universities, leading to the awarding of a double, multiple or joint degree. For example, Erasmus Mundus Joint Doctoral Programmes and Marie Curie Initial Training Networks. There are formalised arrangements on the time spent in each location and how this movement is

facilitated. Joint degrees are awarded if no legal impediment exists whereas double/multiple degrees are awarded otherwise.

3. Joint doctoral degree programmes and joint structured doctoral programme where all elements of doctoral education are run jointly and the organisational and evaluation processes are managed on the basis of full integration of the partners, leading to the award of a joint degree issued jointly by two or more universities.

Difference between a Joint PhD and Joint Supervision

The difference between a joint PhD and joint supervision is that for a joint PhD a student is registered in both institutions for the duration of the PhD and receives a joint award from the two institutions. Research collaborations may involve joint supervision of doctoral students. This interaction enhances doctoral training and may lead in time to more integrated programmes. Current regulations allow for an external supervisor to act as co-supervisor for a student registered at NUI Galway. The award of the PhD in this case is made solely through NUI Galway and the institution where the external supervisor is based does not receive any student fees. Joint supervision is also practised where the partner institution does not have degree-awarding powers.

9.2 Detailed Considerations

Supervisors should contact the Graduate Studies Office at the earliest possible stage to seek advice on Joint PhDs. Legal agreements must be in place between collaborating institutions before the end of year one of the student's PhD programme.

10. Revision of University Guidelines

The efficacy of these Guidelines and their efficient operation will depend on their regular revision. The officers indicated in Section 2 are responsible for each appropriate aspect of the process. Revisions take into account:

- The results of monitoring their operation and the experience of those charged with administering research degrees at the level of the University
- Feedback from students, graduates, supervisors, examiners and members of relevant bodies at College and school levels
- Evolving practice, nationally and internationally.

The Dean of Graduate Studies, working with the Academic Secretary, is responsible for the revision process and the assurance that, as they are developed and revised, they remain compatible with University policies and practices.

Appendix 1: Regulations for Higher Research Degrees

THE PhD DEGREE

(Obtainable in any College of the University)

The University may grant the Degree of Philosophiae Doctor (PhD) to graduates of the University or to graduates of any University, or to candidates of advanced standing, either within or without Ireland, who have:

- a. In the case of a full-time candidate, carried out research in the University for a period of four years and attended such a programme of study as may be prescribed by Regulations. The relevant College will reduce this period where the thesis has been approved for examination prior to the end of the four year period. In such cases, fees will be applied only until the end of the semester in which the thesis is submitted.
- b. In the case of a part-time candidate, carried out research in the University for a period of six years and attended such a programme of study as may be prescribed by Regulations. The relevant College will reduce this period where the thesis has been approved for examination prior to the end of the six year period. In such cases, fees will be applied only until the end of the semester in which the thesis is submitted.
- c. In the case of a full-time or part-time candidate, carried out research in the University and within a partner University with whom the University has agreed through a memorandum of understanding to offer a joint degree. The period of registration and fee schedule that applies is that of (a) or (b) above depending on full or part-time status.
- d. Complied with such Regulations and passed such examinations, if any, as may be prescribed.

Entry Requirements and Application Procedures

- To be eligible to enter on a programme of study and research for the degree of PhD a candidate must have reached a high honours standard at the examination for the primary degree or presented such other evidence as will satisfy the Head of School and the College of his/her fitness.
- 2. The application, together with the recommendation of the Head of School, shall be considered by the College in which the programme is to be pursued. The title of the thesis, or a short description outlining the nature of the work, must be provided to the College when the candidate is being recommended for acceptance. If the candidate's application is approved by the College, he/ she must register as a PhD candidate for the period set out at (a) or (b) or (c), as relevant, above.
- 3. The Academic Council is empowered to withdraw the acceptance of any candidate on the recommendation of the College concerned.

Supervision

- 4.1 The College, on the nomination of the Head of School, will assign a permanent member of University academic staff to be the primary supervisor of the candidate's research.
- 4.2 The College may allow for co-supervision of the thesis. In the case of cosupervision, one of the supervisors need not be a member of the staff of the University.
- 4.3 The College may assign a member of the University's research staff as primary supervisor of a candidate's research, with a permanent member of the University's academic staff as co-supervisor, where the research being undertaken by the candidate is funded from a research project on which the member of research staff is the Principal Investigator.
- 4.4 Honorary Clinical academic staff are eligible to be a primary supervisor for a PhD thesis, with a fulltime academic consultant or fulltime permanent academic staff member being co-supervisor.

- completion, the Graduate Research Committee should include an experienced supervisor. 5. Unless permission is given to the candidate by the Head of School, on the recommendation of the relevant Supervisor and GRC member, to work

4.5 Senior researchers may undertake graduate student supervision following

4.6 The name(s) of the supervisor(s) and the names of the three members of

not be a member of the student's Graduate Research Committee.

4.7 In the case of supervisors who have not yet supervised a PhD to successful

the candidate's Graduate Research Committee nominated by the Head of

School in consultation with Head of Discipline must be forwarded when the

candidate's name is submitted to the College for approval. A supervisor may

approval of their application as Honorary Research Lecturers.

- elsewhere under the general direction of the primary supervisor, the research will be carried out in the School mainly responsible for the subject area concerned but, where the research is interdisciplinary in nature, there shall be due co-operation between the main School and the other School(s) involved. A student who has registered for a joint degree with another institution, with whom a formal memorandum of understanding has been signed, will spend a period of time at the partner institution.
- 6. The candidate shall pursue research for the period set out at (a) or (b) above and shall also follow such a programme of study in the University as may be prescribed by the College.
- 7. A formal review of the research candidate's progress is carried out by the candidate's GRC, at least annually. The supervisor(s) shall submit a written report, according to the local agreed format, on the candidate's progress and the GRC shall review this, together with a written report (according to the local agreed format) from the candidate, and, following a meeting, make a recommendation to the relevant sub-committee of the College on progression. Following consideration of this recommendation, a formal decision on progression shall be made by the sub-committee. A candidate may appeal a decision not to allow progression to the Standing Committee of

Academic Council.

8. Candidates whose theses have not been approved for examination within the due period from the date of registration must re-apply to the relevant College setting out justification for the requested extension of the allowed time period.

Examination

9. The PhD thesis (softbound) may be submitted after completion of the 'Approval for Examination' form (EOG 020). The student must certify that the thesis is his/her own work. If the thesis is based on a group project, then the student must indicate the extent of his/her contribution, with reference to any other theses submitted or published by each collaborator in the project, and a declaration to this effect must be included in the thesis. The 'Approval for Examination' form EOG 020 is signed by the candidate, the primary supervisor(s), and a member of the candidate's GRC. The completed form is submitted by the candidate to the Examinations Office with the thesis (see 10 below). Where a candidate considers that approval for the submission of the thesis has been withheld unreasonably, s/he may appeal to the Standing Committee of Academic Council.

Submission of the Thesis

- 10. The candidate must follow the directions on format, layout and presentation of a thesis, as described below. Two copies of the PhD thesis, spiral or gum bound, must be lodged with the Examinations Office (unless otherwise stated by the supervisor, such as the case of two external or internal examiners). Each copy of the thesis must be accompanied by:
 - a 'Summary of the Contents', not exceeding 300 words in length
 - a copy of the completed form EOG 020.

Directions on Format, Layout and Presentation

There must be a title page which shall contain the following information:

a. The full title (and subtitle, if any)

- b. The volume number and total number of volumes, if more than one
- c. The full name of the candidate, followed, if desired, by any degree and/or professional qualification(s)
- d. The name(s) of the supervisor(s), school(s), component discipline(s), institution
- e. The month and year of submission.

Table of Contents

The 'Table of Contents', which should not be over-detailed, shall immediately follow the title page.

Format and Layout

The text must be printed on good quality $(110g/m^2)$ A4 size paper. Line-spacing should be a maximum of one-and-half; text must be left justified with a left-hand margin of 4 cm and may be right justified. An easily-readable layout and double-sided printing are recommended for the body text. For double sided printing ensure that the right hand margin is also adequate for binding (i.e. a margin of 4 cm). More compact formats, with smaller font sizes, are usually appropriate for certain sections, such as reference lists, bibliographies and some kinds of appendices. Pages must be numbered consecutively, with page numbers located centrally, at the bottom, and chapter headers at the top, of each page. Diagrams, graphs, photographs and tables should be properly numbered and located in relation to the text.

Article-based PhD

In this format, a number of research articles written by the student while registered for the PhD, either published or accepted for publication, are presented with an introductory chapter, explanation of the research question, relevant literature and methodology and a concluding chapter. The student's contribution to each article must be made explicit. Further information on the article-based PhD is to be found in the guidelines.

Binding

The copies of the thesis presented initially for examination must be spiral or gum-bound. The copy of the final bound thesis must be bound within boards with leaves permanently secured. The cover of the copies of the final bound thesis must bear the title of the thesis, candidate's name, degree awarded and the date of submission. The spine bears the candidate's name, the degree awarded and the date of submission.

Approval of Examiners & Chair of the viva

- 11. The primary supervisor is responsible for organisation of the overall examination process and for checking that the candidate, examiners and chair have been supplied with the information necessary for understanding their roles.
- 12. The Examinations Office is responsible for processing the submitted thesis and the subsequent Examiners' Report.
- 13. The examination of a PhD candidate involves at least two examiners, one external and one internal. The primary supervisor discusses with the GRC the choice of the external and internal examiners. The candidate is informed in good time when potential examiners and the overall make-up of the examinations board are being considered. At that stage, while providing a rationale for doing so, a candidate may object to the appointment of a particular examiner. If an examiner is recommended for appointment despite an objection from the candidate, a written rationale for the recommendation is supplied to the College by the primary supervisor. Following the consultation outlined above, the primary supervisor submits an online 'Approval of Examiners' request. The recommended examiners must be first approved by a member of the GRC, and then the Head of School, before approval of College can be granted.
- 14. A chair of the *viva* must be nominated, and approved by the College, for each PhD examination. The chair will not be an examiner and will not be required to read the thesis. The chair will normally be the Established Professor of the relevant discipline; however, he/she may nominate another permanent

member of academic staff in the discipline to act as chair. When the Established Professor is the supervisor of the candidate being examined an alternate chair must be appointed. In the event of a vacancy in the Established Professorship, the Head of School, following appropriate consultation, will appoint the chair. The candidate is informed in good time when the chair is being considered. At that stage, while providing a rationale for doing so, a candidate may object to the appointment of a particular chair.

- 15. Any member of academic staff who has appropriate expertise and experience may act as an internal examiner. Honorary Clinical Lecturers in the School of Medicine are also eligible to be internal examiners of postgraduate research theses. The internal examiner, with his/her letter of appointment, will be asked to declare any potential conflicts of interest that he/she may have.
- 16. A supervisor may not act as an examiner for his/her student. A supervisor may attend the *viva*, subject to the agreement of the examiners, chair and the student. In the case of co-supervision, only one supervisor attends; the decision on who attends is made by the co-supervisors. The supervisor, if present at the *viva*, does not participate in the final decision and leaves the examination when final deliberations are taking place.
- 17. The external examiner shall be an expert of international standing in the field of study of the thesis. A short curriculum vitae of the external examiner will be provided, by the supervisor, to the College to accompany the online request for the approval of Examiners. External examiners should normally be appointed from outside the Republic of Ireland. Because of the University's alliance with the University of Limerick the external examiner shall not be drawn from the University of Limerick, except with the approval of Standing Committee, under clearly defined and exceptional circumstances, where the expertise required cannot readily be found elsewhere. The external examiner must be independent of the university and of the conduct of the research and must not have any real or perceived conflict of interest in examining the thesis. The external examiner, with his/her letter of appointment, will be asked to declare any potential conflicts of interest that he/she may have. Diversification

in the range of persons appointed as external examiners is encouraged, though it is recognised that there may be a particular reason for availing of the expertise of a particular extern for a number of theses within a given period. Colleges must submit an annual report listing all external examiners approved and their affiliation for review by Standing Committee of Academic Council.

- 18. A second external examiner is appointed:
 - When the candidate to be examined is or has been within the past 4 years a member of staff of the University, full-time or part-time, except when the staff member has been appointed in the six months prior to approval of examiners. There is no requirement for candidates who are or have only been tutors or demonstrators (or have undertaken similar roles, as adjudged by the Head of School) to have two external examiners. *A second external examiner is not required in the case of externally funded PhD candidates who are required to have a contract of employment with the University for the duration of the funding award.*
 - When the work being examined, because of its nature, justifies this.
- 19. All examiners participate fully in the two stages of the process: (i) the examination of the thesis and (ii) the *viva* examination of the candidate.

The Viva (Oral) Examination

- 20. The *viva* is arranged by the supervisor at a time suitable for the candidate, examiners and chair. The *viva* should normally be held within two months of the submission of the thesis. The candidate is made familiar by the supervisor in advance with the standard format, timetable and normal length for such examinations.
- 21. A short written preliminary report is prepared by each examiner before the *viva* and sent to the chair and only then should the examiners confer.
- 22. The chair must know the PhD regulations, be able to advise the examiners of these regulations and has a particular responsibility to ensure they are implemented. The chair should meet the examiners prior to the *viva* and agree

the agenda, format of the examination and procedures to be followed. The chair should introduce the examiners and the candidate and outline to the candidate the procedure for the *viva*.

- 23. Normally the *viva* should have a minimum duration of one hour and after about two hours a break should be offered. The *viva* should not normally exceed three hours. Except in exceptional circumstances, the *viva* should be held on campus with all examiners physically present. Where it is not possible for the external examiner to attend in person, an application for the participation of the extern by video conference must be made two months in advance of the proposed date of the *viva*. The student must agree to the *viva* being held by video conference and the approval of a GRC member, Head of School, Dean of College and Dean of Graduate Studies obtained.
- 24. As soon as is practicable after the *viva*, feedback is given to the candidate by the chair of the *viva*.
- 25. Where the examiners are in agreement, they shall submit a joint report with a recommendation for award or otherwise of the degree on the online system. This report shall be submitted online by the internal examiner to the Examinations Office within two weeks of the oral examination. The report will be considered by the Academic Council Standing Committee.
- 26. Where the examiners are not in agreement, separate reports must be made by each examiner, and all reports submitted together to the Examinations Office. The reports will be considered by the Academic Council Standing Committee. In accordance with the general regulations of the University, the opinion of an external examiner as to the overall result to be awarded to a candidate shall not be overruled unless by decision of not less than two-thirds of all the members of the Standing Committee then in office.
- 27. Only reports that are received at least five working days prior to a Standing Committee meeting will be considered at that meeting.
- 28. Where the examiners have recommended that award of the PhD be conditional on corrections being made to the thesis, the primary supervisor

is responsible for monitoring the implementation of these corrections, and the internal examiner(s), (in consultation with the external examiner, if necessary) is responsible for ensuring that the changes made satisfy the requirements of the examiners. The internal examiner shall communicate in writing with the Examinations Office that the corrections are made. The timeline for the re-submission of the thesis requiring minor corrections to be made, either typographical or in content, is one month. Three months are allowed for the re-submission of a thesis which is deemed to require major corrections in content. These deadlines may be extended by the Dean of Graduate Studies in extenuating circumstances.

- 29. Where the PhD has been referred, formal contact should be made with the student by the Dean of College to inform the candidate of the decision of the Standing Committee of Academic Council and to ensure that they receive the examiners' report. The revised softbound thesis and a new EOG 020 form 'Approval for Examination' must be submitted to the Examinations Office. The re-examination of the thesis must be undertaken by the same examiners. The examiners may waive the requirement for the viva, following examination of the re-submitted thesis, and provided the joint report on the candidate's performance at the viva when the thesis was originally examined was positive. However, a candidate may not be failed on the re-submission without the opportunity of a second *viva*. The new joint examiners' report must be submitted online and considered by the Standing Committee of Academic Council. The time limit for re-submission is one year. A candidate may only re-submit once.
- 30. The candidate may not graduate until the revised thesis, incorporating the required changes as confirmed by the internal examiner(s), has been lodged with the Examinations Office. Where the award of the PhD has been recommended, and (where necessary) when the internal examiner has confirmed in writing that all the requirements of the examiners have been met in relation to the thesis in its print and online formats, the candidate must resubmit a hard-bound print copy of the thesis to the Examinations Office.

This copy of the thesis must be submitted through the Student Information Desk (SID) to be lodged in the University Library with the appropriate accompanying form signed by the candidate (Library Submission Form, EOG 051). All theses shall remain the property of the University. Candidates approved for examination after April 1, 2011 may not graduate unless they also submit an online copy to the Library, via the ARAN (Access to Research at NUI Galway) system.

31. A procedure to appeal the result of a PhD examination is outlined in Section 6 of the University Guidelines for Research Degree Programmes. An appeal may not question the academic judgement of the examiners. Potential grounds for appeal are as follows: circumstances affecting the candidate's performance which the examiners were not aware of at the *viva*; procedural irregularities that occurred in the conduct of the examination which give rise to doubt as to whether the same conclusion would have been reached had the irregularities not occurred; evidence of prejudice, bias, unfair or inadequate assessment in the examination process. Appeals may not be submitted on the basis of inadequate supervision; complaints of that nature should be lodged during the period of study and before the submission of the thesis.

The University Academic General Calendars are available on weblink: https://staff.intranet.nuigalway.ie/academic-administration/Academic%20 calendars/Forms/AllItems.aspx

Appendix 2: Relevant Official Forms

All the forms need be downloaded and completed as necessary from the web links below:

http://www.nuigalway.ie/graduate-studies/currentstudents/guidelines-regulations-forms/relevantofficialformsforstudents/

Name of Form	Reference Number English Version	Reference Number As Gaeilge
PhD Forms		
Approval for Examination	EOG 020	EOG 020
Online PhD/MD Examiner System (includes Approval of Examiners and Joint Examiners' Report)	https://graduate.nuigalway.ie/ Information available in user guides	
Library Submission Form	EOG 051	EOG 051
DPsych Conferring Form	GS 070	GS 070
MD Forms		
Online PhD/MD Examiner System	https://graduate.nuigalway.ie/ Information available in user guides	
Approval for Examination	EOG 020	EOG 020
Library Submission Form	EOG 051	EOG 051
Research Masters Forms		·
Approval of Examiners	EOG 053	EOG 053
Report of the Examiners	EOG 040	EOG 040
Library Submission Form	EOG 052	EOG 052
GS Forms		
Declaration by full-time Research Student Form for employment in the University during studies	GS 010	GS 010
Declaration by part-time Research Student Form for employment in the University during studies	GS 020	GS 020
Annual Student Report to GRC	GS 030	GS 030
Annual Supervisor(s) Report to GRC	GS 040	GS 040
GRC Recommendation Report to College	GS 050	GS 050
*Leave of Absence for Research Students	GS 080	GS 080
**Credit Note for Leave of Absence for Research Students	GS 081	GS 081
Off Campus Form for Full-Time Research Students	GS 090	GS 090

* The College is responsible for informing the Academic Administration & Registration Office, Graduate Studies Office, the Fees Office, and Research Accounts Office of all approved leaves of absence, to facilitate formally updating the student's record. ** The GS 081 (Credit Note) form should be completed by the College following approval of a Leave of Absence for a Research Student - GS 080 form. Colleges should submit the completed GS 081 form to the Fees Office. (reference section 5.8.5 of the University Research Degree Guidelines.

Appendix 3: National Framework for Doctoral Education

Context

Ireland enjoys a centuries-old tradition in scholarship. Today, it is one of the most globalised and open economies in the world. These characteristics fuse to offer an evolving and exciting place in which to undertake research and to embark on doctoral education. Since the late 1990s, the research landscape has developed very significantly, underpinned by the recognition that talented people are at the heart of any national innovation system. Significant investment has resulted in Ireland ascending in international rankings of research capacity, and in the doubling of the number of doctoral graduates.

The quality of the doctorate awarded in Ireland is vital to the development of human and knowledge capital. Irish higher education institutions, as well as offering more doctoral places, have taken action to enhance quality of provision. For example, graduate schools have been established and panel-based monitoring at review and progression-points is now standard. In this evolution towards structured doctoral provision across the sector, programmes are designed to provide a high-quality research experience and outcome. They are also designed to imbue doctoral graduates with the transferable skills necessary to advance their careers across a broad range of employment sectors and to make significant contributions in any field. The institutions have also embraced an increasing diversity of academic and professional routes to doctoral attainment including collaborative and inter-sectoral approaches, as well as provision for student mobility.

Looking towards the future, Ireland's National Strategy for Higher Education to 2030¹ sets out a clear vision and roadmap for the development of all aspects of Irish higher education. A key Strategy objective is the creation of a coherent and well coordinated system of higher education institutions, each contributing to national economic and social objectives. In order to enhance the international

reputation and capacity of Irish higher education for doctoral education, the National Strategy calls for the development of a consistent quality framework and for greater collaboration among providers. Through this National Framework for Doctoral Education, Irish higher education institutions are committing to embedding these core principles that will continue to enhance Irish doctoral education. In so doing, and with the wider support of relevant stakeholders, Ireland is positioning itself as a leader in doctoral provision. This reflects the continuing centrality of people and knowledge to Ireland's economic and societal development.

1. Purpose of the National Framework for Doctoral Education

The key aim of this National Framework for Doctoral Education is to underpin excellence in all forms of doctoral education in Ireland. It provides a set of principles for doctoral education, while recognising the diversity in the Irish higher education system. It is consistent with European and international standards, principles and guidelines, including, for example, the Salzburg principles, the Salzburg II recommendations and the Principles for Innovative Doctoral training².

The purpose of this Framework is to:

- Facilitate consistent excellence in the quality of postgraduate education and training, including research undertaken at Master's and doctoral levels;
- Enable and encourage higher education institutions to work more closely in the delivery of an improved learner-experience and outcome;
- Maximise the employability of doctoral graduates across a broad range of employment sectors by ensuring that the acquisition of discipline-specific knowledge is complemented by the development of transferable skills;
- Underpin the international standing of the Irish doctoral award.

2. Framework Principles

This National Framework for Doctoral Education commits the key stakeholders in Irish graduate education and research to the highest standards in the provision of doctoral education and research through the endorsement of the following principles:

- The core of doctoral education is deep engagement with a question, problem or hypothesis at the frontier of knowledge, and advancement of this frontier under the guidance of expert and committed supervision. to be awarded a doctoral degree, the candidate must have made an original contribution to knowledge.
- Successful completion and examination of the research thesis, comprising work of publishable quality, is the basis for the award of the doctoral degree. The thesis can be presented in a variety of formats.
- 3. Doctoral education increases significantly students' depth and breadth of knowledge of their discipline and develops their expertise in research methodology which is applicable to both a specific project and a wider context. It provides a high-quality research experience, training (including a formalised integrated programme of personal and professional development) and output consistent with international norms and best practice.
- 4. Doctoral education is conducted in a learning community where sufficient critical mass of internationally recognised research activity exists to allow students to gain access to a training programme of appropriate breadth and to interact with peers engaged in their field, nationally and internationally.
- 5. Recognising that each doctorate is unique, doctoral education is also flexible so as to support students within individual disciplines or within interdisciplinary or multidisciplinary groups.
- 6. Doctoral education is conducted in a research environment with a high degree of academic quality and infrastructure and where it is consistent with institutional strategies. Academic quality includes quality supervision and training for supervisors.

- 7. The admission of doctoral students takes into account preparedness of the applicant, the availability of qualified, competent and accessible supervision and the resources necessary to conduct the research.
- 8. Doctoral education is supported by established structures with:
 - supervision by a principal supervisor(s), normally with a supporting panel approved by the institution;
 - formal monitoring of progress to completion against published criteria, supported by institutional arrangements;
 - clearly defined examination processes, involving external examiners, assessment criteria and declared outcomes.
- 9. A robust quality assurance system underpins all doctoral provision.
- 3. Doctoral Outcomes

(Level 10 of Ireland's National Framework of Qualifications³)

Doctoral education programmes in Ireland educate and develop researchers to the highest skills levels so that they become creative, critical and independent individuals who will advance the boundaries of research. Through the process of doctoral education, the student is provided with opportunities to develop a range of skills to a very advanced level. These skills relate both to the research process itself and to broader professional training and development. The National Framework for Doctoral Education endorses the following skills and attributes, as articulated in the IUA PhD Graduates' Skills⁴ statement, as key educational objectives for all graduates of Irish doctoral programmes:

- Research Skills and Awareness
- Ethics and Social Understanding
- Communication Skills
- Personal effectiveness/development
- Team-working and leadership
- Career management
- Entrepreneurship and innovation

The core and essential component of doctoral education remains the advancement of knowledge through original research – a fundamental societal value in itself, based on freedom of enquiry, the fostering of innovative thinking and the development of advanced critical skills.

The successful embedding of this National Framework for Doctoral Education involves higher education institutions and the support of a range of stakeholders. Cooperation will be facilitated through the establishment of a National Advisory Forum, whose agenda will reflect the purpose and principles of the Framework and will be developed collaboratively.

Source: http://www.hea.ie/news/national-framework-doctoral-education-0

Appendix 4: Irish Universities' Phd Graduate Skills Statement

2nd Edition 2015

This skills statement, describes the desired learning outcomes and skills that PhD students will have developed during their doctoral education and training. Students develop these skills through their research, additional taught modules and shorter training opportunities. The availability of skills development opportunities in Irish universities reflects student and discipline needs. Consequently, the skills outlined are not a rigid standard, but rather a guideline which is fully compatible with the EUA's Salzburg Principles¹, elaborated upon in the Salzburg II Recommendations in 2010². These principles recognise that advancement of knowledge through original research is the core component of PhD education, but PhD education must also facilitate additional skills development opportunities.

The Development and Availability of Skills Development Opportunities in Irish Universities Reflects Student and Discipline Needs

Consistent with the National Strategy for Higher Education to 2030³ and the EU Directorate-General for Research & Innovation's Principles for Innovative Doctoral Training⁴ the Irish universities, Quality and Qualifications Ireland (QQI) and the Higher Education Authority of Ireland, support the objective of developing PhD graduates with the skills necessary to develop and manage their careers across a broad range of employment sectors, including academia. To achieve this, Irish universities provide structured support for students, incorporating research and generic skills development opportunities, empowering them to make a significant impact in their chosen career and contribute to Ireland's social, cultural and economic development. This support will also aid students in the successful completion of their studies.

¹ Department of Education and Skills, National Strategy for Higher Education to 2030 (2011)

² European University Association, Salzburg Principles (2005) and Salzburg II Principles (2010); European Commission, Principles for Innovative Doctoral training (2011)

³ Quality and Qualifications Ireland, National Framework of Qualifications

⁴ Irish Universities Association, Irish Universities' Statement on PhD Graduate Skills Statement (2nd edition 2015)

All Irish Universities Provide Structured Support for Students, Incorporating Research and Generic Skills Development Opportunities

This skills statement aims to:

- 1. Communicate to students, supervisors and employers the skills and attributes of a PhD graduate.
- 2. Aid students, Graduate Schools, Graduate Programmes and other advisory committees in identifying students' skills development needs.
- 3. Inform the enhancement of further skills development opportunities for all PhD students.

In fulfilling these aims the skills statement further expands on the QQI National Framework of Qualifications PhD descriptors, which are as follows:

Purpose: This is a multi-purpose award-type. The knowledge, skills and competence acquired are relevant to personal development, participation in society and community, employment, and access to additional education and training.

Knowledge-breadth: A systematic acquisition and understanding of a substantial body of knowledge which is at the forefront of a field of learning.

Knowledge-kind: The creation and interpretation of new knowledge, through original research, or other advanced scholarship, of a quality to satisfy review by peers.

Know-how and skill-range: Demonstrate a significant range of the principal skills, techniques, tools, practices and/or materials which are associated with a field of learning; develop new skills, techniques, tools, practices and/or materials.

Know-how and skill-selectivity: Respond to abstract problems that expand and redefine existing procedural knowledge.

Competence-context: Exercise personal responsibility and largely autonomous initiative in complex and unpredictable situations, in professional or equivalent contexts.

Competence-role: Communicate results of research and innovation to peers, engage in critical dialogue, lead and originate complex social processes.

Competence-learning to learn: Learn to critique the broader implications of applying knowledge to particular contexts.

Competence-insight: Scrutinise and reflect on social norms and relationships and lead action to change them.

To assist the development of structured PhD programmes, many countries have developed skills statements detailing categories of skills that students and supervisors may consider appropriate to students' skills development needs. Consequently this statement draws on skills statements developed elsewhere (see appendix).

The skills identified by the Irish Universities Association's Deans of Graduate Studies group as relevant to PhD student education is not an exhaustive list. Their relevance to students will vary according to experiential learning, disciplinary and professional development needs.

Structured Supports Empower Students To Make A Significant Impact In Their Chosen Career

Research Skills and Awareness

- exhibit knowledge of advances and developments in their field
- · demonstrate knowledge of research in related fields and disciplines
- comprehend and effectively employ appropriate research methodologies
- critically analyse and synthesise new and complex information from diverse sources
- formulate and apply solutions to research problems and effectively interpret research results

- exercise critical judgement and thinking to create new ways of understanding
- demonstrate, where appropriate, a knowledge of health and safety procedures and their application in the research environment
- have a broad awareness and knowledge of key relevant funding sources and grant application procedures
- appreciate basic principles of project and time management

Ethics and Social Understanding

- Understand, and apply in their research, principles of ethical conduct of research, including avoidance of plagiarism, allocation of credit and authorship and definitions of research misconduct
- understand the relevance of research in society and the potential impact of research on individuals, groups and society
- where applicable, understand and apply the relevant guidelines for the ethical conduct of research involving people, human tissue and animals

Communication Skills

- demonstrate effective writing and publishing skills
- effectively use and decide on appropriate forms and levels of communication
- communicate and explain research to diverse audiences, including both specialist and non-specialist
- teach and support the learning of undergraduate students when involved in teaching and demonstrating

Personal Effectiveness / Development

- Operate in an independent and self-directed manner, showing initiative to accomplish clearly defined goals
- appreciate key rhetorical skills, including how to persuade others of a viewpoint's merits, demonstrating and communicating credible suggestions to achieve one's aims

- appreciate the importance of initiating new projects, proactively reacting to newly identified needs or aiming to resolve persistent problems
- ability to handle difficulties in research or other professional activities in an appropriate way
- critically reflect on experiences and act on such in a cycle of self-improvement

Team-Working and Leadership

- Develop and maintain effective relationships with colleagues
- work in a collaborative environment
- awareness of their own working style, that of others, and how they interact
- understand how to acknowledge others' views, with a willingness to reflect on and critically appraise them
- understand leadership in team environments, recognising the strengths of team members and work effectively to achieve mutual goals

Career Management

•

- Demonstrate an awareness of transferable skills and their applicability to both academic and non-academic positions and how they are applied in different circumstances
- take ownership of their own career management, forming credible career plans
- initiate and sustain networks and relationships that may encourage opportunities for employment
- present themselves and their skills, attributes, experiences and qualifications, through effective job applications, CVs and interviews
- understand the broadest possible range of their employment opportunities

Entreprenurship and Innovation

- Understand the role of innovation and creativity in research
- demonstrate an awareness and understanding of intellectual property issues, appreciate and, where appropriate, contribute to knowledge exchange
- appreciate the skills required for the development of entrepreneurial enterprises in the public and private sectors
- understand different cultural environments, including the business world, and the contribution that knowledge transfer can make to society

Source: http://www.iua.ie/publication/view/iua-graduate-skills-statement-brochure-2015/

Appendix: International Skills Statements and Documents Reviewed

The VITAE Researcher Development Framework (2011) https://www.vitae.ac.uk/vitae-publications/rdf-related/researcher-development-framework-rdf-vitae.pdf

The Dublin Descriptors: A framework for qualifications in the European higher education area (2005)

http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/050218_ QF_EHEA.pdf

Catholic University of Leuven: Competency Profile http://www.kuleuven.be/research/phd/

University of South Australia: Research Degree Graduate Qualities http://www.unisa.edu.au/Research/Research-degrees/Graduate-outcomes/

University of Canberra: Generic skills and attributes of University of Canberra graduates from higher degree by research programs https://guard.canberra.edu.au/policy/download.php?file_id=2522

University of Queensland: Statement of Postgraduate Research Student attributes http://ppl.app.uq.edu.au/content/4.60.03-research-higher-degree-graduateattributes

Carnegie Mellon University, Pittsburgh, Pennsylvania: Transferable skills http://www.cmu.edu/career/career-prep/successguides/pdf/transferable-skills.pdf

The University of Sydney: Graduate attributes project http://www.itl.usyd.edu.au/GraduateAttributes/interpretations.cfm

¹ European University Association, Report on the Bologna seminar: doctoral programmes for the European knowledge society, Salzburg, 3-5 February 2005, p. http://www.eua.be/fileadmin/user_ upload/files/EUA1 documents/Salzburg Report final.1129817011146.pdf

² Salzburg II Recommendations in 2010 http://www.eua.be/Libraries/Publications_homepage_list/ Salzburg_II_Recommendations.sflb.ashx

³ National Strategy for Higher Education to 2030 (2011) http://www.hea.ie/sites/default/files/national_ strategy_for_higher_education_2030.pdf

⁴ Principles for Innovative Doctoral Training (2011) http://ec.europa.eu/euraxess/pdf/research_policies/ Principles_for_Innovative_Doctoral_Training.pdf

Appendix 5: Training Resources for Research Students and Supervisors

Research Skills Training

Training resources are available for research students on the Graduate Studies Blackboard 1GST1 site and for academic staff on the CELT Blackboard site NUI Galway Teaching & Learning Forum on https://nuigalway.blackboard.com/

In the **Research Skills Training** folder you will find these five folders, which include further sub-folders which are detailed below:

- 1. An Introduction to Research Skills
- 2. Research Integrity
- 3. Research Methods
- 4. Transferrable Skills
- 5. 7 Secrets of highly successful research students

The training resource that is available in the Introduction to Research Skills folder:

• Introduction to the Research Skills Master Programme

The training resources that are available in the Research Integrity folder are:

- Research Integrity: Arts and Humanities
- Research Integrity: Biomedical Sciences
- Research Integrity: Engineering and Technology
- Research Integrity: Natural and Physical Sciences
- Research Integrity: Social and Behavioural Sciences
- Ethics

The training resources that are available in the Research Methods folder are:

- Research Methods in the Arts and Humanities
- Research Methods in Literature Review

- Research Methods in the Sciences
- Research Methods in the Social Sciences

The training resources that are available in the Transferrable Skills folder are:

- Supervision
- Managing Your Research Project
- Intellectual Property in the Research Context
- Writing
- Presenting
- Getting Published
- The Viva
- Career Planning
- Entrepreneurship

There are training resources in the '7 Secrets of highly successful research students' folder from Hugh Kerans and Maria Gardiner.

Library Resources

The Library runs workshops to support and train research students. Details can be found on:

http://www.library.nuigalway.ie/support/researchsupport/

Appendix 6: Books for Supervisors and Research Students

The following is a bibliography of reference material for supervisors and students available from the Graduate Studies Office or the James Hardiman Library.

Books for Supervisors

- Beasley, N. and Taylor, S. (2005) *A Handbook for Doctoral Supervisors,* London: Routledge.
- Barker, K. (2002) *At the Helm A laboratory navigator,* Cold Spring Harbor Laboratory Press.
- Delamont, S., Atkinson, P. and Parry, O. (2004) *Supervising the Doctorate: A guide to success*, Open University Press.
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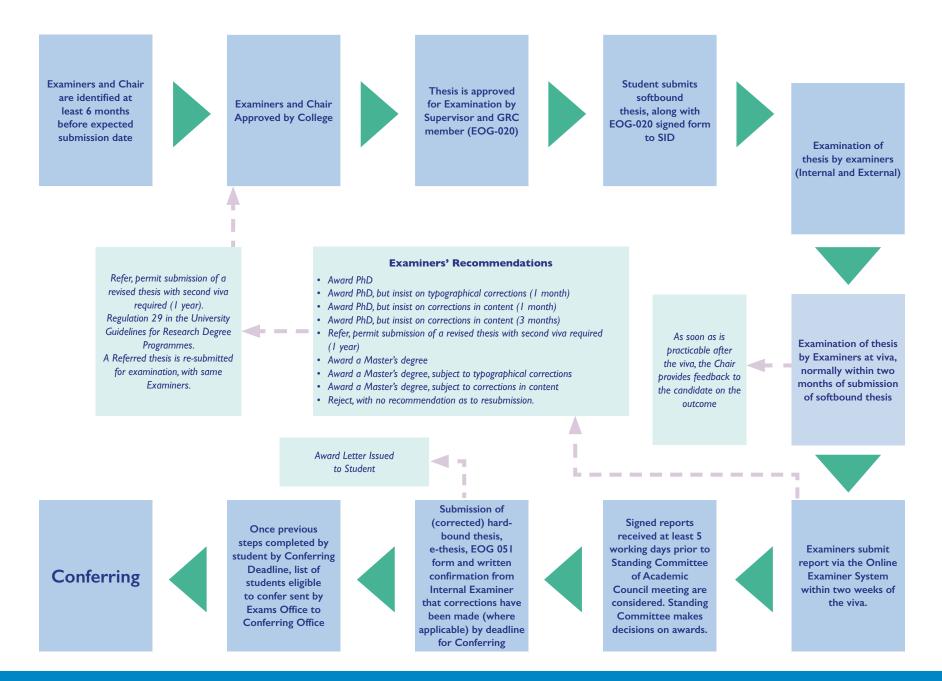
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Appendix 7: Process from Softbound PhD / MD Thesis Submission to Conferring



How to submit your e-thesis to ARAN

http://library.nuigalway.ie/digitalscholarship/openaccess/aranrepository/

Examinations Office:

(and procedure for payment of expenses to External Examiners - QA226) http://www.nuigalway.ie/exams/thesis/phd_examiner_info.html

Conferring Office: http://www.nuigalway.ie/academic_records/conferring/

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