Technological University Dublin – Tallaght Campus

Academic Quality Assurance & Enhancement Manual

Book 3: Research Degree Programme Quality Manual
Revision 2019

Note:

This quality manual relates to those taught programmes provided specifically at the Technological University Dublin – Tallaght Campus. Oversight of these programmes is provided by the Tallaght Campus Academic Board which will report to the Technological University Dublin Academic Council.

Throughout this document, where reference is made to the Technological University Dublin, it shall be understood that this relates specifically to Technological University Dublin – Tallaght Campus (or TU Dublin – Tallaght Campus).

In all cases where there is mention of Academic Council in this document, it is understood that this applies to the Tallaght Campus Academic Board with responsibility for overseeing the education programmes offered at the TU Dublin Tallaght Campus unless explicitly stated otherwise.

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Section 1   Introduction

The Institute has been steadily building a solid reputation as one of the leading Institutes of Technology in the areas of Research and Innovation. The Institute recognises that a research culture is conducive to the success of its educational and training programmes, since research and teaching are closely inter related. Therefore, research is a mainstream activity.

The Institute has a **Code of Practice for Research Degree Programmes** which includes **Regulations for Supervised Postgraduate Research Studies**; and a **Code of Conduct for Researchers.** This was developed by the Postgraduate Policy sub-Committee of Academic Council who consulted with management, academic supervisors and research students in the process. The Code of Practice was approved by Academic Council in February 2006 and subsequently by the Governing Body in March 2006 and HETAC (now QQI) in June 2006. It was also ratified by the Institute management teams. It has been written to meet the criteria and guidelines given in the QQI policy document for postgraduate research degrees *"Taught and Research Programme Accreditation Policy, Criteria and Processes"* August 2005 and references therein.[1]

The Code of Practice is an integral part of the Institute Quality Assurance Structures and BOOK 3 of the Quality Manual presents the outline quality assurance procedures for research degree programmes as taken from the Code of Practice. In addition it includes procedures for the management of ethics in research and intellectual property.

1.1   Rationale for the Pursuit of Research

An active research programme is vital in a dynamic education system seeking to respond to the needs of students, employers and society in general, and in helping educational institutions retain a relevance to the marketplace. Therefore a key ingredient to the Institute's strategy is that research impacts upon both the teaching activities of the institute as a whole at both undergraduate and postgraduate level. To this end both academic management and lecturing staff at the Institute have been proactive in strengthening the link between research and undergraduate teaching.

It is essential that the strategic development of the courses relevant to the requirements of enterprise and its R&D complement each other. This ensures the maximum use of staff expertise and of resources. Therefore, in order to keep abreast of rapidly emerging concepts and technologies, and to maintain an immediacy and relevance to our courses, it is necessary that those involved in the teaching of our programmes at undergraduate level, particularly at honours degree level of higher be actively involved in research. The flowchart in Figure 1.1 below shows how research informs the content of new and existing modules and courses to enhance the pursuit of educational excellence at undergraduate and postgraduate levels. It also shows how research can contribute to industry enhancement.

In summary the rationale for conducting research derives from:
1. High quality track record and reputation of the researchers;
2. The evolution of world-class research at the Institute and the reputation of Research Centres of Excellence on campus;
3. The importance of increasing critical mass of researchers in the higher education and training system to sustain the future knowledge economy;

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[1] This document supersedes HETAC's previous publication – "Postgraduate Research Degrees Policy and Procedures" [2001].

4. National strategic importance of the close-to-market research and innovation culture that already exists in the Institute;
5. The impact on the quality of taught programmes and the provision of industry-specific training;
6. Consistency with the National Policy, Strategy and more locally the Institute Mission and Strategic Plan in the context of enhanced regional development.

Figure 1.1   Flow-chart showing how research informs teaching and learning.

The Institute recognises that an active dynamic research culture is essential to its future development as it seeks to address the needs of an increasingly innovation and knowledge driven economy. It has formulated a Research Charter, a comprehensive Research Strategy and put in place structures and supports to pursue this core activity at the highest level.

1.2   Institute Research Charter

The TU Dublin - Tallaght Campusis committed to the advancement of learning and knowledge through the provision of flexible higher education opportunities which are of the highest quality in a professional and supportive environment. It strives to achieve this by offering educational and training programmes that reflect current and emerging knowledge and practices which are relevant to the needs of the individual and the region. Research and scholarly activity are recognised as being key elements to its success in this regard and the pursuit of these activities is supported and encouraged at all levels of the organisation. The Institute fosters an environment where knowledge expertise and development, investigation, understanding and critical evaluation are key parameters which underpin the educational and training programmes it provides. The Institute recognises that a research culture is conducive to the success of these programmes, since research and teaching are closely inter related. Since its foundation in 1992 the Institute has developed a strong reputation as an Institute that conducts high quality research. As a higher education and training provider it is also committed to the provision of high

quality research degree programmes from which it aspires to deliver graduates ready to meet the needs of business, industry, the public sector and society.

Research is a mainstream activity for the Institute. This Research Charter has been drawn up to underline the Institutes commitment to research at the highest level. It also sets out the Institutes policy in relation to research. Policy Statement: The Institute is fully committed to research as a core activity. By supporting the pursuit of excellence in research the Institute seeks to strengthen its education and training provision, create and disseminate new knowledge, concepts and applications, and support regional and national socio-economic development. It aims to achieve this through being a leader in the development of research and scholarly activity in the region and establishing itself as a centre of excellence for targeted research areas as identified in the Strategic Plan. This vision forms the basis of the Institute's research strategy. The Institute fosters and promotes equality, diversity and inclusiveness in relation to all its research activities. It places great emphasis on developing and enhancing the quality of its services, management and governance provided to all of its researchers and associated stakeholders.

The Institute supports basic, applied and strategic research across all disciplines. Schools and Departments within the Institute have however, identified key and emerging areas of research where the combination of staff expertise and facilities enable them to compete at a higher level to secure funding to pursue research activity. Collaborative research is actively encouraged internally and also externally with other academic, industrial, commercial and professional bodies. Such co-operation is intended to actively integrate the research conducted in the Institute into the wider academic and industrial community. It recognises and encourages the principle that dissemination of research outputs should be used for the greatest public benefit. The participation of staff in national and international conferences is therefore actively encouraged and supported. The value of international student and staff exchanges for the advancement of research is recognised as enhancing the research reputation of the Institute and is therefore facilitated.

The Institute accredits equal recognition to research leading to publication and to research, which because of its nature, cannot be published in the public domain. Commercialisation of research is often the most efficient means of promoting the widest possible dissemination. Intellectual property therefore, is an area of substantial importance in the research environment of Institute. The Institute has drawn up an Intellectual Property policy and a set of procedures to provide guidance to staff, students and other relevant parties regarding issues such as ownership, income from intellectual property and the use of Institute facilities to ensure that the development of intellectual property from research activities is mutually beneficial.

All research activities are conducted in accordance with recognised ethical and safety standards and are open to peer and public scrutiny. In this regard and taking cognizance of the European Charter for Researchers the Institute has formulated a Code of Conduct for Researchers which details the specific requirements and responsibilities of all who wish to conduct research at the Institute, in relation to research freedom, ethical principles, professional responsibility and attitude, obligations, accountability and good practice in research along with dissemination and exploitation of results.

1.3   Institute Commitment to Postgraduate Research

The Institute has a vibrant community of postgraduate students conducting research in a modern environment with state-of-the-art technology and facilities.
Postgraduate students benefit from the many advantages that are on offer at the Institute including:

ƒ Broad range of individual and multidisciplinary research degree programmes from Masters to Doctoral levels
ƒ High quality academic staff providing quality supervision and support
ƒ Institute Research Centres with an international reputation for performing high quality fundamental and applied research
ƒ Strong links with industry, hospitals, and other academic institutions including involvement in National Research Centres and access to facilities therein
ƒ Flexible modes of study
ƒ An expanding postgraduate student body
ƒ State-of-the-art specialist research facilities and library
ƒ Accessible personal and welfare services
ƒ Excellent opportunities to pursue sports, recreational and cultural interests.

As a higher education and training provider it is committed to the provision of high quality research degree programmes from which it aspires to deliver graduates ready to meet the needs of business, industry, the public sector and society.

The Institute supports postgraduate research across all disciplines. Schools and Departments within the Institute have however, identified key and emerging areas of research [Appendix A] where the combination of staff expertise and facilities enable them to compete at a higher level to secure funding to pursue research activity. This approach is also compatible with the Institute's Strategic Plan where it seeks to establish itself as a Centre of Excellence in specialist research areas.

The TU Dublin - Tallaght Campus encourages co-operation with other academic, industrial, commercial and professional establishments for the purposes of research leading to research degree awards. Such co-operation is intended to:

a) Encourage joint research which is mutually beneficial;
b) Extend the postgraduate student's own experience and perspectives of the research work;
c) Provide a wider range of experience and expertise to assist in the development of the project;
d) Enable the postgraduate student to become a member of a wider research community where appropriate.

1.4   Research Strategy

Strategic planning for the development of research goes back further as far as 1998. Early Institutional research Strategy was formulated in the context of existing research activities within the Institute. It also took into account the projections and recommendations of the '*National Development Plan*' (1999) and the '*Technology Foresight Reports*' (1999). The first Research Strategy for the Institute was prepared in the context of the 1999 application to HEA PRTLI. This has been updated annually by a working group reporting to the Research and Development Committee of Academic Council to reflect evolving priorities. The working group comprises the Institute President (also Chair of the IOTI Research Strategy Group), the Head of Development, the Industrial Liaison Manager and a number of Academic Researchers. The Institute has just completed the development of its research strategy for 2008 – 2012. It has been guided by National and European policies. The complete strategy document is available on the Institute website at www.it-tallaght.ie/publications/index.htm

The research mission of the Institute has been articulated in the Research Strategy document as follows:

> *"TU Dublin - Tallaght Campus aims to be a leader in research and scholarly activity in the region, to become established as a Centre of Excellence for targeted research areas which can act as a regional and national resource for industry and other stakeholders and contribute in a unique way to the success of fourth level education in Ireland."*

This mission statement is aligned with the national vision for the role of Institutes of Technology in the development of research in Ireland as articulated in the Strategy for Science, Technology and Innovation (SSTI). [1]

The goals of Institutional strategy for the period 2008 to 2012 are as follows:
- ƒ To carry out research of an international standard, that positively impacts upon society, in the Institute's prioritised research areas, whilst identifying emerging thematic research areas in which the Institute can allow future development;
- ƒ To sustain and improve the linkage between discipline-based research and teaching through institutional polices and practices, leading to an enhancement of the student's learning experience;
- ƒ To sustain and further develop the infrastructural resources within the Institute to support its research activities;
- ƒ To establish structures and processes that will encourage, support and reward both emerging and established academic researchers within the Institute;
- ƒ To identify, expand and deepen strategic research partnerships with regional and national public partners;
- ƒ To continue to partner with industry to ensure that the Institute can develop a diversified and sustainable research base and that the focus of research will be consistent with the challenges set by an innovative and knowledge driven economy;
- ƒ To establish TU Dublin – Tallaght Campus as a driver for enterprise development in South Dublin County and within the higher eduaction sector by developing the expertise to act as a centre of excellence for applied research and knowledge / technology transfer for its region.

1.5   Research Quality Assurance Framework

The Code of Practice is an integral part of the Quality Management System. The regulations and procedures therein underpin the academic operations and management of the Institute's research degree programmes.

A register of postgraduate students is maintained by the Registrar's Office in the Institute. All registrations are evaluated internally by the **Postgraduate Research Board**, as convened by the Registrar.

The Departments and Schools are responsible for the delivery of research degree programmes. They work closely with the Registrar's Office in this regard. They also work closely with Development & External Services (D&ESO) in relation to support services for research, in particular those that apply to studentships and funding. Research Degree Programme Boards reside within the Departments. They are established in accordance with the procedures as described in the Quality Assurance Manual. The Programme Board is comprised of a Head of Department (or nominee) and the research academic staff and student representatives, other staff or external advisors. Their main focus is to monitor and improve the ongoing delivery of the research degree programmes.

It is Institute policy that postgraduate research assessment should be conducted rigorously, fairly and consistently. It should only undertaken by those individuals with relevant qualifications and experience and with a clear understanding of the task. Monitoring of progress on the project is carried out by the Supervisor(s) through regular scheduled meetings and discussions with the student. The overall monitoring of the supervision process is carried out by the sponsoring Department for example through the Programme Boards, annual reviews, and complaints

mechanisms. Student progress is assessed on an annual basis by the Department through the mechanism of formal reports as completed by the supervisors and students.

The examination criteria, along with those for the appointment of internal and external examiners, along with the chairperson of examiners are applied by the Registrar as per Section 4 of the Research Regulations contained herein. These have been drawn up in accordance with the QQI guidelines.

QQI awards Masters and Doctoral degrees to those students who successfully complete approved programmes of supervised research at the TU Dublin – Tallaght Campus. The award is conferred following assessment and examination of the candidate's thesis and approval by QQI.

Continuous improvement of the Quality Assurance framework for research is an ongoing objective. Staff and student participation at research degree Programme Boards and the relevant sub-Committees of Academic Council are the main routes for providing feedback on the quality & effectiveness of the structures in place to support the Institute's research degree programmes.

The Research Degree Programme Quality Manual is available on the staff intranet and is also available from the Registrar's Office and the Library.

The Code of Practice is available online to staff and students on the internet. In addition soft copies are also posted on the Institute staff I Drive in the RDP Regulations and Procedures folder. Comments on the Code of Practice and on how it might be improved can be forwarded directly to the Registrar of the Institute for consideration at the next review.

A Postgraduate Research Student Handbook has also been developed and this is updated on an annual basis by a group comprised of staff from Development and Registrar's Office. Part 1 of the handbook provides general information to research students regarding their studies, supports and services. Part 2 of the handbook summarises the Research Regulations and Code of Conduct. It is given to all students at induction and is published on the website.

The QA procedures outlined in this BOOK 3 of the Quality Manual have been expanded upon in the list of SOPs (Table 1.1) for research degree programme operations and management:

Table 1.1   Standard Operating Procedures for Research

Related School/Section	SOP No.	SOP Title
DESO	DR017	Formal Closure of Externally and Internally Funded Projects
DESO	DR018	External Research Funding Applications - Rev B
DESO	DR019	Acceptance of Research Contracts Rev B
DESO	DR020	Filing Of Research Project Documentation
DESO	DR021	General Financial Management of Research Projects Rev B
DESO	DR022	Ordering and Invoicing for Research Projects
Estates	DR042	After hours access to the Institute for staff and post-graduate students
Registrar & Schools	DR046	Application for Transfer to the Doctoral Degree Register
Registrar & Schools	DR049	Application for Admission to a Research Degree Register
Registrar & Schools	DR050	Filing and logging of correspondence relating to postgraduates with QQI
Registrar & Schools	DR051	Research Degree Submission and Examination procedures

Registrar & Schools	DR052	Notice of Intention to Present for Examination for a Postgraduate Research Degree
DESO	DR056	Procedures for the Recruitment and Selection of Candidates for Research Postgraduate Studentships
Registrar	DR059	Maintaining a Live Register of Research Degree Students
DESO	DR061	Award and Review of the Institute Research Centre Status in all Disciplines of TU Dublin – Tallaght Campus
Sci	SC035	Postgraduate Annual Leave Policy
Sci	SC036	Out of Hours Laboratory Work Policy
Sci	SC037	Postgraduate Research Off Campus Policy
Sci	SC044	Out of Hours Laboratory Work Policy & Set up of Overnight Experiments Involving Running Water
Registrar	RE002	Graduation Procedure
Registrar & Schools	CS4066	Post-Graduate Student Support
Registrar & Schools	DR072	Viva Voce Examination Procedures
Registrar	RE005	Retention & Storage of Postgraduate Research Degree Student Files
Registrar & Schools	Draft	Research Degree Programme Appeals Procedures
Registrar & Schools	Draft	Students Complaints Procedures
Sci	Draft	Roles and Responsibilities for Associate Staff Supporting Science Laboratories
Registrar & Schools	DR070	Research Student Annual Assessment & Renewal of Registration Procedures
Registrar & Schools	DR071	Procedure for Submitting an Application for Ethics Clearance for Research Projects

Procedures for the provision of information to prospective applicants and students are the same as those previously outlined in Section 9.9 of the Taught Programme Quality Manual [Book 2].

Procedures for evaluating the effectiveness of quality assurance procedures are the same as those previously outlined in Section 10 of the Taught Programme Quality Manual [Book 2].

1.6   General Information

1.6.1   Definitions

A research degree programme: is a programme of study designed to enable a student to acquire through supervised personal research, knowledge, skill and competence at Master's or Doctoral degree levels. The programme may have a taught component. However, a substantial majority of the student effort is spent on research resulting in the production of a thesis that is submitted for examination prior to recommendation for award of the appropriate degree.

Postgraduate Research Degrees awarded by QQI are:
Master of Arts (Research)
Master of Business (Research)
Master of Engineering (Research)
Master of Science (Research)
Doctor of Philosophy

National Framework of Qualifications (NQF): a framework for the development, recognition and award of qualifications in the State, based on standards of knowledge, skill and competence to be acquired by learners. The framework comprises ten levels.

Degree of Master (Research): Candidates who study for the Degree of Master (Research) are expected to acquire a mastery of the principles and theory underlying their chosen subject and a knowledge and appreciation of the relevant literature. The award is made at Level 9 of the NFQ framework. Normally, the minimum duration of studies leading to the Degree of Master (Research) is eighteen months and a maximum of four years. After four years, registration has lapsed and re-registration is required.

Degree of Doctor of Philosophy (PhD): Candidates who study for the Degree of Doctor of Philosophy are expected to have reached advanced levels of achievement, in which the candidate demonstrates outstanding scholarship and ability. The candidate must demonstrate that he/she has conducted original, independent research; have acquired a broad knowledge of a particular field of study; and have acquired a comprehensive knowledge of the specialist area upon which their research was focused. Normally, the minimum duration of studies leading to the Degree of Doctor of Philosophy is three years and a maximum of six years. After six years, registration has lapsed and re-registration is required.

Accredited Disciplines: QQI have accredited the TU Dublin - Tallaght Campus to maintain a postgraduate research degree register in specific for research degree programmes at Master's level (Level 9) *in the areas of Electronic Engineering, Mechanical Engineering, Science and Computing* and Doctoral level (Level 10) *in the areas of Biology and Chemistry*. This means that all applications are approved by the Institute Registrar, following the recommendation of the Institute Postgraduate Research Board.

Approved Disciplines: QQI have given the TU Dublin - Tallaght Campus approval to submit **case-by-case** research degree applications in the following areas at Master's level (Level 9) *in the areas of Humanities* and Doctoral level (Level 10) *in the areas of Electronic Engineering, Mechanical Engineering, Science (excluding Biology and Chemistry), Computing and Humanities*. This means that all applications are approved for submission to QQI by the Institute Registrar, following the recommendation of the Postgraduate Research Board.

Postgraduate Research Board: The primary function of the Postgraduate Research Board is to assist and advise the Registrar in monitoring the overall registration, assessment and examination of candidates for the Institute's research degree programmes.

1.6.2   Research Degree Awards

The Institute provides opportunities for postgraduate study by research on both a full-time and part-time basis. It is a recognised provider of Higher Education and Training Awards Council (QQI) research degree programmes. While QQI is the awarding body for the research degree awards, the overall standards for these awards are established by the National Qualifications Authority of Ireland (NQAI) which is the body responsible for the development and maintenance of the National Framework of Qualifications. The framework comprises ten levels, with each level based on specified standards of knowledge, skill and competence. QQI makes awards from levels 6-10 of the framework.
A Master's Degree (Research) award is made at Level 9 of the framework while a Doctoral (PhD) Degree award is made at Level 10, the highest award level that can be attained under the framework.

Candidates who study for the **Degree of Master (Research)** are expected to acquire a mastery of the principles and theory underlying their chosen subject and a knowledge and appreciation of the relevant literature.

Candidates who study for the **Degree of Doctor of Philosophy (PhD)** are expected to have reached advanced levels of achievement, in which the candidate demonstrates outstanding scholarship and ability. The candidate must demonstrate that he/she has conducted original, independent research; have acquired a broad knowledge of a particular field of study; and have acquired a comprehensive knowledge of the specialist area upon which their research was focused. Institutes of Technology have delegated authority to make awards at Level 9 in all disciplines. ITT has been accredited by QQI to maintain a research degree register in specific discipline areas:

- Doctor of Philosophy in Biology and Chemistry disciplines, inclusive of transfer applications.
- Doctor of Philosophy in Humanities

For candidates submitting applications to the following registers, then applications must be submitted to QQI who then approve the application:

f Doctor of Philosophy (all disciplines other than Biology, Chemistry or Humanities inclusive of transfer applications).

1.6.3   Guidelines on the Duration of Research Degree Programmes

The minimum period of registration for full time students registered on Masters or PhD degree programmes is given in the table below. The normal duration of these programmes is also given. The Institute expects all registered research postgraduate students to complete their higher degrees within the normal time durations outlined. However the Institute recognises that exceptional and unforeseen events may occur which may impact on these normal time durations. In these circumstances the Registrar will make a decision whether or not to consider extending such normal time durations. Each case will be dealt with on its own merits and the Registrar's decision is final. The minimum and maximum periods of registration for full time students are as follows:

Award	Minimum	Normal
Masters	18 months	30 months
PhD	36 months	42 months

A longer time period may be applied to part time students at the discretion of QQI. Notwithstanding the above the Institute and QQI permit an absolute maximum registration period of **48 months** in total on the Masters Programme and **72 months** on the PhD programme. Should the candidate not complete the programme within the allowed timeframe the registration lapses. If the candidate wishes subsequently to present for the degree, an application for re- registration to the Institute is a mandatory requirement.

1.6.4   **Research Degree Programme Stages & Milestones**

Postgraduate research studies are carried out under the supervision and guidance of suitably qualified academic members of staff in the specialist area or field involved. In some cases the research project may be supervised by a team of academics, especially where the research project has been designed by a Research Centre or Group. The expertise of external collaborators involved in the Research Centre or Group from other academic institutions, industry or the public sector may be called upon during the project. Academic supervision is central to the successful completion of postgraduate research work. The supervisors play a key role in designing the research project, guiding the postgraduate student in their work, maintaining the general direction of the research, maintaining appropriate targets & academic standards as set out by QQI along with preparing the student for submission of their final thesis for examination.

The research programme may have a taught component. However, this normally takes the form of the student attending short specialist training workshops or seminars related to the project and may not be directly included in the final presentation of results.

Following completion of the project-based research the postgraduate student writes a thesis where the research results are presented, analysed and discussed. The thesis is then submitted to the awarding body, i.e. QQI via the Institute for examination.

Major Milestones in a Research Degree Programme

- admission to the postgraduate degree register
- completion of first year of study
- annual review report & renewal of registration
- approval to apply for transfer from masters to doctoral register
- admission to the doctoral degree register
- completion of research project work
- writing of thesis
- submission of thesis for examination
- viva (where appropriate)
- graduation

Section 2   Research Organisation & Structure Including Roles and Responsibilities

2.1   Research Management

The Governing Body has ultimate responsibility for the management and control of the affairs of research as set out under Section 7 of the Regional Technical Colleges Act 1992. It is supported in its decisions by advice from Academic Council on all academic matters pertaining to research. Executive decisions in relation to the management of research are taken by the Senior Management Team who is directed in this by the Governing Body through the President of the Institute. There are two elements to the management structure for research at the Institute. These are:

- The **operational management** of research activities, including strategy, administration of research funding – managed by the Head of Development through the **Development & External Services Office.**
- The **academic management** of postgraduate research degree progrrammes – managed by the **Registrar** through the Registrar's Office.

The organisational framework to support postgraduate research is illustrated in Figure 2.1.
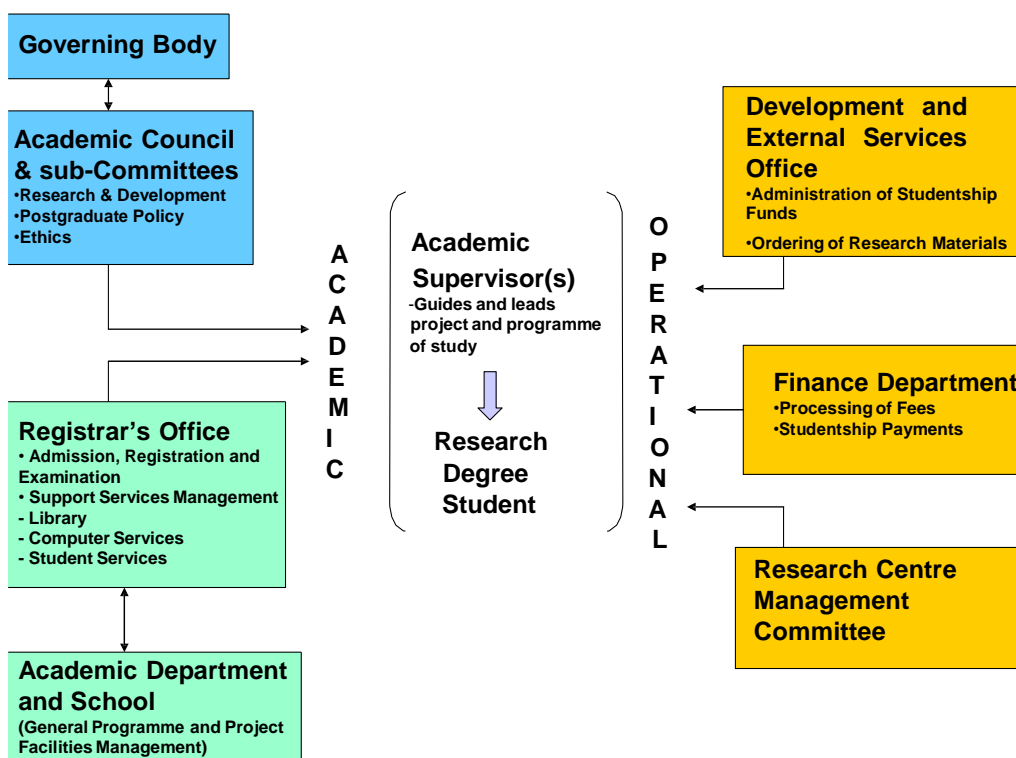
Figure 2.1   How the Institute research framework supports research degree students

2.2   Academic Management of Research

The Registrar is responsible for the admission and registration of students on the Institute's research degree programmes. He/she also manages the overall examination process (see Section 2.5.1).

Administrative support is provided by staff within the Registrar's Office, under the supervision of the Administration & Student Affairs Manager. A register of postgraduate students is maintained by the Registrar's Office in the Institute. All registrations are notified (accredited areas) or submitted for approval (approved areas) to QQI following an internal evaluation by the proposed sponsoring Head of Department and the Registrar through the Postgraduate Research Board.

2.3   The Postgraduate Research Board

The primary function of the Postgraduate Research Board is to assist and advise the Registrar in monitoring the overall registration, assessment and examination of candidates for the Institute's research degree programmes. The Registrar sends reports from this Board to Academic Council, who is responsible for making recommendations to the Governing Body for the selection, admission, retention and exclusion of students.[2]

Composition of the Postgraduate Research Board:
It consists of the Registrar, Heads of School, Heads of Department, Academic Representatives (6) who have supervised research degree students to Level 9 and 10 to completion. The Registrar should also nominate a panel of external academic advisors (5) to advise the Board as required.
The Board should meet at least once a year and thereafter on an ad hoc basis as required. In case of matters arising for consideration by the Board at other times, an executive core committee comprising three members of the Board can be convened by the Registrar.
Since requests for registrations, transfers and examination of candidates often occur periodically throughout the year, the Registrar may liaise with the Board and external panel members as required in writing to seek their advice or approval in relation to these requests rather than convene a meeting.

Terms of Reference:
- ƒ Review and approve all new applications for registration to research degree programmes before submission to QQI.
- ƒ Approve the results of any qualifying examination process as required to support a registration application.
- ƒ Review the annual assessment reports and approve the annual renewal of registrations.
- ƒ Review and approve applications for transfer between postgraduate research degree registers.
- ƒ Provide advice on the approval of internal and external examiners as required.
- ƒ Deal with appeals & complaints as appropriate.

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[2] TU Dublin - Tallaght Campus Academic Council Constitution 21/03/05.   Note: the IT Tallaght Academic Council is now the Tallaght Academic Board, a sub-committee of the TU Dublin Academic Council with specific oversight of the programmes offered at the TU Dublin Tallaght Campus

2.4   Operational Management of Research

The Development & External Services Office is responsible for the overall strategic management and promotion of research activities for the Institute. In that context it is responsible for the non-academic or operational management of research degree projects including the administration studentship and scholarship funds (see Section 2.5.2).

It also has responsibility for the following aspects of research:
- Supporting and coordinating applications for external funding for postgraduate and contract research;
- Promotion of research opportunities within the Institute;
- Promotion of the Institute as a research centre to industry and funding agencies;
- Endorsement and filing of research funding applications;
- Financial monitoring and claims.
- Procurement.
- Recruitment of postdoctoral Fellows, postgraduate students and research personnel.
- Working conditions and office facilities of researchers.
- Negotiation of applied and commissioned research contracts with industry.

The Schools, Departments, Academic Researchers and the Registrar's Office work closely with Development & External Services in relation to many of these aspects of research. The Finance Department is responsible for the processing of appropriate fees and payments from studentship funds.

2.5   Roles & Responsibilities of Management for Research

2.5.1   Responsibilities of the Registrar

Specifically the Registrar is responsible for:

- ƒ How the research Regulations & Code of Conduct are communicated to the Schools and prospective & registered postgraduate students, dealing with all breaches of same.
- ƒ Managing the registration process for research degree programmes within the Institute.
- ƒ Chairing & managing the activities of the Postgraduate Research Advisory Board.
- ƒ Making recommendation regarding QQI requirements for the provision of support services & training to the Departments, Schools and the Development & External Services Office for the Institute's research degree programmes.
- ƒ Overseeing the monitoring of progress for research degree programmes.
- ƒ Overseeing and managing the appeals processes that relate to registrations and examinations.
- ƒ Overseeing and managing the complaints processes that relate to registrations and examinations.
- ƒ Overseeing & managing the examination and final awards process for the Institute.
- ƒ Overseeing the promotion the Institute's research degree programmes to prospective students.
- ƒ Ensuring that the student is aware of the Institute's health, safety and welfare regulations.
- ƒ Ensuring the necessary support & welfare services are made available to postgraduate students for the duration of their studies from the Institute's function areas, such as Computing Services, Student Services etc.

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ƒ Submitting to QQI documentation relating to students and supervisors.
ƒ Organising audits to ensure compliance with procedures, to include reporting to senior management on audits and compliance.

2.5.2   Responsibilities of the Head of Development

In the role as related to research degree programmes the Head of Development is responsible for:

ƒ Development of Research Strategy.
ƒ Provision of office-type accommodation for research degree students.
ƒ Ensuring that the student is aware of appropriate Institutional support systems and sources of advice.
ƒ Administration of research studentships and scholarships, including financial monitoring, orders and claims & making this information available to Supervisors.
ƒ Overseeing & managing the postgraduate student Induction Training Programme.
ƒ Monitoring and implementing the Institute's policies and procedures in relation to Intellectual Property emanating from results obtained from research degree projects.
ƒ Promoting & publishing information on the Institute's research degree programmes to stakeholders, including prospective students.

2.5.3   Responsibilities of the Head of School

ƒ Planning for and overseeing the management of research degree programmes within the School, to include: policy & strategy; availability of space accommodation; quality.
ƒ Developing and implementing, with appropriate consultation, quality assurance procedures for the efficient delivery of research degree programmes.
ƒ Generating a list of approved research Supervisors for the School on an annual basis for submission to the Registrar.
ƒ Ensuring the research Regulations & Code of Conduct are communicated to all staff within their School.
ƒ Ensuring there is a plan for the training of Supervisors and/or academics that wish to undertake research.
ƒ Produce an annual research examination report for Academic Council.
ƒ Invoke the relevant procedures for appeals made by the postgraduate student and/or Supervisors related to the delivery of the programme.
ƒ Invoke the relevant procedures for complaints made by the postgraduate student and/or Supervisors related to the delivery of the programme.
ƒ Convening an annual Exam Board for research degree awards.
ƒ Promoting the research degree programmes running within their School.

2.5.4   Responsibilities of the Head of Department

ƒ Leading and managing research degree programmes within their Department, to include areas such as: policy & strategy; availability of space accommodation.
ƒ Advising on and implementing quality assurance procedures for the efficient delivery of research degree programmes.
ƒ Approving applications for admission to these programmes before they are submitted to the Registrar, and notifying the Head of School.
ƒ Advising on the nature of any qualifying process necessary with the proposed Supervisors and the Registrar.

ƒ   Ensuring Academic Staff who wish to act as Supervisors on research degree programmes meet the criteria and requirements to do so.
ƒ   Ensuring there is provision for training of research degree Supervisors where required.
ƒ   Ensuring there is provision for the replacement of Supervisors where required.
ƒ   Taking an active role in the Postgraduate Research Advisory Board when requested by the Registrar.
ƒ   Monitoring and continuous improvement of research degree programmes generally through the mechanism of an annual Programme Board meeting.
ƒ   Assisting in the preparation of the annual school research examination report for submission to Academic Council.
ƒ   Co-ordinating the annual review process for postgraduate students registered on research degree programmes in their Department.
ƒ   Facilitating and scheduling research seminars within the Department.
ƒ   Approving examiners for research degree programmes within their Department as recommended by the Supervisor(s).
ƒ   Invoke the relevant procedures for appeals made by the postgraduate student and/or Supervisors related to the delivery of the programme.
ƒ   Invoke the relevant procedures for complaints made by the postgraduate student and/or Supervisors related to the delivery of the programme.
ƒ   Promoting the research degree programmes running within their Department.

The Institute recognises that (a) a Head of Department or (b) a Head of School can also act as a Supervisor on a research degree programme. In the case of (a), the Departmental roles should then be fulfilled by the Head of School. In the case of (b), the School roles should then be fulfilled by the Registrar or suitable person nominated by the President.

2.6   Roles & Responsibilities of the Supervisor

The Supervisors work with the student to establish an effective supervisory relationship. The Supervisors have a range of duties and responsibilities in overseeing the progress of the postgraduate student's research work. These include:
ƒ   Selecting & recruiting a suitable postgraduate student for admission to the proposed research degree programme on Departmental approval.
ƒ   Advising on the nature of any qualifying process necessary with the Head of Department and the Registrar at the time of the student's application for admission to the research degree programme.
ƒ   Providing satisfactory guidance and advice to the student on the research project and the standard expected; the planning and timing of the successive stages of the research programme; literature and sources of information for the project; research methods and instrumental techniques; attendance at appropriate courses; avoidance of plagiarism and respect for copyright. The Supervisor(s) should guide the student on how best to complete the research project, including preparation of a thesis within the time available.
ƒ   Monitoring the progress of the student's research programme. The Supervisors must ensure that regular meetings or supervisory sessions take place, the frequency of such sessions will vary according the nature of the research (e.g. whether laboratory work is involved), the particular research project, and may depend on whether the student is registered on a full-time or part-time basis. The length of sessions will also vary from student to student, across time and between disciplines. The key point is that both student and supervisor should have a clear, agreed understanding of the frequency and nature of contact required at any particular stage of the project.
ƒ   Ensuring that the student is aware of his/her requirement to conduct their research in accordance with the ethical and safety standards of the Institute.

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ƒ Arranging training on subject-specific material and skills and generic skills as appropriate.

ƒ Establishing and maintaining a satisfactory timetable for the research. The Supervisors should ensure that the student is informed of any inadequacy of standards of work below that generally expected from research students and should suggest remedial action as appropriate.

ƒ Maintaining a record of formal supervision meetings for each student to include: date of meeting, summary of discussion and any specific advice given.

ƒ Providing timely, constructive advice and effective feedback on the student's work, including his/her overall progress within the programme on a regular basis. The supervisor should take note of feedback from the student.

ƒ Reading promptly all the written work submitted in accordance with the agreed timetable.

ƒ Arranging, as appropriate, for the student to present work to staff or graduate seminars or conferences. The Supervisor(s) should provide advice on writing up the research, or parts of it, for publication and presentation.

ƒ Notifying the student well in advance of any planned periods of absence from the Institute. If the period of absence is significant the Supervisor(s) should ensure that appropriate arrangements for alternative supervision are made, where required, and that the student is informed of them.

ƒ Completing annual progress reports on the project. The Supervisor(s) may also be required from time to time by either the external funding bodies or collaborative Centres to provide a written report on the progress of the research project and should ensure that all requirements concerning the submission of such reports are complied with.

ƒ Making recommendation on requests for transfer to a higher or lower register and advise the student on writing the transfer report required for Master's to Doctoral transfers.

ƒ Initiating the process for the appointment of examiners well in advance of the thesis being submitted. The Supervisor(s) should advise on the nomination of appropriate examiners and seek approval for the proposed examiners from the Head of Department.

ƒ Advising the student on the format and lay-out of the thesis, and providing guidance on the drafting of the thesis.

ƒ Reading thesis material in both proof and final form, making suggestions on editing and/or correction, before it is formally submitted for examination.

ƒ Ensuring that the student understands the procedures for the submission and examination of theses and assisting the student in preparing for the oral examination, where required.

ƒ The financial monitoring of all project funds where appropriate.

A Mentoring Supervisor appointed supervise on the research degree programme provides guidance and assistance to the original proposing Principal Supervisor in complying with those responsibilities outlined above that relate to the planning of the research programme and ensuring the attainment and maintenance of an appropriate academic standard in the work being undertaken.

2.7   Responsibilities of the Postgraduate Student

The student should work with the Supervisor(s) to establish an effective supervisory relationship, tackling the research with a positive commitment, and taking full advantage of the resources and facilities offered by the academic environment. The responsibilities of a postgraduate student include:

ƒ Taking responsibility for his/her research activity and candidacy for the degree.

- ƒ Ensuring that he/she is familiar with relevant aspects of the Institute health safety and welfare framework.
- ƒ Ensuring that he/she is familiar with and complies fully with the Institute's rules and regulations, Code of conduct for Researchers, Intellectual Property policy and procedures appropriate to their research degree programme.
- ƒ Making Supervisor(s) aware of any specific needs or circumstances likely to affect their work (e.g. disability, pregnancy etc.).
- ƒ Ensuring that any circumstances that might require his/her mode of study to be modified or his/her registration to be extended, suspended or withdrawn, are brought to the attention of his/her Supervisor(s).
- ƒ Making appropriate use of any teaching and learning facilities and training opportunities made available by the Institute, School or Department.
- ƒ Successfully completing any training arranged.
- ƒ Maintaining satisfactory progress with the programme of research. This includes keeping up- to-date with the literature related to the research area; performing and completing tasks in the research project on a day-to-day basis.
- ƒ Conducting their research within the ethical standards of the Institute.
- ƒ Maintaining regular contact with Supervisor(s). The student should agree with the Supervisor(s) to have regular meetings and to prepare adequately for those meetings to discuss plans of action and targets for progression of the research work. The student should provide adequate explanation of any failure to attend these meetings.
- ƒ Setting and keeping to timetables and deadlines, including planning and submitting work as and when required. The student should take note of guidance and feedback given by their Supervisor(s).
- ƒ Developing responsibility for the direction of and innovation in the research project as it develops. The student should submit written work to the Supervisor(s) regularly and in good time, in accordance with the agreed timetable.
- ƒ Communicating both orally and in writing, his/her research findings, as agreed by the Supervisor(s). Typically this would involve presentation at seminars and conferences and/or preparing or writing papers for submission to journals etc.
- ƒ Completing an annual progress report by the set date each academic year. The student may be required to make an oral presentation to an assessment panel where there has been unsatisfactory progress.
- ƒ Informing the Supervisor(s) of significant problems and difficulties as early as possible. The importance of prompt identification and resolution of any problems cannot be over emphasised, and it is the responsibility of the student in the first instance to ensure that any problems are raised at the appropriate level at the earliest opportunity.
- ƒ Deciding when he/she wishes to submit their thesis, in agreement with their Supervisor(s).
- ƒ Complying fully with the examination procedures. Students must refrain from interacting with   the examiners.

Note: Failure to comply with the Research Regulations & Code of Conduct may result in disciplinary action culminating in de-registration.

Section 3   Pre-Admission & Candidate Selection Procedures

3.1   Choosing the Research Area

Programmes of research may be proposed in any field of study subject to the requirement that the proposed programme is capable of leading to scholarly research and to its presentation for assessment by appropriate examiners and that the Institute has the facilities, resources and expertise to supervise the topic. The written thesis may be supplemented by material in other than written form. All proposed research programmes shall be considered for research degree registration on their academic merits and without reference to the concerns or interests of any associated funding body.

Priority areas for research at the Institute have been drawn up by the Research & Development sub-Committee of Academic Council and are listed in the Institute's Strategic Plan. Schools and Departments have identified key and emerging areas of research within these priority areas and the complete listing is given in current Research Strategy document.

Where a new avenue of research is being proposed for an application for admission to the postgraduate register, it is the responsibility of the proposed research Supervisor to consult with the Head of Department and seek their approval prior to submission of the application. The Head of Department may refer the matter for discussion to the Research & Development sub- Committee before making a decision.

Where the proposed research is multidisciplinary across more than one Department, it rests with the proposed Supervisor in consultation with the relevant Heads of Department to identify one Department that is to assume primary responsibility for the delivery of the research programme.

Where a proposed Supervisor is a Head of Department the Head of School should approve the research proposal and supervisory arrangements. Where the proposed Supervisor is a Head of School this should be carried out by the President or nominee.

3.2   Procedures for the Appointment of the Research Supervisors

An Academic supervision is central to the successful completion of postgraduate research work. The supervisors play a key role in designing the research project, guiding the postgraduate student in their work, maintaining the general direction of the research, setting and maintaining appropriate targets & academic standards along with preparing the student for submission of their final thesis for examination. All proposed Principal Supervisors must hold either a Masters (Level 9) or a PhD (Level 10) Degree.

It is the responsibility of the Head of School to generate a list of approved Supervisors for research degree programmes and to make this information available to the Registrar and Heads of Department. The Registrar is responsible for maintaining the approved list for the Institute. The Head of School may submit amendments to their approved Supervisors' lists at any time. Such amendments may include recommendations for the transfer of a Co-Supervisor to the Principal Supervisor listing.

The nomination of Supervisors for a research project is normally done through agreement by the proposed academic researchers themselves. The nomination can also come from a team of researchers for projects run through Research Centres or specialist research groups. Where there is conflict of interest in this area it rests with the Principal Investigator to resolve the issue.

Where the project is to lead to an academic award the Head of Department should approve the nomination(s) prior to submission of an application for registration. Where there is conflict of interest in the area it rests with the Head of Department to resolve the issue.

A single Supervisor (in the category of Principal Supervisor) may be appointed to supervise a candidate registered on a research degree programme. In such cases the Head of Department may be required to act in an ancillary supervisory role (e.g. where Supervisor leaves or in cases of dispute) or make arrangements for another suitably qualified academic to do so.

Where more than one Supervisor is appointed, one Supervisor is normally appointed as the Principal Supervisor and the second or subsequent Supervisors nominated as the Co-Supervisor.

Categories of Supervisor are listed below, with more detail on these and the criteria for their appointment provided in the Code of Practice, Section 1.

Category A: Principal Supervisor
The Principal Supervisor is responsible for:
      a) the running of the project
      b) providing guidance to the postgraduate student on the planning of the project, how the research is to be conducted, the standard expected, assessment of progress and the presentation of the research results in the final thesis.

Category B   Co-Supervisor
A Co-supervisor may be appointed not only to provide additional expertise and specialist knowledge as deemed necessary but also to function in an ancillary role, in the event of:
      a) Departure of the principal supervisor (retirement, illness, leave of absence etc.).
      b) Irreconcilable breakdown in the supervisory relationship between the Principal Supervisor and the postgraduate research student.

Category C   Mentoring Supervisor
A Mentoring Supervisor must always be appointed to supervise on a research programme where the Principal Supervisor does not meet the required criteria laid out in Category A above.

External project collaborators may also be nominated as research Supervisors in Categories A and B where they meet the relevant criteria above.

3.3   Pre-Admission Process and Procedures

Departmental approval is required by all those who wish to conduct research at the Institute. Where it is proposed to recruit a candidate for a postgraduate research project leading to the award of a research degree qualification the proposed researcher must submit a written request to the relevant Head of Department who must confirm:
      a) The availability of adequate and appropriate space accommodation within their Department.
         Note: It is the Head of Development who signs off on the availability of general office-type accommodation
      b) The proposed Supervisor(s) meet the criteria for the appointment of Supervisors.
      c) The supervisors existing commitments and responsibilities allow sufficient time for supervision of the student.
      d) Research in the proposed topic/area can be facilitated within the Department and School.
      e) The training needs of the postgraduate student can be accommodated.
      f) Any potential ethical considerations have been highlighted.

Where an *ethical risk has been highlighted for a research project* the proposed Researcher(s) must obtain clearance from the Research Ethics Committee before the proposed start date of the project and before funding can be drawn down for the project. Some funding agencies require ethics clearance be obtained before the application is submitted to them for funding. The procedure for ethics clearance where required is outlined in Section 14 of this Quality Manual or SOP DR071. Research projects will not normally be approved and the registration of postgraduate research students will not normally be processed until the proposal has been approved following the aforementioned procedure.

A re-assessment of ethical and risk factors must be undertaken by researchers in any research project where any significant change in the direction or focus of an ongoing research project is intended.

Following Departmental approval the Principal Supervisor in collaboration with Co-supervisors and/or External Collaborators where appropriate prepares a research project proposal as per Section 3.3.1 *(funded projects)* or Section 3.3.4 *(non-funded projects)* below.

3.3.1   Funded Project Studentship Applications

The Development & External Services Office co-ordinates the overall research funding application process. It also provides staff with the appropriate application and proposal forms, guidelines for completion, deadlines etc. Calls for funding from internal and external sources take place throughout the year at the discretion of the funding agency (external funding) or the Institute (internal funding). Complete lists of external funding agencies, along with details on internal funding mechanisms are available from the Development & External Services Office.

All intending research supervisors must seek the permission and approval of the Head of Department before preparing and submitting an application for research funding. Decisions made by the Head of Department in that regard will be made based on current available capacity and/or resources to support the proposed work, the current level of R&D commitment of the supervisors, and adequate supervisory arrangements being available. Details of the steps involved in preparing and submitting an application for research funding are given in **SOP – DR0018** entitled **Research Funding Application Procedures.**
Commitment to support a research grant application is <u>not</u> a guarantee that the project, if successful in gaining funding, can actually be supported.

A secondary application to the Head of Department must be made prior to entering the recruitment process as detailed below. Decisions on allowing recruitment to proceed will be based on a re-evaluation of current available capacity and/or resources to support the proposed work and the current level of research commitment of the supervisors. There is also a need to check with External Services regarding availability of desk/office space.
The recruitment and selection procedures can be broken down into a number of elements, namely:
1. Pre-recruitment Consultation
2. Advertising & Receipt of Applications
3. Pre-Interview & Short listing Process
4. Interview Process
5. Making a Recommendation & Reference Check
6. Making the Studentship Offer.

The steps involved in the process along with detail on procedures and forms to be completed are given in **SOP – DR056** entitled **Procedures for the Recruitment & Selection of Candidates for Research Postgraduate Studentships.**

3.3.2   Non-funded Research Pre-Application Steps

It is usually an Academic or proposed Supervisor who prepares and submits an application to conduct a research degree project leading to a postgraduate award. The prospective applicant (usually an Academic Researcher) discusses his/her intentions regarding a research funding opportunity with their Head of Department. Approval of the Head of Department will be necessary before the application can proceed. The Head of Department considers whether the

project in question can be supported within his/her Department as previously outlined above, with reference to such issues as lecturer commitments, technician support, bench space and utilisation and maintenance of equipment.

The proposed Supervisor(s) should consider any risks associated with the proposed work. The Head of Department also considers any risks associated with the proposed work, and may recommend ethics clearance be obtained where appropriate. See procedure outlined in DR071 or Section 14 of this Manual for seeking ethics clearance.

If the Head of Department decides that the application may proceed, a candidate can be recruited. Where candidates are applying for a non-funded full-time or part-time postgraduate research programme, a formal pre-admission interview following the guidelines outlined in Section 3.3.1 above must also be conducted by the proposed Supervisor or Supervisory team. Following a successful outcome to the pre-admission interview the candidate is deemed eligible to apply to register for the appropriate degree programme. The registration process can then be initiated following the procedures outlined in Section 2 of regulations in the Code of Practice as summarised in Section 4 below.

3.4   Evaluation of Academic Entry Requirements

Having selected a Candidate, the Supervisor should contact the Registrar's Office to arrange   a final check on their eligibility with regards to their qualifications and English language proficiency. This is done using the **Assessment of Academic Qualifications (AAQ) Form** given in **Appendix 7 of SOP DR056**. Where the Candidate is not an TU DUBLIN - TALLAGHT CAMPUS graduate, Supervisors should request they send in their original degree parchments/ transcripts as these are needed for verification purposes and must be submitted with the AAQ form.

Section 4   Admission & Registration Procedures

4.1   Academic Entry Requirements

The entry requirements for postgraduate students to research degree programmes are compatible with progression routes through the National Framework for Qualifications, at NQAI levels 9 and 10 for Master's and Doctoral degree awards. All applicants are normally required to possess a minimum of a second class honours grade 2 degree at level 8 or an equivalent qualification in terms of knowledge, skill and competence in order to be considered for admission to a research degree register. However, possession of such a qualification does not guarantee acceptance.
The qualifications of all applicants who wish to register for research degree programmes are assessed as part of the formal registration application process outlined previously in Section 3.4.

The requirements for consideration for entry to the higher degree programmes by research on offer at the Institute are described in Section 2.1 of the Code of Practice.

4.2   Application for Admission & Registration

These procedures can be broken down into four elements, namely:
1. Application Preparation & Submission
2. Application Assessment in Accredited Disciplines
3. Application Assessment in Approved Disciplines
4. Communication of the Outcome of the Application Process

An application for registration on a research degree programme can be made on the project start date and not less than one month after the project commencement date.

Only candidates who have been deemed eligible to apply for registration (as outlined in Section 2.1 of the Institutes Research Regulations in the Code of Practice) should prepare an application for registration in conjunction with the proposed Supervisor(s).
Applications can only be prepared following the approval of the Head of Department who must confirm to the Supervisor(s)
All applications for admission to the appropriate Postgraduate Degree Register must be completed on the Institute application forms following the steps outlined in the **SOP DR049** entitled **Application for Admission to a Research Degree Register**.

The application forms are available from the Office of the Registrar and are also available on the intranet at:
          http://intranet.it-tallaght.ie/staff/postgraduate_research/default.htm

The Admissions Office should authenticate the hard copies of the supporting documentation, makes copies and store them, along with a printed copy of the application form, in a central file set up for the candidate in that Office. The official parchments can be returned to the applicant on request.

Student details should then be entered on the Institute student database [Banner] by the Office of the Registrar and also on the Registrar's Office own database [see **SOP DR059 entitled** *maintaining a Live Register of Research Degree Students* for details]. The applicant is deemed to have temporary registration on the programme, *pending a successful outcome to the assessment of the application by the Postgraduate Research Board and the Registrar*

(accredited disciplines) and QQI (approved disciplines). This involves setting the candidate up on banner and providing the candidate with an Institute student number. The candidate is then also set up with an email account and access to the Institute's web facilities (internet and student intranet).

It is the responsibility of the sponsoring Head of Department to look after the allocation of research space appropriate to the project and to liaise with the Development and External Services Office for assignment of office accommodation resources where available to the student for the duration of the project.

For successful applicants a formal letter **[SOP DR049 Appendix 1]** will be sent to the candidate by the Registrar with the offer of place on research degree programme. A bank giro will also be included with the letter of acceptance for the student to pay the fees as required.

For unsuccessful applicants, a formal letter **[SOP DR049 Appendix 2]** will be sent to the candidate by the Registrar which will indicate whether a re-submission of the application is recommended or not, with additional documentation or clarification.

4.3   Annual Renewal of Registration

These procedures can be broken down into two elements, namely:
  1. Annual Assessment Process
  2. Annual Renewal of Registration.

The renewal of registration of a student working towards a research degree is dependent on a positive outcome to an annual assessment review within the sponsoring Department and School, by the steps outlined in Section 6.1 of the **SOP DR070** entitled **Research Student Annual Assessment & Renewal of Registration Procedures.**

The Head of Department should notify the Registrar of the outcome to the annual assessment process, giving the names of all research students currently registered and the recommendation going forward for the next academic year.

The Registrar will notify all staff and postgraduate students of the appropriate postgraduate registration date, which will normally be before Sept. 30th of the given academic year.

Details of all students and their status going forward should be brought before the Institute Postgraduate Research Board for approval before the Oct. 24th of the academic year in question.

Where it has been recommended that a student not continue on their programme then the Registrar will notify the student in writing of this recommendation directly. See **SOP DR070 Appendix 1** for a template letter that may be used.

Where the recommendation has been – student registration is lapsed – then the Registrar will notify the student in writing of this recommendation directly. See **SOP DR070 Appendix 2** for a template letter that may be used.

The **TU Dublin - Tallaght Campus Research Degree Live Register Spreadsheets** for the academic year in question should be updated by the Registrar's Office database and the procedures outlined in the **SOPDR059 - Maintaining a Live Register of Research Degree Students,** should be followed.

4.4   Withdrawals, Extensions and Deferrals

4.4.1   Withdrawal by the Postgraduate Student

In the event that the student wishes to withdraw from the programme, they should notify their Supervisors and complete the TU Dublin – Tallaght Campus - *Application for Withdrawal from a Research Degree Register Form*.

It is, however, desirable that the student first discuss their intention to withdraw from the programme with their Supervisor(s) on an informal basis.

The completed form is submitted to the Registrar's Office for consideration by the Registrar. The withdrawal of the student from the programme is noted at the next Institute Postgraduate Research Board meeting.

The Registrar notifies QQI of the withdrawal of the student from their programme of study and deletes the name from the live register.[3]

4.4.2   Extension of Time to Complete Thesis

Where the student requests an extension of time to submit their thesis they should notify their Supervisors and complete the TU Dublin – Tallaght Campus - *Request for Extension of Registration Form*.

It is however desirable that the student first discuss their intention to apply for an extension with their Supervisors on an informal basis.

Extension of time to complete a thesis may only be granted with the agreement of the Registrar in consultation with the Supervisors and QQI under exceptional circumstances, e.g. prolonged period of illness or other personal circumstances.

Both student and supervisors must complete the QQI *Application for Re-Admission to Postgraduate Register form* where the allowed registration period has passed. Both forms are submitted to the Registrar's Office for consideration by the Registrar.

The Registrar submits the re-admission form to QQI for consideration by their Research Degree Programme Committee. The QQI recommendation is communicated to the student, Supervisors and Head of Department by the Institute Registrar. The appeals process is the same as previously outlined in Section 2.2.4 of the Code of Practice.

4.4.3   Deferrals

A request for deferral from a research programme of study must be notified in writing by the student to the Supervisor(s).

It is however desirable that the student first discuss their intention to apply for a deferral with their Supervisors on an informal basis.

A deferral may only be granted by the Registrar under exceptional circumstances, e.g. prolonged period of illness or other personal circumstances.

The Student must complete the TU Dublin – Tallaght Campus - *Request for Deferral from a Research Degree Programme Form*. The completed form is submitted to the Registrar's Office for consideration by the Registrar and should be copied to the sponsoring Head of Department for information
purposes.

The Registrar notifies QQI in writing of the request for deferral with supporting reasons. Where the period of deferral goes beyond the time allowed for completion of the required thesis, the student and Supervisors must follow the procedure outlined in the "Extension of Time to Complete Thesis" sub-section above.

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[3] Any issues with regard to the studentship should be dealt with by the Supervisor(s) and the Head of Development. This includes whether to recruit another candidate for the studentship, who would then have to go through the full application process as outlined in Section 1 of the Code of Practice.

4.5   Transfer Procedures: Masters to Doctoral Degree

These procedures can be broken down into four elements, namely:
1. Transfer Application Preparation & Submission
2. Transfer Application Assessment in Accredited Disciplines
3. Transfer Application Assessment in Approved Disciplines
4. Communication of the Outcome of the Transfer Application Process

A request for transfer to the Doctoral Register can only be initiated following the recommendation of the Supervisor(s) in consultation with the sponsoring Head of Department. The steps in the **SOP DR046 - Application for Transfer to the Doctoral Degree Register** should be followed.

An External Assessor is required to carry out an assessment of the student's suitability to conduct proposed doctoral research to the knowledge, skill and competence level required for Doctoral Degree programmes. They must submit a signed written report on their assessment to the Principal Supervisor, indicating whether it is recommended the student transfer to the Doctoral register or not with supporting   reasons. A template external assessor's report form is given in **SOP DR046 Appendix 2.**

If a satisfactory report is recorded from the external assessor the Supervisor(s) should complete the appropriate transfer form. The application form is available from the Office of the Registrar and is also available on the intranet at:

>   http://intranet.it-tallaght.ie/staff/postgraduate_research/default.htm

 All transfer applications must be reviewed and assessed on behalf of the Registrar by the Postgraduate Research Board.

4.6   Transfer Procedures: Doctoral to Masters Register

Students on the Doctoral Register, who are unable to complete the approved programme within the permitted duration for any reason may through the sponsoring Department, apply to the Registrar for permission to transfer to the Master's Register. The Registrar may permit such a transfer if satisfied that there are good reasons for doing so, and submits this request to QQI to have the registration amended. The attachment of special conditions, including provisions with regard to duration, to the candidate's registration for the Degree of Master may be required at the request of the Institute's Postgraduate Research Board and/or QQI as required.
The outcome of the QQI amendment process will be communicated to the student, Principal Supervisor and Head of Department by the Registrar.

Section 5   Programme Commencement & Training Procedures

5.1   Project Commencement

The Supervisor(s) normally meet the student on the first day of the project to clarify the research topic, formulate an initial programme of work and identify specialist training needs specific to the project.

Arrangements for processing student registration and funding (for those who have been offered a studentship) are normally completed on the first day of the programme. This is normally done by the postgraduate student with the help of the project Supervisor(s). The Supervisor arranges for the student to contact the Development & External Services Office to initiate procedures in relation to payment of the studentship stipend and to set the student up with the appropriate desk space and support services (Library, Email Access etc.).

The following is a checklist of what a new student should bring with them on their first day where possible to ensure efficient processing of their application:

To apply for registration:
- Personal Public Service Number (PPSN)
- Permanent address details
- Information on qualifications, college attended, awarding body, date of award

- Transcripts & award parchments
- Statements of qualification equivalence, if applicable
- Evidence of proficiency in English, if applicable.

To apply for payment of studentship stipend
- Correspondence or permanent address
- Bank details (name, sort code, account code, account number)
- PPSN number
- Information on qualifications, college attended, awarding body, date of award.

5.2   General Financial Management of Research Projects

Project supervisors are primarily responsible for the financial monitoring of all projects. However, DESO will provide Project Supervisors with financial reports containing details of receipts and income and expenditure for each individual project code as required. Project supervisors should review the financial reports and ensure that only expenditure incurred by their project has been charged to that project code. See **SOP DR021 - General Financial Management of Research Projects** for more information.

5.3   Training

The quality of postgraduate researchers produced is influenced by a number of factors including the training received as part of working on a specific research programme. Training of the postgraduate student throughout their studies is vital to ensure the student:
  ƒ Has an understanding of the role of research in their discipline and its application in the broader community;
  ƒ Develops the ability to carry out independent research;

ƒ Gains from the overall research experience;
ƒ Generates results from their research and completes their programme within the appropriate timeframe.

The training of the student is ongoing and goes beyond the initial induction training received as shown in Figure 5.1.
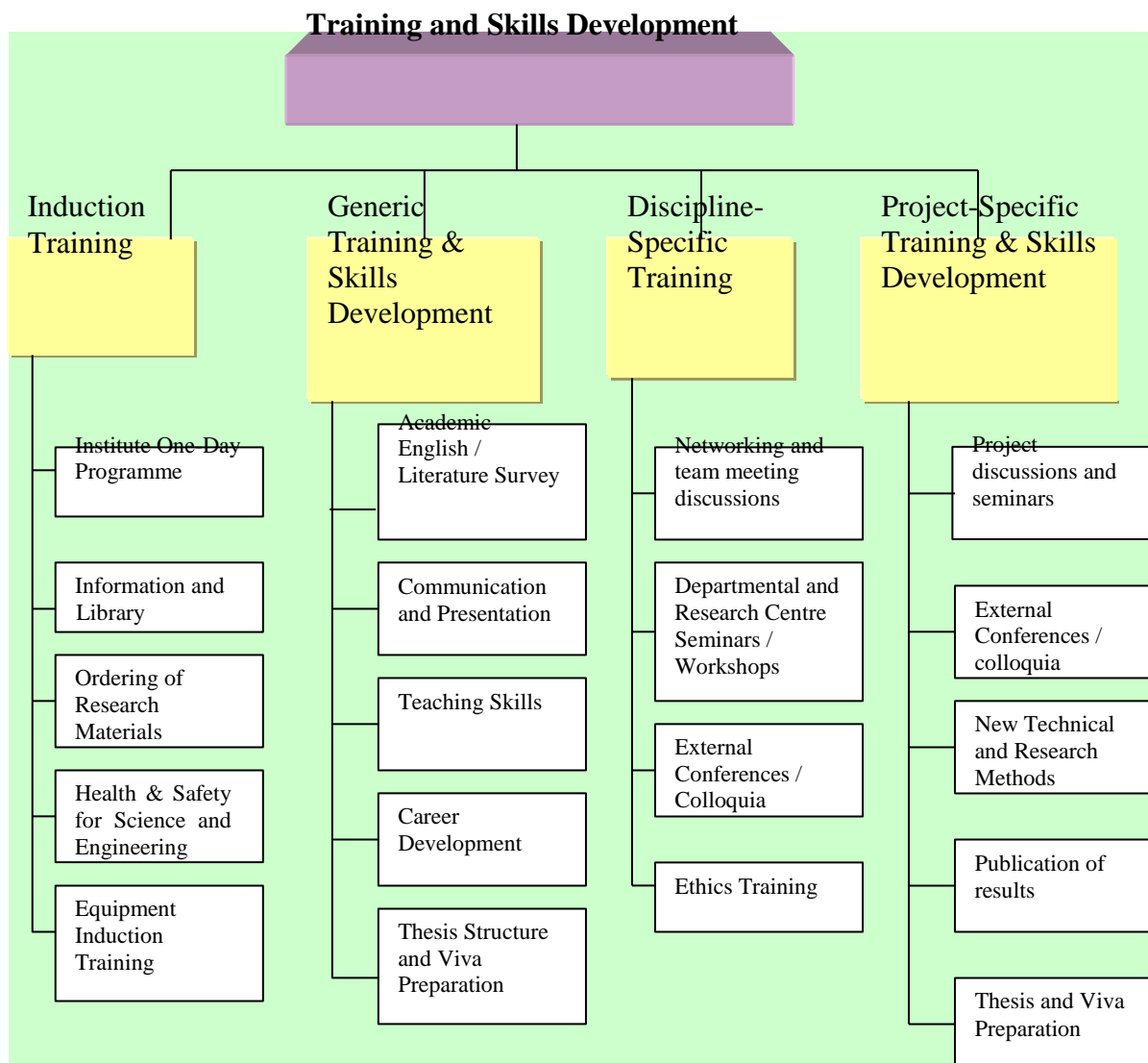
Figure 5.1   Postgraduate Students Training and Skills Development Flowchart

The purpose of Induction Training is to aid the adjustment of the new postgraduate researcher into their new environment within the Institute & sponsoring School. The role of the induction progamme is to familiarise the postgraduate research students with:

a) the Institute Code of Practice for Research Degree Programmes, including information on student expectations and entitlements;
b) the Institute resources available to support their research activity;
c) the research environment and provide initial generic training in basic research skills to support their programme.

It is compulsory for each new postgraduate student registered on a research degree programme to attend the induction programme which normally runs once/twice a year as required.

At the Postgraduate Induction Course each attendee receives a copy of the postgraduate student handbook which includes the Institute's Research Regulations and Code of Conduct for Postgraduate Researchers.

5.4   Postgraduate Student Supports

The facilities, services and support networks in place for TU Dublin – Tallaght Campus as presented in Section 9 of the taught programme Quality manual Book 2 are also available to postgraduate students. They are described in detail in Book 2 of the Quality Manual.

They are also described in the **Postgraduate Research Student Handbook** in the sections listed below:

- ƒ General Student Services & Facilities – All of Section 5

- ƒ Admission & Registration – Section 6.1 and PART 2 of Handbook – Research Regulations

- ƒ Thesis Submission & Examination – Section 6.1 and PART 2 of Handbook – Research Regulations

- ƒ Library Services – Section 6.4

- ƒ School Services – Section 6.3

- ƒ Information Technology & Reprographics Services – Section 6.2.

Section 6   Procedures for Ongoing Monitoring and Assessment

6.1   Meetings with Students

Supervisors and students are required to meet on a regular basis to discuss progress on the project. A record or log of these meetings must be maintained by the Supervisor(s). These documents must be made available to the Head of Department, School and/or Registrar on request. This log should detail the progress of the research work and the decisions made at each stage of the project. It may also be used in cases where there are grievance issues to be resolved.

In addition students may be requested to prepare and submit quarterly written reports (in particular where the student is part of a Research Centre of specialist research group). Presentations made by the student as part of Departmental Seminar programmes on an annual basis generates additional records of student progress. They also serve as an informal assessment by the supervisors and other academics in the Department.

All supervisors and students must carry out independent assessment reports on an annual basis as per instructions in Section 3.6.

6.2   Procedures for Dealing with Unsatisfactory Progress by the Postgraduate Student

The reporting of unsatisfactory progress of a student registered on a research degree programme can be carried out at any time during the programme of study and not just at the annual review stage. The postgraduate student will be informed by the Principal Supervisor in writing of the nature of the unsatisfactory progress. The procedure for dealing with unsatisfactory progress is outlined in the Code of Practice, Appendix I.

6.3   Annual Assessment Review

The renewal of registration of a student working towards a research degree is dependent on a positive outcome to an annual assessment review within the sponsoring Department and School.

Dates will be communicated by the Registrar to Students, Supervisors, Heads of Department and School in the *Research Degree Programme Academic and Operational Calendar* at the start of each academic year.

Assessments should be conducted for all students working on their research or thesis which will continue into the next academic year except those who have:
    (a)   been registered less than 3 months;
    (b)   submitted their thesis for examination.

All registered research students [except those mentioned in (a) and (b) above] must complete and submit the TU Dublin – Tallaght Campus *- Postgraduate Student Annual Progress Report* to their Head of Department before the date as notified in the calendar.

All Principal Supervisors [except those supervising students mentioned in (a) and (b) above] must complete and submit the *TU Dublin – Tallaght Campus - Supervisors Annual Progress Report Form* to their Head of Department before the date as notified in the calendar.

The reports should be assessed within the sponsoring Department and School as per **SOP DR070 - Research Student Annual Assessment & Renewal of Registration Procedures** and one of the following recommendations should be communicated to the Principal Supervisor, who should then inform the student that:

a) the research project is progressing satisfactorily and should continue; for details on renewal of registration see steps in Section 6.2 below; *or*

b) the research is not progressing satisfactorily, and a clear outline of remedial action to be taken should be provided to the student by the Supervisor(s) and they should be required to report again for review within one month; *or*

c) the research is completely unsatisfactory and the student is required to make an oral presentation to an assessment panel.

The Head of Department should notify the Registrar of the outcome to the annual assessment process, giving the names of all research students currently registered and the recommendation going forward for the next academic year.

All annual reports and supporting documentation (from panel where required) will be held in the School Office and archived as per **SOP RE005 – Retention & Storage of Postgraduate Research Degree Student Files**.

Section 7   Submission & Examination Procedures

7.1   Thesis Preparation

The Principal Supervisor guides the student in the preparation of the thesis, detailing how to write an abstract, introduction, discussion, results and experimental sections, where required, and suited to the level of award sought by the student. Training in writing styles for theses is provided by the Institute library on a needs basis, following recommendation and referral of the student by the Supervisor(s).

It is the appointed Supervisor(s) who normally indicates to the research student that their course of research is near or at completion and that they are now in a position to begin collating their results and to write up their thesis. The Supervisor(s), guide the student in the preparation of a thesis, detailing how to write an abstract, introduction, discussion, results and experimental sections, where required, and suited to the level of award sought by the student. Training in writing styles for theses can be provided by the Institute library following recommendation and referral of the student by the Supervisor(s).

More detailed information on the Institute and QQI requirements in relation to thesis format and layout are given in Section 4.1 and 4.2 of the Code of Practice respectively.

7.2   Notice of Intention to Submit Thesis

All students must give their Supervisors three months notice of their intention to submit their thesis. The student can only give such notice following approval from their supervisors indicating that the work is at a stage suitable for submission. This is to facilitate the timely completion of the examination process before the Institute's Examination Board meetings held in June and September of each year.

At this stage the Supervisor(s) nominate Internal and External examiners for the candidate for approval by the Head of Department. When approving the composition of Examiners the Head of Department should ensure the Examiners satisfy the criteria in Section 4.4 of the Code of Practice. Members of the candidate's supervisory team should take no active part in the examination process, unless specifically requested to do so by the examiners. Supervisors may attend the *viva voce* as observers, providing both the candidate and the examining committee are agreeable.

The Supervisor(s) then submit An *Intention to Submit Form* to the Registrar on behalf of the research student candidate which includes details of the proposed Examiners. The steps in this process are given in **SOP DR052 - Notice of Intention to Present for Examination for a Postgraduate Research Degree.**

7.3   Submission of Thesis

In order to submit a thesis for examination the candidate must be fully registered (with appropriate fees paid in full) on the appropriate postgraduate register.

Initially, the candidate should present the thesis in soft binding to facilitate any subsequent revisions that may be required. For the initial submission, the candidate must prepare one copy

of the thesis for distribution by the Registrar to the Internal Examiner who may make recommendations of changes needed before the thesis can be formally submitted for assessment. Following completion of those recommendations to the Internal Examiner's satisfaction <u>two copies</u> of the thesis are submitted through the Registrar to QQI for distribution to the Chairperson of Examiners and the External Examiner.

On receipt of feedback in respect of the initial, soft bound submission and the completion of required amendments, if any, and/or viva (as outlined in Section 7.5 below) the candidate must make a minimum of four hard bound copies of the thesis. They should submit one copy to the Supervisor(s), one to the sponsoring Head of Department, and two to the Registrar for submission to the Institute library and to QQI. Each copy of the thesis must be typed and hard-bound in a fixed binding so that leaves cannot be removed or replaced at this point. QQI request a separate copy of the abstract to be submitted with their hard bound copy of the thesis.

In the case of a thesis, which is accompanied by an exhibit or artifact produced or developed by the candidate, which forms a significant part of the submission, it is the Institute's responsibility, through the Registrar, to arrange appropriate and convenient access to the exhibit or artifact for the purpose of assessment by the examiners. The artifact should remain with the Institute (either with the Supervisors or in the library) following completion of the examination process.

7.4   Examination Procedures

The thesis will be referred by the Institute's Registrar, <u>not</u> by the candidate or the Supervisor(s) to the examiners following the process in the flowchart below. Full details of the steps involved are given in **SOP DR051 – Research degree Submission and Examination Procedures.**

SUBMISSION & EXAMINATION PROCESS

Student submits <u>one soft-bound copy</u> of thesis to SUPERVISOR

after amendments re-submit

NO

Supervisor submits soft bound copy of thesis to INTERNAL EXAMINER

YES

Student submits <u>two soft bound copies</u> of thesis to Registrar

Registrar gives sends one soft bound copy of thesis to External Examiner along with
• Standard Letter
• QQI externs report form (plus continuation sheet)
• Section 4.4 of Code of Practice (Examination Procedures).
The other copy held for the Chairperson of examiners (for viva)

Viva

No Viva

Viva Chairperson through the **Registrar** is provided with:

• soft bound copy of thesis
• examination procedures (Section 4.4)
• QQI externs report form(s)
Post Viva **Chairperson** sends final QQI report to the REGISTRAR with externs comments attached

Completed QQI report form(s) submitted by **Registrar** to HOD for the next exam board meeting, chaired by HOS, where Broadsheet is signed.

Student submits
• <u>two hard bound copies</u> of thesis to Registrar and <u>one copy of the abstract page</u>
• <u>one hard bound copy</u> to supervisor (or more where more than one supervisor)
• <u>one hard bound copy</u> to HOD

Broadsheet and forms submitted by **HOS** to REGISTRAR

Registrar submits
- one hard bound copy of thesis and abstract to QQI, along with signed broadsheets and QQI report form(s)
- one hard bound copy to library (or restricted access location in School)

The candidate must note that under no circumstances can they attempt to contact the Examiners during the period of the examination.

7.5   Viva Voce or Oral Examination

The viva is an integral part of the research degree examination process. The *viva voce* is an oral examination where a research student defends their work leading to the award of a research degree. The purpose of a viva voce examination is to assess the work submitted by the candidate. It gives the candidate the opportunity to present and defend the work through high- level debate with experts in the subject. It enables the examiners to confirm that

ƒ   the candidate has a thorough understanding of the practical and theoretical aspects and methods involved in the work;

ƒ   the work presented is the candidates own.

A viva voce examination is a mandatory requirement for the award of PhD. The requirement for such an examination at Master's Degree (Research) level is normally at the discretion of the examiners.

The **SOP DR071 - Viva Voce Examination Procedures** describes the viva process in detail. The procedures can be broken down into four elements, namely

1. Organisation of the Viva Examination
2. The Role of the Chairperson
3. The conduct of the Viva

4. Reports from the Examiners & Chairperson

The two examiners, a chairperson and usually the Supervisor(s) are present. The Supervisor(s) will not normally take part in the viva discussion unless requested to do so by the Examiners or chairperson.

The chairperson is present to ensure that the examination is conducted in a fair and academically rigorous manner. They can advise the examiners and the student on regulatory matters.

Following the examination the examiners will confer and decide the outcome. They may decide on any of the following outcomes:
- The candidate not be awarded the intended degree;
- The candidate be awarded the intended degree;
- The candidate be granted the intended degree subject to minor amendments being carried out to
  the satisfaction of the examiners;
- The candidate completes major amendments to their thesis and presents themselves for a further
  oral examination;
- The candidate completes major amendments to their thesis subject to the satisfaction of the
  examiners without the need for a further oral examination;

The examiners will normally tell the student what outcome has been recommended after their deliberations on the day of the viva.

7.6   Disagreement Amongst Examiners

Where there is disagreement amongst the examiners, the Chairperson is expected to clarify and, where possible, reconcile those differences. In the exceptional case of irreconcilable disagreement, each examiner shall submit a separate report to the Chairperson, who will then refer the case to the Institute Registrar, and also QQI for consideration. Thereafter QQI has the power to recommend to the appointment of a further external examiner or examiners.

7.7   Appeals Against the Outcome of Examination

A candidate may appeal their examination result to the Registrar. The written appeal request must specify the grounds on which the review is sought and must contain all the information which the candidate requires to have taken into account in the review. The grounds for review of an examination result are as follows:
   a) The examination regulations have not been properly implemented.
   b) The regulations do not adequately cover the candidate's case.
   c) Compassionate or medical circumstances (made known to appropriate Head of Department or to the Registrar) related to the candidates examination situation of which the Examiners were unaware, prior to or during the examination process.
   d) Significant performance related information which the appellant believes was not considered by the Examiners.

Such an appeal can be made in relation to the examination process only. Any complaint about other matters such as inadequate supervision must have been raised during the research and long before submission of the thesis.

Appeal requests must be received by the Registrar not later than ten working days after the candidate received notification of the examination result and will first consider whether there is a prima facie case for a review of the examination result.

If it is considered that the request is clearly frivolous, vexatious or outside the permitted grounds, the Registrar will discuss the request with the Director. If it is agreed that there is no prima facie case, the recommendation will be submitted to the Institute Postgraduate Research Advisory Board for a decision. The Board may support the recommendation or require further investigation or action on the review, including seeking advice from QQI on the matter. There shall be no appeal from the decision of the Board or QQI.

If it is considered that there is a prima facie case for a review the Registrar will gather such evidence as is considered appropriate and likely to assist a panel in reviewing the case. This may include seeking written or oral testimony from the examiners, from other persons present at the oral examination, from supervisors or other members of the academic staff, or further evidence or statements by way of elucidation from the candidate.

The request for a review shall be considered by a review panel, constituted by the Registrar in accordance with standard Institute procedures. It must include persons who have experience of supervising and examining research degrees and who have had no previous involvement in the case. No student or research degree candidate shall be a member of the research degree review panel. A review panel shall not be constituted as an examination board.

If the review panel decides that a candidate has valid grounds for a review, it shall recommend that the Registrar request QQI to either:

      a) invite the examiners to reconsider their decision; or

      b) appoint new examiners.

There shall be no appeal from the decision of the review panel and QQI.

7.8   Plagiarism and Academic Fraud

Plagiarism is defined for candidates as the passing off of someone else's work. Information on how to avoid plagiarism is provided in **Appendix M of the Code of Practice.**

Any action on the part of a candidate which involves plagiarism (defined as the unacknowledged use of another's work as if it were one's own exemplified by copying from a source without acknowledgement of its origin) or other form of academic dishonesty, in work which may be assessed as part of the requirements for an academic award, will be regarded as a serious offence.

Where a substantive case of academic dishonesty or plagiarism is detected by an Examiner, a written report of these allegations shall first be made to the Chairperson of Examiners to deal with the issue at a special *Board of Examiners* meeting. The Board will make one of the following recommendations in writing to the Registrar:

      a) The examiner is satisfied that the matter should be noted but requires no further action by the Board because it involves no more than a single lapse or a very few minor lapses which have been taken into account in the examiner's assessment of the work.

      b) The nature of the academic dishonesty is such that it is appropriate to investigate the matter further as per Institute procedures outlined in **Appendix N of the Code of Practice** [Disciplinary Board Proceedings for Students Allegedly Breaching Examination Regulations].

The outcome of the investigation in this regard will be communicated to the candidate by the Registrar, who will also notify the Board's decision to the Principal Supervisor and sponsoring Department and School. Appeals will be dealt with in accordance with the procedures outlined in **Appendix N of the Code of Practice**. The decision of any Academic Disciplinary Board hearing will be communicated to QQI by the Registrar.

Section 8   Feedback, Appeals and Complaints Procedures

8.1   Research Student Feedback

All research students are encouraged to offer feedback on their programme of study. This is facilitated through the student's attendance at:
- regular meetings with Supervisor(s)
- Departmental Research Degree Programme Board meetings [*format the same as for taught programme programme boards*].

The annual reports submitted by the research student are another means of providing feedback on the programme. Feedback can also be given to the relevant student representative of the Postgraduate Policy sub-Committee of Academic Council.

If students are experiencing supervisory problems then they are advised to discuss the issue firstly with the Supervisor(s) and if that does not prove satisfactory to discuss it with the relevant Head of Department or School.

8.2   Complaints Procedures

Supervisors and postgraduate students are encouraged to solve any disputes/grievances through open informal dialogue before invoking a formal grievance or complaints procedure. In the event of a difficulty arising during the project between the postgraduate student and Supervisors, the postgraduate student should normally first consult the Principal Supervisors to seek to resolve the issue. Where the matter cannot be resolved in this manner, it should be referred to the relevant Head of Department (or Head of School where the Head of Department is the Supervisor). They will seek to find a resolution of the matter. Where the complaint remains unresolved it is dealt with in turn by the Head of School and then the Registrar. Where the matter cannot be resolved in this manner, either party may formally invoke a complaints procedure outlined in Appendix J of the Code of Practice (page 96).

If the postgraduate student considers that they are receiving inadequate supervision, they may register a complaint with the relevant Head of Department, who may then invoke the complaints procedure. Where the complaint remains unresolved it is dealt with in turn by the Head of School and then the Registrar. A complaint of inadequate supervision will not normally be entertained after submission of the thesis.

8.3   Appeals Procedures

A postgraduate student who is dissatisfied with a decision made during the course of their studies may appeal the decision in writing to the Registrar following the procedures outlined in the Code of Practice.

Such decisions with regard to registration may include:
- ƒ   rejection of an application for registration
- ƒ   withdrawal of registration
- ƒ   not to recommend an application for transfer from Masters to PhD register
- ƒ   not to recommend an extension of registration beyond the time limit
- ƒ   suspension of registration
- ƒ   not to transfer to part-time status
- ƒ   not to recommend a deferral

  f not to recommend for examination.

The procedures in relation to the above appeals can be obtained in Appendix F of the Code of Practice (page 91).

If the result of the annual assessment is unfavourable, the student may appeal this result directly to the Registrar, following the procedure outlined in Appendix F.

A candidate may appeal their examination result to the Registrar as per Section 7.7 of this Quality Manual.

Section 9   Code of Conduct & Research Misconduct Procedures

The Code of Conduct for Researchers has been developed by the Ethics Sub-Committee of Academic Council and forms the basis of the Institute's Ethics Policy for all its research activities, including postgraduate research degree programmes. It draws on a variety of resources as referenced in the footnote.[4]

9.1   Code of Conduct for Researchers

Standards of Professional Behaviour in Research

1.1   All researchers within the Institute (including all students of the Institute) have a duty to society, to their profession, to the Institute and to those funding their research, to conduct their research in a conscientious and responsible manner. The Nolan Committee on Standards in Public Life in the U.K.[21] identified seven principles which have relevance to best practice in the conduct of research: selflessness, integrity, objectivity, accountability, openness, honesty and leadership. These standards also form the basis of the Wellcome Trust Guidelines on Good Research Practice, January 2002.

Together, these principles provide a foundation for the personal integrity that should be reflected in the professional conduct of research by every individual who contributes to research at the Institute. Institute staff members in leadership or supervisory positions have an obligation to foster personal integrity in the conduct of any individual carrying out research for the Institute under their direction. They are also responsible for the ethical basis of the research and its funding, and for the safety of all involved in the research process. Many professional associations have ethical codes and guidelines for the conduct of research and all individuals carrying out research for the Institute are also expected to comply with such standards when collaborating with such associations for research purposes or as members of such associations.

1.2   Research misconduct is least likely to arise in an environment where good open research practice (e.g. documentation of results, peer review of research, regular discussion and seminars) is encouraged and where there is adequate supervision at all relevant levels. It is a responsibility of Heads of School and Department to convey clearly to research group leaders or principal investigators/supervisors in their area the standards, protocols and ethics for research in their departments and relevant areas, and to ensure that adherence to those standards is a matter of course. Principal investigators/supervisors and research group leaders must in turn convey clearly to all researchers under their care the standards and protocols for research in their relevant areas, and to ensure that adherence to those standards is a matter of course.

1.3   All individuals (including students) carrying out research for the Institute should be made familiar with, and be expected to comply with, the Institute's Code of Good Practice in Research. The Heads of Department or Function should also bring to the attention of any

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[4] Taken from
ƒ   http://pubs1.tso.parliament.uk/pa/cm199697/cmselect/cmstand/688/code1.htm,
ƒ   http://www.public-standards.gov.uk/
ƒ   http://www.archive.official-documents.co.uk/document/parlment/nolan/nolan.htm
ƒ   http://www.wellcome.ac.uk/doc_WTD002753.html: Wellcome Trust Guidelines on Good Research Practice, January 2002

individual carrying out research for the relevant Department or Function any specific standards and ethics which may be applicable in that Department or Function.

Every individual carrying out research for the Institute is expected to follow these principles. The following are of particular relevance to research:

Honesty
    A. At the heart of all research endeavour, regardless of discipline or institution, is the need for researchers to be honest transparent, and amenable to reasonable enquiries in respect of their own actions in research and in their responses to the actions of other researchers. This applies to the whole range of research, including experimental design, generating and analysing data, publishing results, and acknowledging the direct and indirect contributions of colleagues, collaborators and others.
    B. All individuals in the Institute's employment must refrain from plagiarism, piracy or the fabrication of results and committing any of these actions is regarded as a serious disciplinary offence.

Openness
    A. While recognising the need for researchers to protect their own research interests in the process of planning their research and obtaining their results, the Institute encourages researchers to be as open as possible in discussing their work with other researchers and with the public. Once results have been published, where appropriate, the Institute expects researchers to make available relevant data and materials to others, on request.
    B. In addition, where available and relevant to the research or individual researcher in question, the Institute expects researchers to observe the standards of practice set out in guidelines published by funding bodies, scientific societies and other relevant professional bodies.

Leadership and Co-operation in Research Groups
    A. The culture and tone of procedures within any organisation must be facilitated and resourced by individuals in authority. Within the Institute, it is the responsibility of the Director, Heads of School, Heads of Departments and Senior Staff to ensure that a climate is created which allows research to be conducted in accordance with good research practice.
    B. Within a research group, responsibility lies with the group leader. Group Leaders should create a research environment of mutual co-operation, in which all members of a research team are encouraged to develop their skills and in which the open exchange of research ideas is fostered. They must also ensure that appropriate direction of research and supervision of researchers and research students is provided.
    C. Good research practice should be encouraged and there must be adequate supervision at all relevant levels (e.g. documentation of results, peer review of research, regular discussion and seminars).
    D. It is the responsibility of Heads of School and Heads of Department to convey clearly to principal investigators or research group leaders the standards and protocols for research in their departments and relevant areas, and to ensure that adherence to those standards is a matter of course.
    E. Principal investigators and research group leaders must in turn convey clearly to all researchers under their care the standards and protocols for research in their relevant areas, and to ensure that adherence to those standards is a matter of course.

Documenting Results and Storing Primary Data

    A. Throughout their work, researchers are required to keep clear and accurate records of the research procedures followed and of the results obtained, including interim results. This is necessary not only as a means of demonstrating proper research practice, but also in case questions are subsequently asked about either the conduct of the research or the results obtained.

    B. For similar reasons, data generated in the course of research must be kept securely in paper or electronic form, as appropriate. The Institute expects such data to be securely held for a period of ten years after the completion of a research project, as required by several Research Councils. The storage of such Data must also be kept in accordance with the Institute's Data Retention policy available from the Information Officer.

Publishing Results

    A. It is usually a condition of research funding that the results are published in an appropriate form, usually papers in refereed journals. This has long been widely accepted as the best system for research results to be reviewed - through the refereeing process - and made available to the research community for verification or replication.

    B. The issue of authorship is important in the context of good research practice. The Institute expects anyone listed as an author on a paper to accept personal responsibility for ensuring that they are familiar with the contents of the paper, and that they can identify their contributions to it. The practice of honorary authorship is unacceptable.

Acknowledging the Role of Collaborators and Other Participants

In all aspects of research, the contributions of formal collaborators and all others who directly assist or indirectly support the research must be properly acknowledged. This applies to any circumstances in which statements about the research are made, including provision of information about the nature and process of the research, and in publishing the outcome. Failure to acknowledge the contributions of others is regarded as unprofessional conduct. Conversely, collaborators and other contributors must carry their share of the responsibility for the research and its outcome.

The Needs of New Researchers

Researchers who are new to the Institute's research community may face particular difficulties in compliance with good research practice. Responsibility for ensuring that students and other new researchers understand good research practice lies with all members of the Institute, but particularly with Heads of Department and Research Group Leaders.

Integrity in Submitting Research Proposals

Principal Investigators/Supervisors should take all reasonable measures to ensure the accuracy and completeness of information which is contained in applications for funding and in managing research projects, to ensure compliance with all sponsor, institutional, legal, ethical and moral obligations.

Integrity in Managing Research Projects

Principal Investigators/Supervisors should take all reasonable measures to ensure compliance with sponsor, institutional, legal, ethical and moral obligations in managing projects.

Conflict of Interest

It is the responsibility of all individuals who carry out research for the Institute to identify and declare to the Institute any conflicts of interest, whether legal, ethical, moral, financial, personal or other nature, so that it does not become a complicating or actionable issue.

Ethical Practice

    A. Research Involving Human Participants and Biological Samples.

Ethical approval is required prior to conducting research involving human participants and using biological samples from the Institute Research Ethics Committee. In addition approval is also required from collaborating Hospital Research Ethics Committees and from other regulatory bodies as relevant, and as required by individual research sponsors (e.g. Health Research Board). Researchers should also ensure the informed consent and confidentiality of personal information relating to the participants in research and that the research fulfils any legal requirements such as those of the Data Protection Act and the Freedom of Information Act.

    B. Research Involving Animals

Ethical approval is required prior to conducting research involving animals from the Institute Research Ethics Committee and the research must comply with all statutory licensing requirements. Researchers should consider, at an early stage in the design of any research involving animals, the opportunities for reduction, replacement and refinement of animal involvement.

    C. Research Involving Genetically Modified Organisms (GMO's)

Ethical approval is required from the Institute Research Ethics Committee and the research must comply with all statutory licensing requirements with regard to the generation of GMO's, their modification, their containment, and their release to the environment.

Research Misconduct

The Institute takes seriously any allegation of research misconduct and has written procedures for investigating and resolving such allegations, as outlined in Part 2 of the Code of Practice below. Any member of the Institute who believes that an act of research misconduct has occurred or is occurring should notify the relevant Head of Department. If, for any reason, this is not possible or appropriate, the individual should contact the relevant Head of School or the Registrar.

9.2   Procedures for the Examination and Resolution of Allegations of Research Misconduct

Definition of Misconduct in Research[5]

All individuals carrying out research for the Institute are expected to observe high standards of professional behaviour both in the practice and in the publication of research.

Any practice or conduct by an individual that deviates significantly and unacceptably from the professional academic standards applicable to the relevant Department or Function for proposing, conducting and publishing research constitutes research misconduct. Violation of Institute policy is likely to render any individual researcher liable to the Institute's disciplinary procedures.

Research misconduct includes, but is not limited to:
    (i) falsification or fabrication of data, including intentionally misleading or deliberately false reporting of research information;
    ii) unacknowledged appropriation of the work of others, including plagiarism, the abuse of confidentiality with respect to unpublished materials, or misappropriation of results, physical materials or other resources;

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[5] Note: research misconduct in relation to the examination process is dealt with in the Research Regulations following the procedures outlined in Appendix N.

(iii) conduct which seriously deviates from accepted ethical standards in research;
(iv) falsification of credentials.

The setting of standards of professional behaviour in research is not intended to compromise the freedom, within the law, of Academic Staff to question and test received wisdom and to put forward new ideas and controversial or unpopular opinions.
The procedures below apply to all individuals carrying out research in the Institute including, without limitation,

- ƒ all Institute employees, irrespective of whether their current place of work is within or outside Institute premises
- ƒ all visiting researchers to the Institute irrespective of whether they are employed by the Institute, including persons with honorary positions, conducting research within, or on behalf of, the Institute,
- ƒ all postgraduate students of the Institute; and,
- ƒ all visiting postgraduate students.

After investigation into alleged misconduct by any individual who is not an employee of the Institute, the Director or representative or duly convened investigating group will determine the nature of any further action to be taken in relation to the misconduct.

Any disciplinary proceedings against a registered postgraduate student or researcher in respect of alleged research misconduct shall be dealt with in accordance with the provisions of the Institute Code. However, the application of this research misconduct procedure through the Institute's Disciplinary Procedures for academic and other staff shall take precedence over the Code where an individual is both a student and an employee of the Institute.

It is intended that any action carried out in terms of this procedure will be sufficient to comply with the preliminary and investigation stages required by the Institute's Disciplinary Procedures for academic and other staff.

Procedures
The Institute is committed to ensuring that all allegations of research misconduct are examined thoroughly, fairly and expeditiously.

Initial Allegation of Research Misconduct
Any member of the Institute (employee, student, or visiting researcher) or external examiner of student work who believes that an act of research misconduct has occurred or is occurring should, in the first instance, attempt to address the issue informally with either the individual concerned or the appropriate Head of Department or Function. In the event that the person who believes research misconduct is or has occurred is not satisfied with the outcome of any such informal approach or if such an approach is believed to be inappropriate, a formal complaint should be made in the first instance to the Head of the relevant Department or Function, who shall notify the Registrar and the Human Resource Manager (for academic staff) of the complaint as soon as is practicable.

If for any reason the complainant believes that it is inappropriate for the complaint to be made to the relevant Head of Department or Function, a formal complaint should be made directly to the Registrar. Where such a complaint is reported directly to the Registrar, the relevant Head of Department or Function and the Human Resources Manager (for an academic staff member) will usually be informed about the receipt of the complaint. However, all practicable steps will be taken to protect the anonymity of any individual reporting suspected misconduct until such time as it is decided that a formal investigation is warranted.

Any person or organisation external to the Institute wishing to report suspected research misconduct should contact the Registrar.

Every complaint of research misconduct will be taken seriously. In the event that such complaint is found to be both without basis and is deemed to be malicious, vexatious or frivolous, the Institute may consider disciplinary proceedings against the instigator of the complaint.

Preliminary Action to determine whether a formal examination is warranted
The Registrar shall, assisted by the Head of the relevant Department or Function where appropriate, identify any external funding sources for the research which is the subject of the complaint, and any external collaborators. The Registrar shall also ask the person making the allegation to submit in writing a detailed statement in support of the allegation indicating what informal steps, if any, have already been taken with a view to resolving the issue. The Registrar may also, at his or her discretion, choose to evaluate anonymous allegations, depending on the seriousness of the issues, the credibility, and the feasibility of confirming the allegation with credible sources. At this stage the individual concerned shall be notified in writing by the Registrar of the allegation and informed that it is to proceed under this procedure. At the same time, he or she should be given a copy of this Code which includes Procedures for Investigating and Resolving Allegations of Misconduct in Research.

The Registrar shall, normally within a maximum of 5 working days of the allegation being reported to him or her, appoint an Investigation Team consisting of 2 individuals who, in the opinion of the Registrar have no conflicts of interest in the case, are unbiased, and have expertise to evaluate the appropriate research issues.

Where feasible the Investigation Team shall consist of one staff member from the School (or, in the absence of a related School, the relevant administrative centre) in which the research activity in question has been conducted and one staff member from elsewhere within the Institute. The Investigation Team shall specifically limit its role to that of evaluating only the facts to determine whether there is sufficient evidence of research misconduct to proceed with a formal investigation. The Investigation Team shall keep proper records of their proceedings. The individual against whom the complaint has been made shall be notified by the Registrar of the members of the Investigation Team.

The initial investigation will normally involve the Investigation Team examining relevant research records and materials. The Investigation Team shall complete its initial investigation and submit its report in writing to the Registrar, normally within a maximum of 5 working days from the date the Team is appointed. The report shall state what evidence was reviewed and conclude whether the investigation should end or continue to further formal investigation.

Care must be taken to maintain the anonymity of the initiator of the complaint where possible at this stage.

The Registrar shall, normally within 2 working days of receipt of the report, notify the individual concerned and his or her Head of Department or Function in writing of the outcome of the initial investigation. The Registrar shall also inform the instigator of the complaint whether a formal investigation is to proceed and that this information is to remain confidential.

Formal Investigation
The purpose of the Formal Investigation is to examine and evaluate all relevant facts in relation to the allegation of research misconduct. In addition its purpose is to determine whether there are sufficient grounds for proceeding with the complaint in respect of a postgraduate student, under the General Student Discipline Policy & Procedures **(Appendix O of the Code of**

Practice) or in respect of Institute employees, under the Institute Procedures for the Resolution of Grievances/Disputes which includes Disciplinary Procedures for Academic Staff **(Appendix P of the Code of Practice).** Where the alleged misconduct is in respect of research carried out for the Institute by an individual not employed by the Institute, the purpose of the Formal Investigation is to allow the Director to determine whether any further action should be taken.

The Head of Development following notification by the Registrar shall, only where necessary in terms of the funding conditions, notify any bodies which provide funding related to the research of the individual concerned of the ongoing investigation. The Registrar shall also notify any other body related to the research concerned in the event that the Institute is contractually obliged to notify that body about the ongoing investigation. At the initial stages of the investigation such bodies shall be informed that the allegations have not yet been fully investigated and that the Institute does not expect any funding body to suspend the grant or contract as adequate steps are being taken to proceed with the investigation.

In the case of alleged misconduct by any individual not employed by the Institute, the relevant individual's employer should only be informed that an investigation is taking place where the misconduct relates to the research that the individual concerned is carrying out for the Institute and the individual is carrying out that research by virtue of his or her employment with that other employer. The Institute shall also ensure that, by carrying out an investigation into the alleged misconduct, it complies with any contractual arrangements in place between the Institute and the employer of any individual carrying out research for the Institute.

However, it is essential to keep circulation of details of the allegations and investigation as limited as possible. Any such information must be disclosed subject only to an undertaking of confidentiality from the recipient.

An Investigation Panel, which may include the members of the existing investigation team, shall be appointed by the Human Resources Manager in conjunction with the Registrar, normally within a maximum of 2 days. The Registrar shall not serve on the Investigation Panel. The Panel shall keep written records of the proceedings and will be provided with secretarial assistance by the Institute if required. The Panel shall inform the individual concerned in writing of the confirmed membership of the Panel and of the scope of the intended investigation, and of their right to legal or appropriate representation, should they see fit.

The Panel shall:

    (a)   Interview the individual concerned and any other parties it chooses, including the initiator of the complaint and other members of the research group;

    (b)   Widen the scope of its investigation if it considers that necessary, subject to keeping the individual concerned informed, in writing, of the increased scope of the investigation;

    (c)   Require the individual concerned - and if it judges it necessary, other members of the Institute - to produce files, notebooks and other records;

    (d)   Seek evidence from other parties;

    (e)   In the event of the defendant not cooperating with the investigation panel, the panel will be empowered to draw conclusions and make decisions about the allegations;

    (f)   The panel will make decisions on the balance of probability;

    (g)   It shall be the panel's position to prove the allegations and not the individual's duty to disprove them; the presumption of innocence applies.

The individual concerned shall be given a full opportunity to comment on all the evidence gathered by the Investigation Panel before the report is finalised. Where he or she is interviewed by the Panel he or she should be informed that he or she may be accompanied by a member of staff or a representative of a Trade Union, or a legal representative, or a representative of their choosing.

The Investigation Panel shall submit a report in writing, normally within a maximum of 20 working days of the confirmation of the members of the Investigation Panel, to the President and the Registrar. The report shall generally describe the investigative process, indicating whether or not it finds there are sufficient grounds for proceeding with the complaint under the appropriate Disciplinary Procedures (Appendix O or P). The Panel shall make a recommendation to the President about whether it has found that there are such grounds. In addition, the Panel may make recommendations on the future operation of these procedures.

The President will determine the nature of any further action to be taken regarding investigated misconduct in relation to any research carried out for the Institute by any individual not employed by the Institute. This may include advising the employer of the individual concerned of the findings of the investigation. The Director may also consider the suspension or withdrawal of any honorary contract. Where no action is to be taken in relation to individuals not employed by the Institute, the Registrar shall take all appropriate steps to inform all parties previously notified of the alleged misconduct, of this outcome.

After the completion of the appropriate Disciplinary Procedures, the President may, in addition to or instead of any sanction to be imposed under those procedures:

> (a) convey the outcome of the Disciplinary Proceedings to the professional body or bodies it deems appropriate (e.g. the Irish Medical Council), any relevant grant-awarding bodies or any other public body with any interest, the editors of any journals which have published articles by the person against whom the allegation has been upheld or any other body which, in the opinion of the Institute, is likely to be affected by the research misconduct in question. All such disclosure must be limited to misconduct upheld in relation to research relevant to such bodies or published by such journals;
> (b) recommend to QQI and Governing Body, where misconduct has been established and the research concerned contributes to or contributed to a degree or other academic award of the Institute, the revoking or withholding of that award;

If the allegation has not been upheld after completion of the Disciplinary Procedures, the Registrar shall take all appropriate steps to inform all parties previously notified of the alleged misconduct, of the outcome of the Disciplinary Procedure. In the event that the Institute becomes aware that the allegations which have been investigated have become public, the Institute may consider taking reasonable steps to confirm the outcome of the Disciplinary Proceedings to the parties concerned.

The time scales set out in this procedure are not binding upon the Institute and can be extended where reasonably required. The individual under investigation will be notified in writing of any such extension and the reason for it. Where any of the Institute personnel named as having responsibilities under this procedure are absent or unavailable, the President may appoint alternates.

Section 10   Intellectual Property Policy & Procedures

10.1 Policy

Intellectual Property (IP) is an area of very substantial importance in the academic environment of TU Dublin – Tallaght Campus. The purpose of defining an IP policy is to encourage the generation of IP by Staff[6], Students[7], and Other Relevant Parties.[8] This IP Policy is intended to provide support and guidance regarding commercial exploitation, ownership and income from IP and the use of TU Dublin – Tallaght Campus facilities and resources to ensure that the development of IP is mutually beneficial for Staff, Students, Other Relevant Parties and TU Dublin – Tallaght Campus.

The Institute recognises and encourages the principle that IP developed at TU Dublin - Tallaght Campus should be used for the greatest public benefit. Commercialisation is often the most efficient means of promoting the widest possible dissemination and use of TU Dublin – Tallaght Campus Dublin IP. In such circumstances, it is appropriate and desirable for both TU Dublin - Tallaght Campus and the originator of the IP to benefit from the commercial exploitation of IP produced at TU Dublin - Tallaght Campus.

TU Dublin - Tallaght Campus has a strong interest in promoting the generation of IP in the context of the Government's drive to create a knowledge based economy, to increase the number of patents coming out of third level institutions and to transfer that technology into viable commercial entities.

For the avoidance of doubt, this IP Policy (and any subsequent amendments made to this IP Policy) is the agreed protocol or IP Policy referenced in:

the Staff contract of employment;
the Staff fixed purpose contract;
any document engaging an Other Relevant Party;
the Student registration form;
the Student Handbook;
any Acceptance Form or Intellectual Property Assignment Agreement signed by Staff and/or Students and/or Other Relevant Parties.
This IP Policy also forms part of the regulations of TU Dublin – Tallaght Campus which govern the conduct of Students and Staff.

10.2   IP Procedures

The complete policy and procedures document is available from the Head of Development.

It document sets out the principles and rules that govern the creation, ownership and commercialisation of IP developed by Staff, Students and Other Relevant Parties participating in programmes carried out using TU Dublin – Tallaght Campus facilities, know-how, confidential information and/or TU Dublin – Tallaght Campus IP (together, TU Dublin – Tallaght Campus Assets). The steps in protection of research outputs with commercial potential are given below:

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[6] In this IP Policy, the term "Staff" refers at all times to TU Dublin - Tallaght Campus full time academic staff, TU Dublin - Tallaght Campus part time academic staff and persons employed by TU Dublin - Tallaght Campus on fixed purpose academic contracts.

[7] In this IP Policy, the term "Students" refers at all times to TU Dublin - Tallaght Campus registered undergraduate students, TU Dublin - Tallaght Campus registered postgraduate students and TU Dublin - Tallaght Campus registered post doctorate students.

[8] In this IP Policy, the term "Other Relevant Parties" refers to individuals other than Staff and Students who are engaged in research at TU Dublin - Tallaght Campus and agree to be bound by the provisions of this IP Policy.

1.   Submission of Invention Declaration Form:

- The IP Policy requires that all Staff, Students and Other Relevant Party complete an Invention Declaration Form regarding any discovery or invention made that might be useful, patentable or otherwise protectable.
- This form should be promptly submitted to the Development & External
    Services
    Office.

2.   Commercial Evaluation of IP:

- Any IP reported in an Invention Declaration Form shall be submitted to the IP Committee for assessment under the guidelines of the IP Policy and for recommendations to TU DUBLIN - TALLAGHT CAMPUS regarding the patentability or potential commercialisation.
- The IP Committee may recommend that other suitably qualified advisors or external consultants be engaged to advise on the assessment of the IP.
- The criteria to assess the commercial value of the IP should include:

    - Assessment that the IP does not cater for a once-off need and that it has a potential long-term benefit.
    - Technical and commercial feasibility.
    - Proof of concept (business plan, access to finance etc.).
    - Potential for sale or licensing of technology or consultancy.
    - Demonstrates a competitive advantage based on differentiated or innovative product or service.
    - Development stage of the subject matter.
    - Commercial focus and profit motive.
    - Study of comparable existing subject matter, licences and commercialisation practices.
    - Proximity to market.
    - Market valuations – in other words 'what is the current market willing to pay?'
    - Barriers to entry into markets.
    - Estimated projected sales based on market research.
    - Third party assistance including for example input from industry and state agencies.
    - Estimated cost of patent process.

- Whilst the criteria listed above are not exhaustive, it provides guidance to persons submitting an application as well as to those determining the commercial value. As it is a complex decision, the IP Committee may refer to other expertise where necessary, and further criteria may be applied.
- A decision will be made by the IP Committee within a reasonable time (e.g.

    60/90 days, but in any event no longer than one year from date of report) of receipt of the application, where practicable, and the originator of the IP will be notified in writing of the decision made.
- If the evaluation is rejected by the IP Committee, the IP Committee may decide in appropriate circumstances, to offer the opportunity to the originator of the IP to pursue exploitation independently if appropriate under agreed written terms. TU Dublin - Tallaght Campus will have no rights if it subsequently proves successful, subject to any agreed terms.

3.   Submission of a patent application or an application for other protection:

- TU Dublin - Tallaght Campus shall have the right, but not the obligation, either directly or through an outside agent, to seek patent or other protection of the IP and to undertake efforts to introduce the invention into public use.
- Where a decision is made by the IP Committee to proceed with a patent application, the originator of the IP is required to cooperate in every reasonable way, to execute all necessary documents and to assist the IP Committee in completing the patent application form. The application should remain confidential until such time as the process is complete. Confidentiality agreements will be used where appropriate.
- Commercialisation activities should recognise specific terms and conditions in appropriate funding contracts including any External Agreements.
- The cost of the submission of the application shall be paid by TU DUBLIN - TALLAGHT CAMPUS. Any expenses incurred will be reimbursed to TU DUBLIN - TALLAGHT CAMPUS prior to the distribution of any royalty income (if any) from the IP.
- The originator of the IP and TU Dublin - Tallaght Campus shall take all reasonable precautions to protect the integrity and confidentiality of the IP in question. The originator of the IP should be aware that publication prior to the filing of patent applications may prevent the granting of certain patents.
- TU Dublin - Tallaght Campus may decide at any stage to withdraw from the process of exploiting an particular piece of IP. This may arise where:
-   concern regarding the technical or commercial feasibility of a particular piece of IP,
-   costs of exploiting the IP are excessive, or
-   external sponsorship of the process is no longer available.
- The originator of the IP will be notified in writing of the intention of TU Dublin - Tallaght Campus to withdraw from the process and the withdrawal will apply from immediate effect.
- The IP may, at TU Dublin - Tallaght Campus's entire discretion, be assigned or licensed to the originator in appropriate circumstances, offering the opportunity to the originator of the IP to pursue exploitation independently.
- No patent application, assignment, licensing or other agreement may be entered into or will be considered valid with respect to TU Dublin - Tallaght Campus IP except when properly and lawfully executed by TU Dublin - Tallaght Campus.

Section 11   Process and Procedures for the Management of Ethics in Research

Ethical issues occur in <u>all</u> types of research. Good ethical practice comes from being aware of regulatory guidelines; statutory prohibitions along with Institute policies & best practice. The TU Dublin - Tallaght Campus is committed to promoting and supporting ethical practice across all of its educational activities, including research. In all cases researchers must comply with the ethics policy while conducting their research.

The Ethics Committee is the subcommittee charged with assisting Academic Council in the performance of its functions in relation to ethical matters associated with research. Hence, its main function is to advise on policies and procedures in relation to ethical conduct of research and development within the Institute. It was through the Ethics Committee that the current Ethics policy has been formulated based on best international practice. It is composed of two distinct sections:

1. Code of Good Practice in Research;
2. TU Dublin - Tallaght Campus Policy and Procedures on the Examination and Resolution of Allegations of Research Misconduct.

The policy forms the basis of the Institute Code of Conduct for Researchers **[Section 9 of this Manual]** which is included in the Code of Practice for Research Degree Programmes. It forms the basis of the Institute's Ethics Policy for all its research activities, including postgraduate research degree programmes. It draws on a variety of resources as referenced in the footnote.[9]

Executive decisions in relation to the management and operation of the Institute are taken by the Senior Management Team (SMT)[10], which is headed by the Director. A working **Research Ethics Committee** (REC) has been constituted by SMT for the purposes of:

ƒ protecting and safeguarding the rights and interests of human and animal participants participating in research studies or trials conducted by or involving TU Dublin - Tallaght Campus researchers;

ƒ facilitating the conduct of ethically sound, legally compliant research at the Institute in accordance with national and EU legislation.

The REB reports directly to SMT. An annual report from the Board will also be compiled for the Ethics sub-Committee and Academic Council.

11.1   Scope of Procedures

It is the purpose of this document to outline the procedures to be followed when preparing an application for research funding and/or for a place on a supervised research degree programme undertaken at TU Dublin - Tallaght Campus, to ensure any ethical considerations have been highlighted. It also describes the process by which project proposals will be reviewed where an ethical risk has

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[9] Taken from

ƒ   http://pubs1.tso.parliament.uk/pa/cm199697/cmselect/cmstand/688/code1.htm,

ƒ   http://www.public-standards.gov.uk/

ƒ   http://www.archive.official-documents.co.uk/document/parlment/nolan/nolan.htm

ƒ   http://www.wellcome.ac.uk/doc_WTD002753.html: Wellcome Trust Guidelines on Good Research Practice, January 2002

[10] The Senior Management Team comprises the Director, Heads of School, Head of Development, Registrar and Secretary/Financial Controller.

been identified. The procedures apply to all staff, postgraduates, undergraduates and contract researchers in the Institute.

All Research involving or impacting upon human and animal participants requires ethics review by the Institute's Research Ethics Board, before the research project is started and before research funding can be drawn down.

11.2   When is Ethics Clearance Required?

Experimentation which involves one or more of the following should obtain ethical clearance. The onus is on the researcher (or in the case of undergraduates and postgraduates, the research supervisor) to be aware of this. Failure to comply will be regarded as misconduct and actions will follow Part 2 of the Institute's Code of Conduct for Researchers.

1. Human experimentation – including surveys, behavioural observation etc.
2. Animal experimentation
3. Clinical trials involving human participants
4. Research involving human remains, cadavers, tissues, discarded tissue (e.g. placenta), and biological fluids
5. Genetic manipulation
6. Use of known teratogens, carcinogens and any cytotoxic substances in clinical trials
7. Use of harmful substances in human or animal participants
8. Use of ionising radiation with human participants
9. The possibility of a conflict of interest due to financial incentives / benefits from a sponsor
10. The collection, storage and use of data of a sensitive or confidential nature
11. The potential for conflict over authorship; fair recognition of all the participants an the research
12. If ethical clearance is a stated requirement of the funding agency
13. Emerging areas of research not yet listed or any research where the researcher is uncertain of the requirement.

Review is <u>not</u> normally required not be required for:
(a) Research utilising existing publicly available documents or data
(b) Observational studies in public places in which the identity of the participants remains anonymous
(c) Quality assurance studies
(d) Audits.

The remit of the Research Ethics Committee is to look at proposals purely from the Research Ethics perspective in terms of the research methodology, protection of participants etc.
Any issues that involve moral ethics, such as arms research, are deemed to be an issue that the Senior Management of the Institute would address.
The containment of harmful, teratogenic, carcinogenic or toxic substances and/or radiation when <u>not</u> being administered to humans or animal participants, are deemed to be Health and Safety issues.

The opinion of the Research Ethics Committee should be sought whenever there is any doubt about the applicability of this guidance to a particular research project.

11.3   Preliminary Assessment of Ethical & Risk Factors within a Department

All researchers are required to submit an *Assessment of Ethics and/or Risk in Research Form [Form TU DUBLIN - TALLAGHT CAMPUS RE_1]* to the sponsoring Head of Department,[11] irrespective of whether ethical clearance is required or not.
The onus is on the researcher (or in the case postgraduates, the research supervisor) highlight any potential ethical issues to the sponsoring Head of Department prior to preparing and submitting research funding and postgraduate registration applications.

The proposed sponsoring Head of Department will review the ethics/risk form(s) submitted and notifies the researcher as to whether ethics clearance is required or not. Where ethics clearance is not required completed *Assessment of Ethics and/or Risk in Research Form [Form 1]* should be held in the sponsoring School Office. Copies should also be forwarded to the Office of the Registrar for the appropriate postgraduate student file.

Where an ethical risk has been highlighted either by themselves or the Head of Department or Head of School for a research project the proposed Researcher(s) must obtain clearance from the **Research Ethics Committee** before the project starts. This may also be a requirement of the funding agency.

11.4   Procedures

Full details on the process and procedures for the management of ethics in research are published on the Institute website, along with supporting guidelines for applicants and application forms at: www.it-tallaght.ie/researchinnovation/ethicsinresearch

The full procedure for submitting an application for ethics clearance is outlined in **SOP DR072 – Procedure for Submitting an Application for Ethics Clearance for Research Projects**.

A flowchart outlining the steps involved is shown Figure 11.1 below.

Note:
1. Where a funding agency requires an ethical review prior to a research funding application then the procedures in **DR072** below also apply.
2. Where an ethical consideration has been highlighted, research funds will not be released and the registration of postgraduate research students will not normally be processed until the proposal has been approved by the Research Ethics Board.
3. Where an ethical consideration has been highlighted, no research work can commence before the proposal has been approved by the Research Ethics Board.
4. A re-assessment of ethical and risk factors must be undertaken by researchers in any research project where any significant change in the direction or focus of an ongoing research project is intended.
5. The process for dealing with applications that have been reviewed by the Research Ethics Committee or Board of a collaborating institution or hospital is covered in the relevant section of **SOP DR072** that deals with Multi-centre Studies.

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[11] Where the Head of Department is the proposed academic researcher, then the form should be submitted to the Head of School.

Assessment of Ethics and/or Risk in Research Form(s) along with Proposed Research Programme or Project Proposal submitted by the Principal Researcher to Head of Department.

Head of Department reviews Ethics Forms(s) and the Proposal and notifies Researcher of decision regarding ethics clearance

Modify form(s) and proposal and re-submit to Head of Dept

Ethics clearance not required

Ethics clearance required

Abandon proposal preparation

Proposal submitted to Research Ethics Board via the Secretary

Review by Research Ethics Board

Approval granted by REB.

Proceed with any one of the following:
ƒ **Funding application**
ƒ **Application for admission to research degree programme**
ƒ **Begin research project**

Approval not granted, abandon proposal preparation

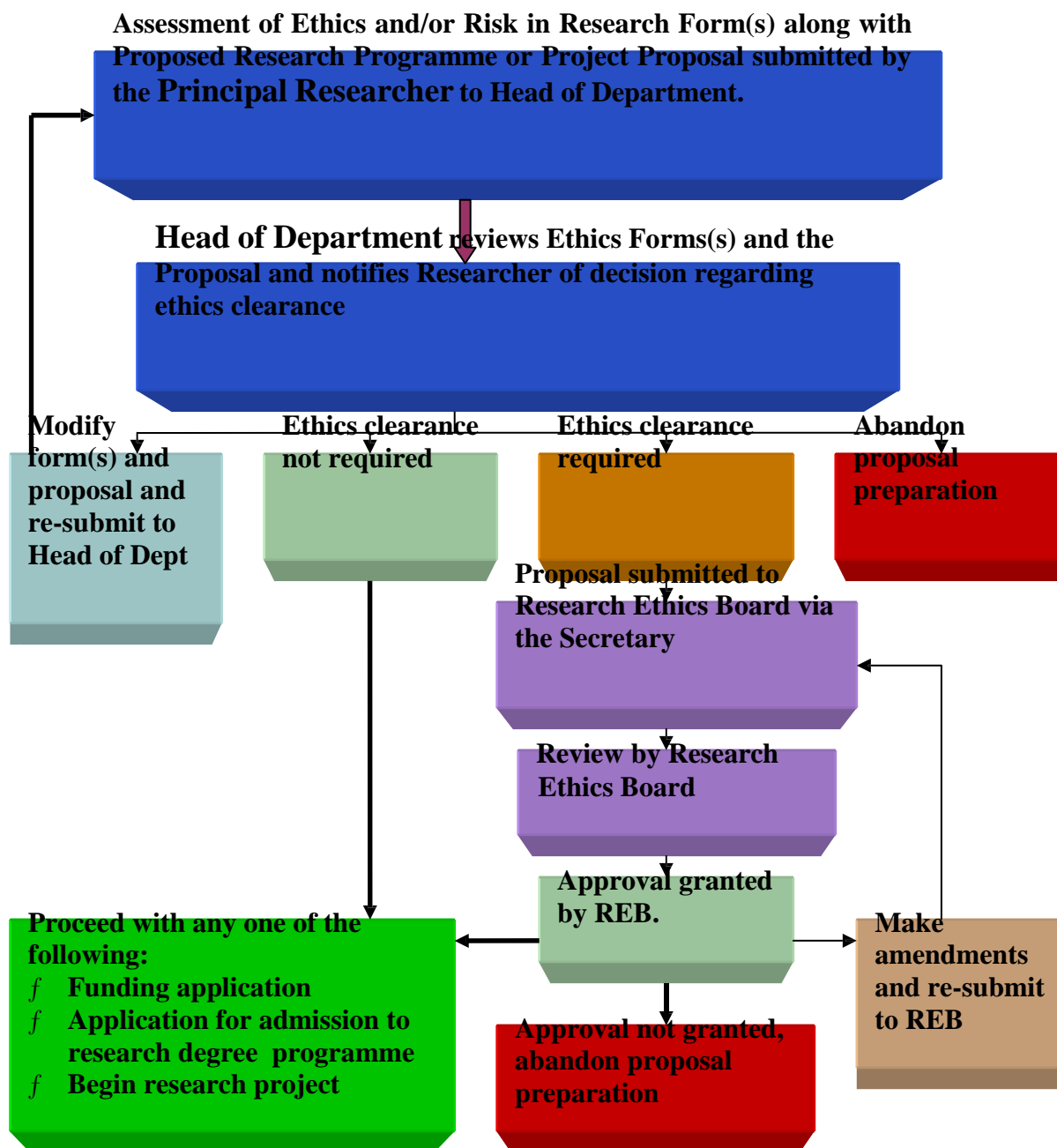**Make amendments and re-submit to REB**

Figure 11.1   Procedure for Submitting an Application for Ethics Clearance

11.5   The Research Ethics Committee

The Research Ethics Committee has been established to take a human subject-centred approach when reviewing project proposals to review and to approve, propose modifications to, reject or terminate any proposed or ongoing research.

Terms of Reference
The Research Ethics Committee has a number of primary aims:

1. To protect the rights and welfare of human and animal participants in research studies or trials conducted by or involving TU Dublin - Tallaght Campus researchers.

2. To facilitate the conduct of ethically sound, legally compliant research at the Institute in accordance with national and EU legislation.

3. To advise the Ethics Committee on the further development of ethical policies and procedures at the Institute where required.

Composition of the Research Ethics Committee

The guiding principle for appointing members to a REC is to ensure that the committee has the appropriate expertise, skills, knowledge and perspectives to ensure an adequate and thorough ethics review. The Board should be multidisciplinary and multi-sectoral in composition. Attention should be paid to age and gender balance. One third of the total membership should be lay members.

The membership of the Research Ethics Board will be established by SMT, who will nominate the Registrar or other SMT nominee to act as chairperson. The other membership will be as follows:

    (a) vice-Chair
    (b) Secretary
    (c) Member with knowledge of and current experience in the areas of research which are regularly considered by the R.E.B. (e.g. scientist).
    (d) Member(s) with knowledge of and current experience in the professional care, counselling or treatment of people (e.g. nurse, medical practitioner, clinical psychologist, as appropriate)
    (e) Member(s) with training in ethics
    (f) Member(s) with a qualification in law
    (g) Member(s) with training in statistics
    (h) Lay member(s) [must not be connected with the Institute]
    (i) A Head of Department
    (j) A Head of School
    (k) An expert in animal studies (e.g. a vet or suitably experienced scientist) as required.

An administrative officer should also be present to record minutes.

A minimum of five members of the REC is required to be present at a meeting held to determine an opinion in relation to an application to the REC. There should be a reasonable representation of members, which must include the chairperson, or in his/her absence the vice-Chairperson.

The Chairperson may appoint a person to act as an alternate for each member of the Board, where the alternate satisfies the same membership criteria as the member. When alternates substitute for a primary member, the alternate member should have received and reviewed the same material that the primary member received or would have received. An alternate can only vote if the member for whom he/she acts as an alternate is absent.

Where a Chairperson or members of the REC believe there is insufficient expertise on the committee to assess an application or an issue, the Board should seek additional expert advice. Experts may have specialist knowledge in particular fields of science or medicine or they may be representatives of communities or special interest groups. Co-opted expert members are not entitled to vote.

Functions and Responsibilities

    1. The REC should meet bi-monthly as required to:
        f Review proposals for research to be carried out in Institute or by Institute staff.

ƒ   Provide an annual report to the Ethics Committee and Academic Council on its activities in the intervening period.

2.   Board members have a commitment to protect and safeguard the rights and interests of human participants participating in research, while promoting and facilitating research excellence.

3.   A member should be prepared to have his/her name, profession and affiliation published.

4.   Members are expected to treat as confidential all applications, meeting deliberations, information on research participants/volunteers and related matters.

5.   When an REC member believes they have a conflict of interest on a subject which will compromise their ability to make an impartial decision, they should declare that conflict of interest and withdraw themselves from the discussion and/or activity.

6.   Provide comments on applications to the Board through the Secretary where they cannot attend a scheduled meeting.

Standard Operating Procedures fro the REC

The Research Ethics Committee will review **projects involving humans** in the categories outlined in Section 5 above. Project proposals may include:

- student projects
- staff research projects
- questionnaires for use in research.

All eligible applications for review will be listed on a spreadsheet distributed to the Board members by the secretary at least 5 days before the next meeting. Each application will be read by members of the Research Ethics Board in advance of the meeting. Any concerns identified should be notified to the Secretary at least **3 working days prior** to the scheduled meeting.

The Chairperson, vice-Chair and the REC Secretary will consult a few days in advance of the scheduled REC meeting to highlight potential issues and set an agenda for the formal meeting.

The Board should meet in accordance with publicised scheduled dates. Meeting requirements should include the following:

(a) meetings should follow a previously scheduled agenda

(b) members should be given sufficient time to review relevant documentation

(c) meetings should be minuted. There should be an approval procedure for the minutes

(d) when appropriate, the sponsor and/or investigator may be invited to present the proposal to the members and answer any questions a member may have

(e) when appropriate, independent experts (e.g. researchers with specific competence, ethicists, statisticians) may be invited to attend to inform the discussions

(f) when appropriate, the principal researcher may be called in to inform the discussions.

Annual Report

The REC should produce an annual report to be sent to the Registrar, for reporting to SMT, the Ethics Committee and Academic Council, containing information relevant to its procedures including, but not limited to:

(a) membership/membership changes

(b) number and dates of meetings held

(c) confirmation of participation by required categories of members

(d) substantive changes to the standard operating procedures

(e) list of training undertaken by members

(f) a list of proposals considered, the decision reached on each

(g) time taken from acceptance of application to final decision on each proposal
(h) list of projects completed or terminated during the year.

Annual reports are public documents and should be available upon request.

Review Procedure
All properly submitted and valid applications shall be reviewed in a timely fashion by the Research Ethics Committee.

Elements of a Review
When reviewing research proposals the Board may wish to refer to the following guidelines taken from the Irish Council for Bioethics "Operational Procedures for Research Ethics Committees: Guidance 2004" available at http://www.bioethics.ie/pdfs/guide.pdf

Decision Making Process
The REC should ensure that all supporting documentation for an application is complete before coming to a decision on a research proposal. The Board should comply with a pre-defined method for arriving at a decision. It is recommended that the Board use the consensus model where the process of discussion and debate will lead to a decision, rather than a formal vote- casting process. Under the consensus model, the proposal will be approved when all members present are willing to allow the proposal to proceed. In cases in which consensus seems unlikely, the chairperson may call for a vote with a two-thirds majority required for approval. Dissenting members should be afforded the opportunity to append an opinion to the REB decision. The comments of members who cannot be in attendance will be used to inform discussions, but they cannot vote in abstention.

The REC may request the principal researcher to participate in discussions about their proposal, but may not be present when the REB is making its decision.

It is desirable to adopt a consistent approach to granting or declining approval of a proposal. It is recommended that the following terminology be used in communicating the decision of the REC to an applicant:

i. Approved, the applicant may conduct the research as outlined in the research proposal submitted to the REC
ii. Provisionally approved, subject to recommended revisions to the proposal or answers to questions posed to the applicant. The revisions and/or answers must be resubmitted to the Secretary, for review as dictated by the REC as follows, before final approval will be granted:
         ƒ   by Secretary
         ƒ   by Secretary, vice-Chair and Chairperson
         ƒ   by at least three REC members over the email
iii. Approval declined, detailed reasons for declining approval should be forwarded to the applicant, with or without an invitation to resubmit a substantially altered proposal for reconsideration.

No research may be conducted prior to receiving final approval.

The REC decision should be communicated, by the Secretary, to the applicant in writing within **6 working days** of the meeting at which the decision was taken. The chairperson should sign and date all such communications. The decision should include, but is not limited to the following:
(a) project identification number and/or date of the proposal that the decision is based on
(b) exact title of proposal reviewed

(c) name and title of applicant
(d) name of Research Ethics Committee taking the decision
(e) date and place of the decision
(f) chairperson and list of members present when decision was taken
(g) clear statement of the decision taken
 (h) terms and conditions, if any, of approval of proposal, with clearly defined reasons for such terms and conditions
(i) clearly stated reasons if approval has been declined
(j) whether approval was by expedited review.

Amendments Process
Any significant alteration to a previously approved proposal must receive prior approval from the REC before implementation. Significant alterations include changes to:
(a) personnel (including where work has been subcontracted to another investigator) any changes to named Researchers responsible for the conduct of the research; any change to the personnel involved in obtaining informed consent or having access to personal information about research participants/volunteers
(b) method
(c) design of the study
(d) duration of the study
(e) informed consent procedures
(f) patient information leaflets
(g) method of recruitment.