

CODE OF PRACTICE FOR THE QUALITY ASSURANCE OF POSTGRADUATE RESEARCH

Part A – Description of the Research Process and
Quality Assurance Environment.

**Institute of Technology, Sligo.
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1.0 INTRODUCTION

Postgraduate research is a core activity at Institute of Technology, Sligo that involves a number of stakeholder groups, including, *inter alia*:

- Research active staff
- Postgraduate students
- Research centres
- The Research Committee (Academic Council)
- Admissions Office
- Registrar's Office
- Research Office
- Financial Office
- Student Services
- MIS Office
- School administration
- HETAC
- Funding agencies
- Industry/employers
- The DoES
- Society in general

While the conduct of postgraduate research itself can be controlled *via* the project proposal and by good project management practices, there are many aspects of the research process which interact with other areas of Institute operations (e.g. recruitment and selection, registration, welfare, finance, examinations, etc.), where clear procedures are necessary in order to assure the quality of the overall process.

The objective is to conduct postgraduate research at IT, Sligo in accordance with international best practice.

The purpose of this **Code of Practice** is to set out the elements of the postgraduate research process and to describe how each element is assured within the Quality Assurance system of IT, Sligo. It is divided into two parts, as follows:

- Part A – Description of the research process and quality assurance environment (presented here in hard-copy)
- Part B – Research quality assurance procedures (available in the document store online).

This **Code of Practice** should be read in conjunction information provided on the website www.itsligo.ie/research, and the Institute's Intellectual Property Policy. Anyone operating in or with IT, Sligo should be familiar with its quality system, as described in **The Quality Manual** (available on the website document store). Anyone whose professional work is primarily based in IT, Sligo should read **The Staff Handbook** (available from the Human Resources Office).

The Code of Practice will be renewed on an annual basis, the current calendar year being the latest version. If a conflict is found between specifications in Part A and Part B, Part B will take precedence (document controlled).

2.0 THE RESEARCH PROCESS

From origin to completion, a postgraduate research project (be it stand-alone, or part of a larger programme), can be shown to have a number of distinct phases (Figure 2.1). Each of these has particular requirements associated in terms of assuring the quality of the overall process.

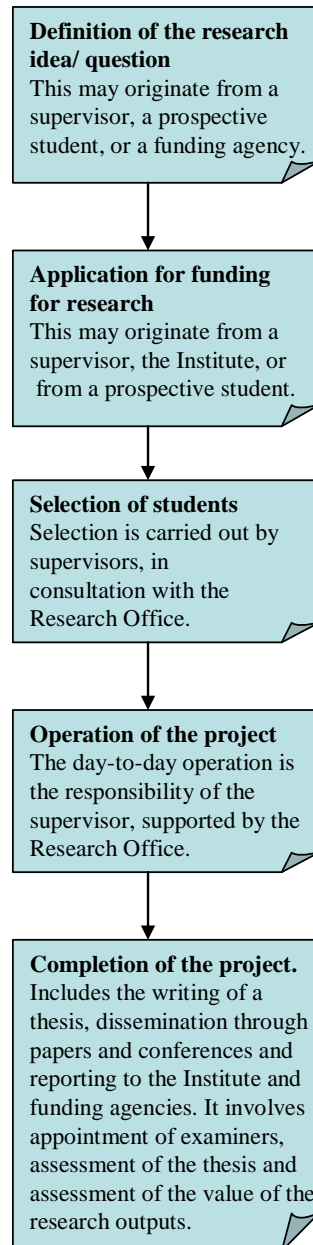


Figure 2.1: Phases in the Research Process.

Research can vary from stand-alone projects to projects within a large, multidisciplinary programme, often involving collaboration with other HEIs or industry, either nationally, or internationally.

The objective of this **Code of Practice** is to present a set of regulations that are fair, consistent and effective in assuring the quality of the postgraduate research activities carried out at the Institute.

2.1 Research Management

Research administration at IT, Sligo is managed through the Research Office as part of the Registrar's Functional area.

In addition, an independent committee of the Institute's Academic Council (the Research Committee), exists to make recommendations to the Governing Body on policy and programmes for research. The Research Committee comprises staff members from each of the academic schools, members of the Research Office and of the post-graduate student body.

The research supervisor(s) and the postgraduate student (the research team) are responsible for the day-to day conduct of the research, management of budgets and reporting on progress and outcomes.

2.2 Types of Research

There are a number of different categories of research that can be undertaken at the Institute. These include:

2.2.1 Academic research leading to a higher degree

Students may register to undertake research degrees at IT, Sligo, on a full-time or part-time basis. The awards are made by HETAC or the Institute, depending on the subject area. The terms are two full-time academic years for a Master's Degree and three to four full-time academic years for a Doctoral Degree. These degrees are generally carried out by directed study/work, but may also include attendance at certain taught academic programmes. The supervisor(s) for this study will normally be staff of the Institute, but may, in certain circumstances, be external to the Institute.

These projects may be funded or unfunded. In the case of a funded project, it is the researcher's responsibility to ensure that all terms and conditions stipulated by the funding body are met. The Research Office will assist in this regard, wherever possible. Where a commercial partner is involved as a joint funding agent (as opposed to primary funding agent, Section 2.2.3 refers), additional care should be taken to manage the research project. The commercial partner also has a vested interest in research outcomes and the relationship between partners must be managed carefully. There should be a written, signed agreement between the researcher, the Institute, the funding body and the commercial enterprise defining, *inter alia*:

- The requirements of the project.
- The legal entitlement over the outputs of the project.
- How the outputs of the project are defined, e.g. delivery of data report, software acceptance tests, etc.
- Support required by each party, e.g. equipment, access to premises, access to people, software tools, hardware tools, etc.
- Compliance with the Institute's current Intellectual Property Policy.

The researcher should negotiate the best terms and conditions for the project. The Institute can assist in any negotiation necessary. The researcher should obtain the approval of their Head of School before signing any contractual agreement.

Where a project is unfunded, the student should ensure that their financial situation will not place them under unacceptable pressure during the planned term of study.

2.2.2 Students registered or working at external institutions

Students registered at IT, Sligo may undertake research at another institution or industry. In this case, their general terms and conditions are determined by IT Sligo. There should be a nominated contact person at the 'host' institution. Additional terms and conditions for their time at the partner 'host' institution should be negotiated by the researcher and specified in a written agreement. The permission of the appropriate Head of School is required before signing any such agreement. The Research Office will assist in developing these agreements, where possible. In this case, the research degree is awarded by HETAC or the Institute, depending on the subject area.

Research students of other Institutions may carry out work at the Institute. In this case, their general terms and conditions are determined by the institution where they are registered. There must be a nominated contact person at IT Sligo. Additional terms and conditions for their time at IT Sligo should be negotiated by the nominated contact person and specified in a written agreement. The permission of the appropriate Head of School is required before signing any such agreement. The Research Office will assist in developing these agreements, where possible. In this case, the awarding body is the responsibility of the institution where the student is registered.

2.2.3 Commercial research leading to a higher degree

A researcher may identify a commercial partner as the primary funding agent to help fund research towards a higher degree (i.e., excepting schemes, such as the Enterprise Ireland Innovation Partnership Scheme, where a commercial partner funds part of a project, Section 2.2.1 refers). "Commercial" refers to any body, profit making, non-profit, industry or government with which a researcher has a contractual financial agreement (non-grant).

In this case, the researcher will have agreements with the Institute, HETAC (where HETAC is the awarding body) and with the commercial partner. The awards are made by HETAC or the Institute, depending on the subject area.

In this situation, additional care should be taken to manage the research project. The commercial partner also has a vested interest in research outcomes and the relationship between partners must be managed carefully.

There should be a written, signed agreement between the researcher, the Institute and the commercial enterprise defining, *inter alia*:

- The requirements of the project.
- The legal entitlement over the outputs of the project.
- How the outputs of the project are defined, e.g. delivery of data report, software acceptance tests, etc.
- Support required by each party, e.g. equipment, access to premises, access to people, software tools, hardware tools, etc.
- Compliance with the Institute's current Intellectual Property Policy.

The researcher should negotiate the best terms and conditions for the project. The Institute can assist in any negotiation necessary. The researcher should obtain the approval of their Head of School before signing any contractual agreement.

2.2.4 Non-commercial staff research

Non-commercial staff research refers to any independent or collaborative research undertaken by staff for their own professional development. This type of research may be funded through public grant schemes or may be unfunded. It will generally result in publication of scholarly books, articles in peer reviewed journals and/or papers presented at conferences. Publication of non-commercial staff research builds reputation among the academic community and enhances the staff member's profile in competing for public and private sector research funds.

This type of research is considered valuable in terms of staff professional development and as a contribution to the research ethos of the Institute. However, as it does not involve students, this particular **Code of Practice** does not apply in terms of quality assurance. Arrangements for managing this type of research are a matter for the staff and School management. The Research Office will assist in matters relating to this research, wherever possible.

2.2.5 Funded research **not** leading to a higher degree

Staff or management of the Institute may enter into agreements with a commercial partner (non-grant), and/or other funding agencies (grant) to carry out commercial or contract research, either by the staff member, or by hiring research assistants.

This type of research is considered valuable in terms of staff professional development and as a contribution to the research ethos of the Institute. However, as it does not involve students, is covered by contracts between the parties involved and involves paid staff (covered by the Human Resources Office), this particular **Code of Practice** does not apply in terms of quality assurance. The Research Office will assist in matters relating to this research, wherever possible.

2.2.6 Post-doctoral research fellowships

Post-doctoral research fellowships are awarded as paid research contracts in order to encourage and facilitate exceptional researchers or individuals who want to pursue a career in research. Post-doctoral Research Fellows give credibility and experience to research teams. They are career researchers, seen as experts in their field whose knowledge and expertise is sought after. They facilitate access to new and larger research programmes and therefore larger funding schemes.

Senior post-doctoral researchers have a reputation and track record of winning large research funding grants. Post-doctoral research is expected to contribute significantly to the knowledge of the research staff and to the research ethos at IT, Sligo.

As this category does not involve students, is covered by contracts between the parties involved and involves paid staff (covered by the Department of Human Resources), this particular **Code of Practice** does not apply in terms of quality assurance. The Research Office will assist in matters relating to this research, wherever possible.

2.3 Types of Research Award

Students registered at IT, Sligo can pursue the following research awards (awards are made by HETAC, or the Institute, depending on the discipline involved):

- **Degree of Master (Research)**

Candidates for the Degree of Master (Research) will be expected to acquire a mastery of the principles and theory underlying their chosen subject and a knowledge and appreciation of the relevant literature. This will be achieved through directed work/study programmes. It may also involve attendance at taught modules where necessary. Academic descriptors and learning outcomes for this award are contained within the National Framework of Qualifications (www.nfq.ie).

Normally, the minimum duration of studies leading to the Degree of Master (Research) is twenty-one months (two full-time academic years) from the date of admission to the Master's Register. In exceptional circumstances, the Research Committee of the Academic Council may vary the required and permitted duration of the programme.

Should the candidate not complete the degree within four years of admission to the Master's Register, registration will lapse. If the candidate wishes subsequently to present for the degree, application for re-registration is mandatory.

Supervision for a Degree of Master (Research) is normally by a suitably qualified IT, Sligo staff member (other models of a suitable supervisory team, including supervisors from other HEIs or from industry, are possible).

- **Doctoral Degree (Ph.D.)**

The Degree of Doctor of Philosophy is conferred for 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 and has a broad knowledge of a particular field of study and a comprehensive knowledge of the specialist area upon which his/her research is focused. Academic descriptors and learning outcomes for this award are contained within the National Framework of Qualifications (www.nfq.ie).

Normally, the minimum duration of studies leading to the Degree of Doctor of Philosophy is three to four full-time academic years from the date of admission to the Doctoral Register. In exceptional circumstances, the Research Committee may vary the required and permitted duration of the programme.

Candidates will normally register in the first instance for a Master's Degree, and transfer, if successful, after a period of no less than twelve months, through a process described in the *Transfer Between Master's Register and Doctoral Register* procedure (ADM 003, in Part B of this

Code). In the case of a candidate transferring from the Master's Register to the Doctoral Register, the required and permitted duration shall be measured from the date of admission to the Master's Register.

Should the candidate not complete the degree within six years of admission to the register, registration will lapse. If the candidate wishes subsequently to present for the degree, application for re-registration is mandatory.

Supervision of a Doctoral Degree is normally by a suitably qualified IT, Sligo staff member (or other suitable arrangement, as above). Doctoral research is expected to contribute distinctly to knowledge of the subject, and to satisfactorily display both research competence and originality.

2.4 Research Ethics

IT, Sligo expects members of the academic community, staff and students, to conform to the highest standards of ethical practice in research and scholarship.

All staff and students conducting research at IT, Sligo should be aware of ethical issues surrounding their research and seek appropriate advice (the Research Office and the Research Committee can assist). Particular ethical issues arise when research involves animals or humans.

3.0 MAINTAINING A RESEARCH CULTURE

Teaching, learning and the production of new knowledge are core functions of a higher education institution (HEI). Undergraduate programmes are developed in key areas, based on the current expertise of groups of staff and on planned development into new areas, or to higher levels of provision in existing areas.

A range of scholarly activities of staff are fundamental to this development. Amongst the range are many research-linked activities, including:

- Ongoing course development research (including feedback of the results of current institute postgraduate research into undergraduate courses).
- Development and supervision of undergraduate dissertation work.
- Personal professional development research (ideally leading to publication).
- Development and supervision of postgraduate research programmes.
- Providing general support and/or mentoring for other staff or for research students, taking part in scholarly meetings such as seminars/ conferences, etc. and providing input to bids for competitive research or academic development funding.
- Staff undertaking higher degrees.

A lively engagement by a significant proportion of staff in these activities constitutes a research culture. A healthy research culture leads to a research environment that is conducive to the conduct of high quality research. From this also comes the inspiration and motivation to investigate new research questions, either as one-off projects, or as

part of medium to large-sized programmes (preferably multi-disciplinary and involving collaboration with other institutions).

Institute of Technology, Sligo supports the activities listed above, and other appropriate activities, as resources allow. Examples of supports include:

- An allocation of teaching load of (average) 2 hours per postgraduate student supervised, to a maximum of six hours.
- Provision of research space and facilities.
- A small sums research fund to support professional development research (a competitive process).
- Payment of fees for staff undertaking higher degrees.
- Support for attendance at conferences when the staff member (or postgraduate student) presents a paper (when funds are not available for same from individual project budgets)
- The provision of training programmes in, e.g., supervision, research methods, literature review, writing, etc.
- Organisation of a regular research seminar series.
- Administrative support in preparing research funding applications.
- Administrative support in managing the research process, including quality assurance and finance.

4.0 PROJECT PROPOSAL AND STUDENT REGISTRATION

This is the stage of the research process where the researcher or research team have formulated a research question, and plan to address it in a formal academic project. From a quality assurance point of view, this stage can be considered to have two distinct parts, namely:

- Application for funding (not necessary in all cases)
- Registration of the student

4.1 Funding Applications

Many (not all) research projects require funding. Normally, this comes from one of a number of government funding agencies, such as the HEA, Enterprise Ireland, the Health Research Board, or research councils, such as IRCHSS and IRCSET.

The total cost of the research is always greater than that obtained from the agency/council, as it will always require physical resources and facilities from the Institute.

It is important that, when the research team is submitting an application for funding to a funding agency, the required institute resources are in place, and have been committed to the project. A procedure to assure this step in the process has been put in place (*Preparation of Research Funding Applications* [Res001]), which requires the signature of the Head of Research and, where required by a funding agency, the appropriate Head of School on all funding applications

4.2 Selection of Postgraduate Students (including entry requirements and qualifier exams)

The selection of postgraduate students is covered by procedure RES002 (*Selection of Postgraduate Students*).

The applicant is kept informed about the progress of the assessment. Any offer of a position that is made is subject to successful registration with the Institute. The applicant is provided with a copy of this **Code of Practice** and the Institute's **Intellectual Property Policy** with the offer letter, and confirms reading of and agreement with same by signature in the letter of acceptance.

The entry requirements for Master's and Ph.D. are shown in Figure 4.1 overleaf. Where a candidate does not meet these criteria, it may be possible, in certain circumstances, to undergo a qualifier examination that would allow entry to the research register. The procedure for this is set out in procedure RES009 (*Qualifier Assessment for Prospective Postgraduate Students*).

It is important that the research team identifies skills gaps in the candidate at this stage, and puts in place a planned programme of instruction or demonstration, as appropriate, to deal with these gaps.

4.3 Registration of Postgraduate Students

This is a critical step in the research process, as it is where the standards of student, supervision, proposed research and required facilities/resources are assured. It is covered by procedure ADM001 *Registration of Postgraduate Research Students*.

Figure 4.2 shows the general process. The research team (supervisor(s) and student) fill out a standard application form provided by the Research Office. The Head of Research sends the application to one reviewer from each of an internal and external panel of expert reviewers, along with a set of standard review criteria. Each reviewer reports back to the Head of Research, with a recommendation and, if appropriate, comments. If the recommendations, or comments, are such that substantial redrafting of the proposal is necessary, the Head of Research provides the feedback to the research supervisor to allow the team to redraft the proposal. If appropriate, the Head of Research sends the redrafted proposal to the reviewers for additional review.

The Head of Research presents recommendation of the reviewers to the Research Committee, normally at its next meeting, or, by agreement, at interim periods. The Research Committee makes a recommendation on registration and communicates the decision to the Registrar's Office.

DEGREE OF MASTER (RESEARCH)

The normal entry standard for a Master's degree is an Honours Bachelor Degree (Level 8, minimum 2nd Class Honours) in a field of study directly related to the subject matter of the Master's Degree.

A candidate holding qualifications different from those specified above may be admitted to a Master's Degree programme subject to satisfactory performance at such examination, test or other requirement as defined by IT Sligo, on the advice of its External Examiner(s).

IT Sligo will consider applications from individual candidates who:

- (a) hold the Graduate Diploma of the HETAC or IT Sligo at Second Class Honours level in an area of study cognate to the proposed study area, subject to approval by the Research Committee
- (b) hold such other qualifications as may be acceptable to the Research Committee for the purposes of proceeding to a specific Master's Degree;

DEGREE OF DOCTOR OF PHILOSOPHY

Normally, admission to the Doctoral Register is confined to candidates who have been admitted at least 12 months previously to the Master's Register and whose transfer to the Doctoral Register is recommended by the candidate's Supervisor(s) and External Examiner(s) and approved by the Research Committee.

Direct admission to Doctoral Register may be possible, in the following cases:

1. After assessment and recommendation by an External Examiner appointed by the Research Committee in which the nature of the work proposed, the applicant's academic achievement and personal qualities are deemed to be such as to merit direct progression from Bachelor Degree to Doctoral candidate status. In any such case the applicant will be required to hold an Honours Bachelor Degree (Level 8) with First Class Honours in a related subject and to show substantial reason for not registering for a Master's Degree in the first instance.
2. Candidates with an approved professional qualification and an exceptional level of experience and work achievement may also be considered for direct admission to the Doctoral Register.
3. The Research Committee may directly admit to the Doctoral Register a candidate with a good research Master's Degree from a recognised Degree awarding body. The Research Committee may obtain an External Examiner's opinion on the applicant's Master's Degree.
4. Candidates shall not be eligible to register for a Ph.D. if, simultaneously, they are registered for another programme with the HETAC, IT Sligo or another institution, without prior permission from the Research Committee.

Figure 4.1: Entry Requirements for Registration for Research Degrees

The research team are kept informed about the progress of the assessment, with indicative timescales, etc. The Research Office writes to the candidate to advise them of the outcome of the process.

During the assessment period, the student may be given temporary registration status, without prejudice, to allow access to the library and other facilities.

Where the research discipline is outside the areas of Accreditation to Hold Research Registers status, as may, from time to time, be awarded by HETAC, the same process is used to register students. In these cases, the Research Office subsequently notifies HETAC of the process that has taken place and the result.

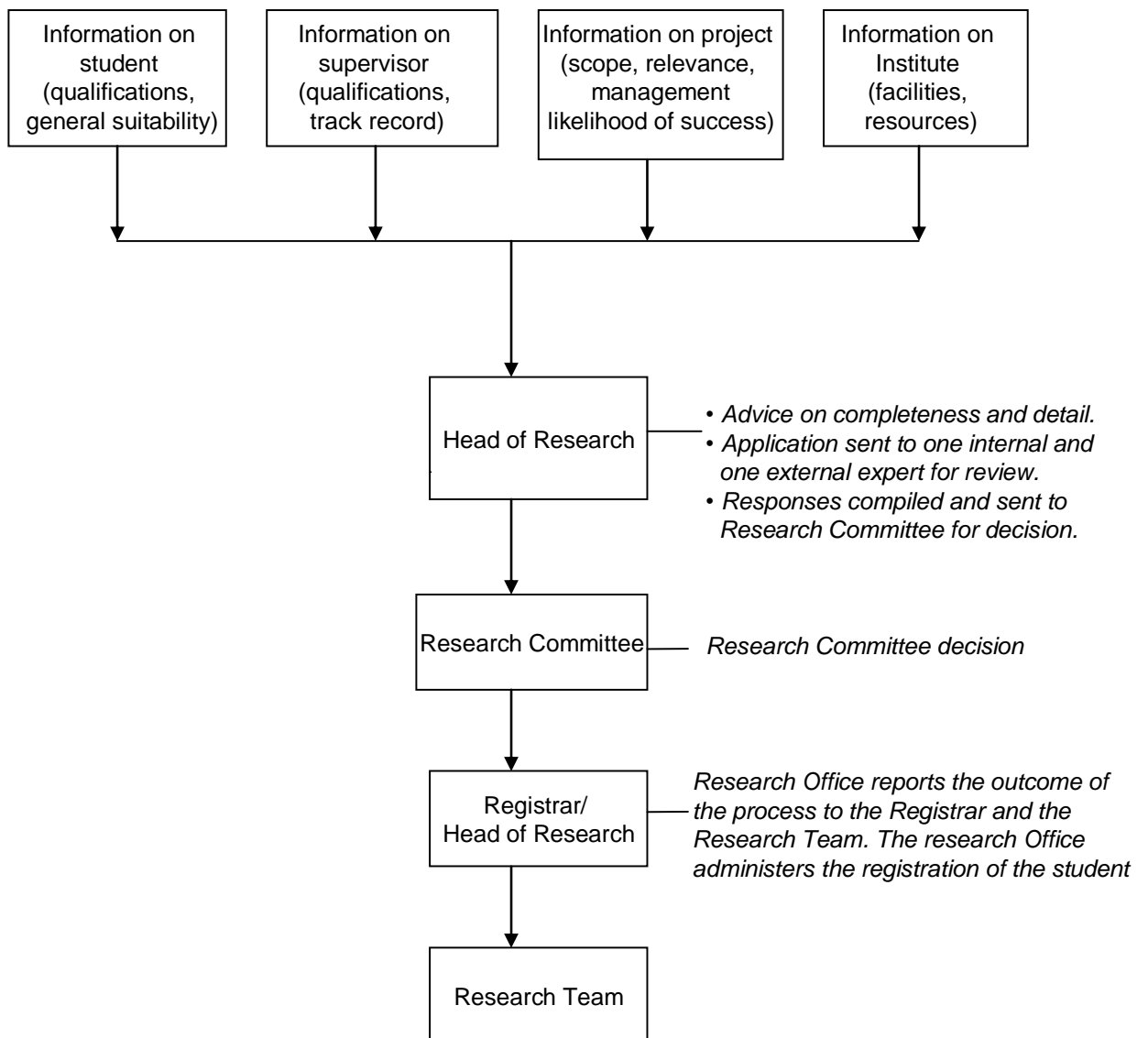


Figure 4.2: The Postgraduate Registration Process

4.3.1 The qualifications of the supervisor

The qualification criteria for staff wishing to supervise research without mentoring or co-supervision are:

- A qualification in the cognate area, normally to at least the level of award sought.
- Previous experience of supervision to completion.
- A track record in successful research as measured by traditional research outputs, such as publications, presentations at conferences, patents, etc.
- Current research activity in a cognate area.
- The supervisor must not be currently registered for a postgraduate research award in a cognate area, and at the same level as the candidate

Where these criteria are not met, the Research Committee may recommend co-supervision, or the appointment of a mentoring supervisor, as appropriate. In such cases, the Research Committee will take particular cognisance of the proposed supervisors experience of supervision, and academic/industrial experience.

4.3.2 The academic quality and relevance of the proposed research

The Research Committee must satisfy itself that the proposed research is of an academic standard that gives a reasonable expectation that a candidate can reach the level sought.

The researcher must locate the research within the relevant literature and show that the proposed work is founded solidly in the current knowledge and addresses a question that is of relevance.

The researcher must take note of the strategic aims of the Institute, as expressed in its research prioritisation exercise, and its local, regional, national and international objectives, as described in the IT, Sligo Strategic Plan.

4.3.3 Student induction

The staff of the Research Office are available year round to assist with any issues that the student, or the supervisor might have.

In addition to this, the Research Office conducts an induction session with new postgraduates, normally in November, but may also be repeated at any other time, if appropriate. The session covers issues such as: background to research at IT Sligo; Institute research architecture; start up; IT Dept. and research; literature review; data analysis; write-up; Library and research; dissemination/ communication; submission/examination; project management; Finance Dept. and research; research outcomes; quality assurance system; Student Services and research.

4.3.4 Postgraduate training

Through the project assessment process, any project-specific skills-needs for the proposed student will be identified, along with the identification of the source of budget for same. The Institute will provide, on an intermittent basis, general modules on subjects such as research methods, library resources, health and safety, etc.

5.0 PROJECT MANAGEMENT AND MONITORING

The responsibility for day-to day management of the research project rests with the research team (the supervisor(s) and student). This includes making reports required by funding agencies, or other agreements that the team has entered into (e.g. programme reports, reports to collaborators, etc).

From a quality assurance point of view, a small number of procedures have been drafted, as outlined below, to facilitate early identification of any problems, and their solution.

5.1 Responsibilities of the Supervisor

The supervisor shall:

- provide advice to the candidate in relation to:
 - the nature of the work to be undertaken and the standard expected;
 - the planning of the research;
 - the appropriate literature and sources;
 - attendance at appropriate taught courses in research methodology and requisite techniques to ensure the candidate has the necessary skills for sustained independent effort;
 - attendance at appropriate research seminars and/or conferences;
 - publication in appropriate journals
- maintain contact with candidate through scheduled meetings and be available to the candidate at other appropriate times;
- monitor the progress of the candidate's work on a formal basis by setting appropriate academic standards and milestones to be attained by the candidate, and by assessing and providing constructive criticism in reasonable time;
- identify, at as early a stage as possible, insufficient progress, in order to allow adequate time for re-orientation and correction;
- manage the finances of the project;
- report on progress to the Institute through such reports as are required in the research quality process;
- make such reports as are required to funding agencies, or other stakeholders

5.2 Responsibilities of the Student

The candidate shall:

- familiarise him/herself with the Institute's rules and regulations governing postgraduate awards by research;
- agree in advance the programme of work, and the aims, objectives and timeframe for the proposed programme, including the nature and extent of the guidance expected, with the supervisor(s);
- be responsible for carrying out the work, in a timely fashion, to the required standard;
- agree a schedule of meetings with the supervisor(s) and arrangements for the evaluation of progress;
- inform the supervisor(s), as early as possible, of any significant problems and difficulties encountered;
- contribute, as appropriate to reports prepared for funding agencies or other stakeholders;
- submit a thesis in accordance with the schedule of exams of the Institute;

- not initiate formal contact with the external examiner(s);
- be responsible for ensuring that the thesis presentation format is in accordance with regulations.

5.3 Routine Reporting

Routine reporting of the progress of the project to the Institute is required in procedure RES003 (*Assessment of Postgraduate Progress*).

5.4 Financial Management

The supervisor is responsible for the financial management of a project. Project budgets are prepared on the *Agresso* financial management system. The supervisor, or their nominee, prepares the requisition on the system.

Management sign-off is in accordance with general Institute regulations for limits and appropriate permissions.

The Research Office will assist in financial management, where possible.

The supervisor is responsible for reporting to the funding agency or other stakeholders. The Research Office will assist in this work, where possible.

5.5 Grievance Reporting

Should any issue between stakeholders in the research process go beyond local resolution to the point where a grievance exists between two or more parties, a procedure has been drafted (RES008 *Grievance Reporting Relating to Postgraduate Research*).

5.6 Changes in Supervisory Arrangements

Should any factor require a change in supervisory arrangement, a procedure has been drafted (RES004 *Changes in Supervisory Arrangements*).

5.7 Transferring Between Registers

The Registrar of IT Sligo maintains two registers of candidates for higher degrees by research, as follows:

- Register of Candidates for the Degree of Master (Research) – referred to as “the Master’s Register” and
- Register of Candidates for the Degree of Doctor of Philosophy – referred to as “the Doctoral Register”.

A candidate wishing to pursue a Ph.D. will, normally after at least one year of study, and no later than one year before intended submission of the Ph.D. thesis, make an application for transfer between registers. A similar referral process to that used for the initial registration, from the Head of Research to the Research Committee of the Academic Council, will apply. The details of the process are contained in procedure ADM 003 (*Transfer Between Master’s Register and Doctoral Register*).

6.0 THESIS PREPARATION AND ASSESSMENT

It is the candidate's responsibility to prepare a thesis for submission. No guarantee is given or implied by the supervisor or the Institute on the likely success of the assessment.

6.1 Appointment of Examiners

The candidate's research is examined by at least two examiners: at least one external examiner will be engaged by the HETAC (in cases of non-Delegated Authority) or by the Institute (in cases of Delegated Authority), an internal examiner, who is not the candidate's supervisor, will be engaged by IT, Sligo.

The following are the criteria for the appointment of an external examiner:

- The external examiner will be substantially independent of IT, Sligo and of the co-operating off-campus organisation, if any, and shall not have acted as the candidate's internal or off-campus supervisor.
- The external examiner will be a specialist in the subject area, be known for his/her contribution to, and must be currently active in research in, the area of the candidate's research.
- The external examiner will have academic qualifications to at least the level of the award to be examined.

The following are the criteria for the appointment of an internal examiner:

- The internal examiner must not be the candidate's supervisor.
- The internal examiner must have a qualification in the cognate area to at least the level of award sought.
- The internal examiner must be active in the general area of research of the degree being undertaken by the candidate and, where practicable, should have experience as a specialist in the topic(s) to be examined.
- Where the previous criterion can not be met from within the Institute, an Internal Examiner who does meet that criterion may be appointed by IT, Sligo from another HEI.
- Where the candidate is a member of staff of IT, Sligo, an examiner will not be appointed from within the Institute. Instead, a further examiner will be appointed from outside the Institute to fulfill the duties normally assigned to the internal examiner.
- The internal examiner has an administrative role in maintaining contact as appropriate with IT, Sligo and the supervisor(s) on behalf of the other examiner(s) with regard to assessment.

In cases where the Institute does not have Delegated Authority in the discipline area, IT, Sligo will notify HETAC at least two months in advance of a candidate's intention to submit the thesis for examination.

The external examiner(s) and internal examiner will be proposed to HETAC at this time using the college-wide procedure for nominating externs (IT, Sligo Marks and Standards, Revised Jan 2004) and a HETAC approved form (Appendix A - Marks and Standards) documentation. More than one external examiner may be appointed should HETAC so wish.

Where qualifier examinations are necessary for registration, or if a candidate wishes to apply for transfer from the Master's register to the Doctoral register the external examiner(s) may be proposed to HETAC at those times.

Where HETAC considers it necessary, and, subject to IT, Sligo's requirements, the external examiner(s) may conduct periodic reviews of the candidate's progress. In such circumstances the external examiner(s) will be proposed to HETAC at the time of registration.

6.2 Sequence of Submission

There are two main stages to submission. The first is submission of soft bound copies to the examiners.

An abstract, not exceeding 300 words, should be provided as an integral part of the thesis, and should precede the main text. Each copy of the thesis submitted should include a copy of the abstract. The abstract should be printed or typed in single spacing and should indicate the author and title of the thesis in the form of a heading.

Also integral in the thesis should be a statement, signed by the candidate and the supervisor(s), indicating that the thesis represents the candidate's own work, or, in the case of a thesis based on a group project, indicating the extent of the candidate's individual contribution. In the case of a collaborative project, the statement should make reference to any other theses submitted or material published by each collaborator in the project.

After comments are received from the examiners, and required amendments made (if any) a number of hard bound copies are submitted (Figure 6.1).

6.3 Format of Thesis Presentation

The thesis should be in typescript or print (12-point type) on A4-size paper single sided, with pages numbered consecutively (centrally, about 20mm from the bottom edge). The main text should be typed or printed in one and one half or double spacing; footnotes and quotations should be typed or printed (10-point type) in single spacing.

On each page there should be a left-hand margin of at least 40mm and a right hand margin of at least 20mm.

Photographs or diagrams, if any, should, where feasible, be incorporated digitally within the text. Where this is not appropriate or practicable they should be fixed firmly in place. They should be provided with reference numbers and legends.

Where the thesis consists of more than one volume, the pagination should indicate the relevant volume number as well as the page-number on each page.

Appendices should be named alphabetically, and each appendix paginated consecutively but separately from the main text and from each other.

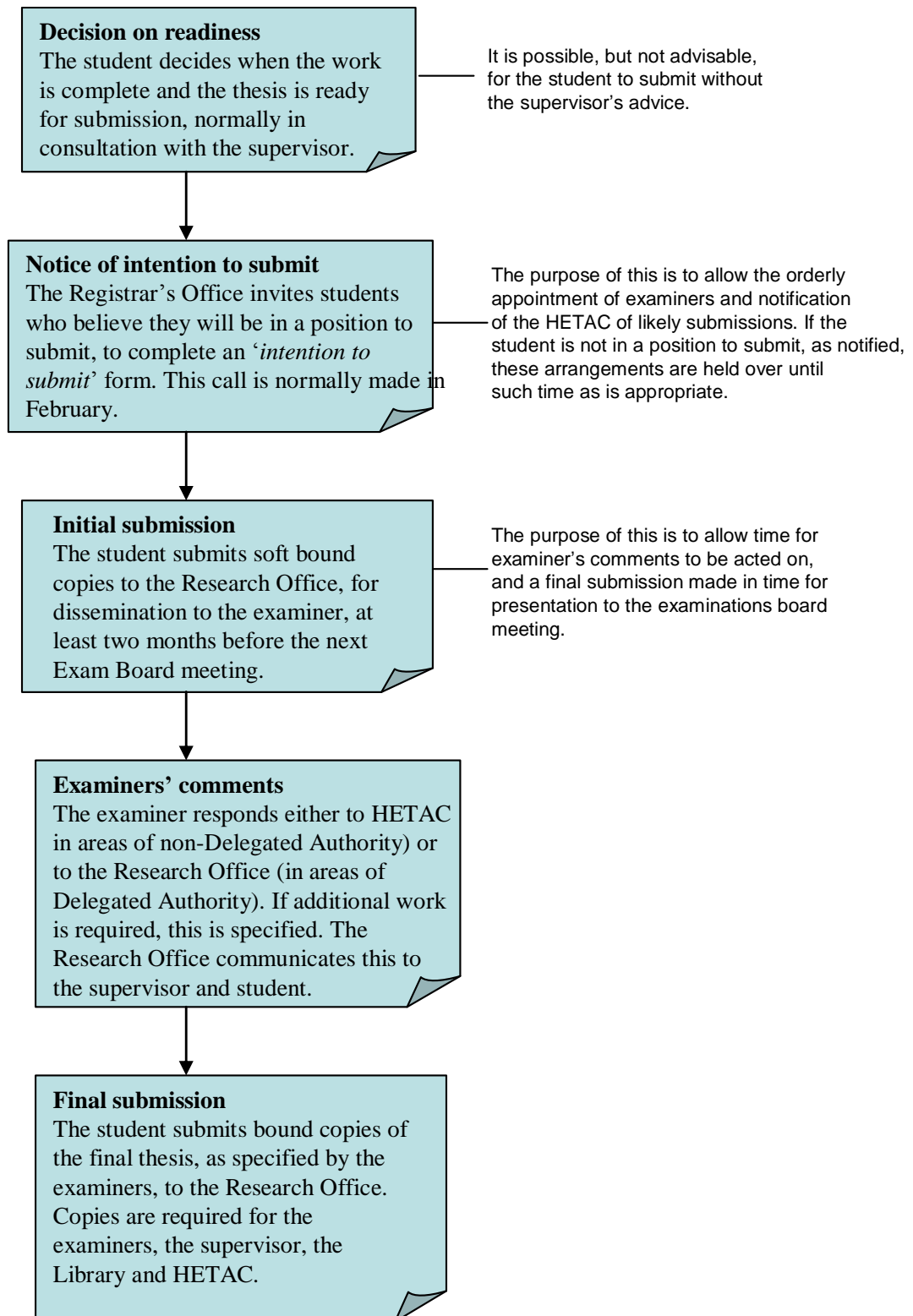


Figure 6.1: The Thesis Submission Process.

The front board (cover) of the thesis shall contain the following information only:

- the title of the thesis;
- the initials and name of the candidate;
- the award for which the thesis is submitted, and the year of submission;
- the volume number and the total number of volumes where the thesis consists of more than one volume.

The same information (excluding the title of the thesis) shall be printed along the spine of the cover in such a way as to be easily legible when the copy is lying flat with the front cover uppermost. All lettering on the cover and the spine shall be of plain graphic design.

The title page of each volume of the thesis should contain the following information:

- the full title of the thesis, with any subtitles, in 20 point type;
- if there is more than one volume, the total number of volumes and the number of the particular volume;
- the full name of the author with, if desired, any qualifications or distinctions;
- the award for which the thesis is submitted;
- the name of the IT, Sligo;
- the names(s) of the supervisor(s) of the research;
- as the last line on the page, in cases where IT Sligo has Delegated Authority to make awards in the discipline area, the statement “Submitted to the Institute of Technology, Sligo, (Month) (Year)”.
- as the last line on the page, in cases where IT Sligo does not have Delegated Authority to make awards in the discipline area the statement “Submitted to the Higher Education and Training Awards Council, (Month) (Year)”.

Footnotes and indented quotations should be single line spaced. The footnotes in each chapter should be numbered consecutively. A list of references may be included either at the end of the chapter to which they relate, or in a separate reference section located at the end of the main body of the text, before any appendices. References should be thorough and comprehensive.

The thesis must include a bibliography of the works consulted in its composition.

The candidate may publish material in advance of presentation of the thesis, but reference should be made to any such publication, including material submitted for publication or in press, in the thesis.

6.4 Assessment

Each Examiner assesses the work and presents an independent report to the HETAC (in cases where the Institute does not have Delegated Authority to make awards in the discipline area) or Research Office (in cases where the Institute has Delegated Authority to make awards in the discipline area). Examiners are normally expected to carry out their duties within eight weeks of referral to them of the work in question.

The Examiners may, if they consider it necessary, conduct an oral examination of the candidate on the programme of work and on the field of study concerned. An oral examination is a mandatory requirement for the Degree of Doctor of Philosophy.

Examiners will assess and may recommend the award of **Degree of Master (Research)** in accordance with the following criteria:

- the thesis should show evidence of independent thought and research, and must demonstrate a mastery of their chosen subject;
- the candidate should demonstrate an understanding of methodologies appropriate to the chosen field and show adequate knowledge of the literature of the subject and of the work of other scholars in the field;
- the candidate should be capable of relating knowledge of particular topics to the broader field of study involved and of presenting such knowledge in a critical and scholarly way.
- the candidate has met the Learning Outcomes of the national Framework of Qualifications – Level 9.

Examiners will assess and may recommend the award of **Doctor of Philosophy** in accordance with the following criteria:

- the candidate shall have demonstrated the capacity of pursuing original independent research in the field of study and of exercising critical judgement;
- the thesis must make a substantial and original contribution to scholarship and provide evidence of originality by the exercise of independent critical powers;
- the thesis must contain an acceptable amount of original work by the candidate, which is considered by the examiners to be of publishable standard in the form *inter alia* of:
 - articles in appropriate refereed journals,
 - a book or other scholarly publication,
 - a research/creative or self-expressive work monograph which meets the standard of refereed academic publications;
- the candidate must present and successfully defend the body of work at an oral examination.
- the candidate has met the Learning Outcomes of the national Framework of Qualifications – Level 10.

Four grades of assessment are possible, as set out in the HETAC External Examiners Report form, as follows: Recommended without modification; recommended with minor corrections; referred for substantial amendment and e-examination; not recommended.

At the end of the assessment process, the Examiners will report formally to HETAC, or the Institute (as appropriate) using the standard HETAC External Examiners Report form.

6.5 Oral Examination

An oral examination is a mandatory requirement for the award of PhD. The requirement for an oral examination at Master's Degree (Research) level is exceptional, save as outlined previously, and is at the discretion of the Examiners.

The oral examination will normally take place as soon as possible, or within three months of submission of the work presented.

The Examiners for an oral examination should consist of the Examiners, internal and external, chaired by an individual, appointed by IT, Sligo, who has not previously been involved with the candidacy or the examination process.

The Supervisor(s) will normally be in attendance but cannot take part in the examination of the candidate's work.

The purpose of an oral 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 the candidate has a thorough understanding of the practical and theoretical aspects and methods involved in the work.

The Chairperson's primary duties are to ensure that the Examiners and the Candidate have adequate time for discussion of issues arising from the work submitted.

The Chairperson will assume responsibility for the organisation of the examination on the day. This includes determining whether the candidate has any special requirements for the examination such as booking a *neutral* room.

Before the Examination itself, the Chairperson will ensure that the external and the internal Examiners have had the opportunity to confer.

The Chairperson will agree the approach and broad lines of questioning with the Examiners, allowing the external Examiner(s) the major say in the framing of these. Problematic areas will be identified in advance, in order to ensure that these are adequately explored in the dialogue between Candidate and Examiners.

The Chairperson will introduce the Examiners to the Candidate, briefly explain the purpose of the examination and the procedures to be followed, and advise the candidate to deal with questions as fully as he/she thinks necessary. The Chairperson's overall aim will be to ensure a fair and constructive dialogue between the Examiners and the Candidate.

6.6 Award

Following receipt of the external examiner(s)' report(s) (directly, or from the Institute, as appropriate), HETAC will issue a broadsheet for results. The Examination Board Meeting will then take place; the proceedings of each such Board Meeting will be conducted in accordance with the provisions of the HETAC Marks and Standards document, and IT Sligo's general academic QA processes. Having considered the recommendations of the Examiners, the final determination of the result is a matter for the Examination Board.

The Examination Board recommendation as to the award or otherwise of a degree shall be recorded and forwarded to HETAC by IT, Sligo.

The Degree of Master (Research) is of Honours standard and is awarded without classification. In the case of successful candidates, the Broadsheet of Results will be annotated "Recommended" and signed by the examiner(s) concerned.

The Degree of Doctor of Philosophy is awarded without classification. In the case of successful candidates, the Broadsheet of Results will be annotated "Recommended" and signed by the examiner(s) concerned.