

Institutes of Technology Ireland (IOTI)

Sectoral Protocol for the Awarding of Research Master's Degrees at NFQ Level 9 under delegated authority (DA) from Quality and Qualifications Ireland (QQI)

1. Background

In May 2014, QQI published a policy (QP.04) entitled *Policy and Criteria for the Delegation of Authority to the Institutes of Technology to make Higher Education and Training Awards (including Joint Awards)*.¹ One of the purposes of QP.04 is to enable Institutes of Technology (IoTs) to validate their own research degree programmes in any discipline area at NFQ Level 9, and to make master's awards in respect of the same validated research degree programmes under DA from QQI.

QQI has identified in QP.04 certain criteria for the purposes of extending DA to IoTs to make awards at NFQ Level 9 which supplement, and partially replace, the existing policy in this area. The existing policy, which has been saved by the transitional and savings provisions of the Qualifications and Quality Assurance (Education and Training) Act 2012 (the 2012 Act), includes the following key policies: HETAC's *Criteria and Procedures for the Delegation and Review of Delegation of Authority to Make Awards (2004)*² and *Research Degree Programme Policy and Criteria (2010)*.³ The supplementary criteria (QP.04, p. 7) are that QQI is satisfied with the Institute's:

- capacity for maintaining an institutional strategy for research
- capacity for executing the awarding body functions, and operations and management concerned with awarding research master's degrees
- operations and management (particularly governance) in respect of the provision of master's level research degree programmes of education and training including a research validation process to replace QQI's research validation process (approval/accreditation).

A key part of the enabling infrastructure for IoTs to validate research degree programmes at NFQ Level 9, and to make master's degree awards in respect of the same validated programmes, is the agreement of a sectoral protocol between QQI and IOTI (acting on behalf of the 13 IoTs). The protocol sets out the high level quality principles that underpin the sector's approach to validating research degree programmes at NFQ Level 9, and to making the associated master's awards. As such, the protocol describes the essential quality assurance infrastructure that should be in place within an IoT before it validates research degree programmes at Level 9, and before it applies for an extension of DA in respect of these programmes. The protocol is not intended, however, to replicate the detailed quality assurance policies and procedures that would be put in place for these purposes at the

¹ <http://www.qqi.ie/Downloads/Policy%20docs/QQI%20Policy%20No.4.pdf>

² <http://www.hetac.ie/docs/DA%20Criteria%20and%20Procedures%202004.pdf>

³ http://www.hetac.ie/docs/E.1.7-1.0_Research_Degree_Programme_Policy_And_Criteria_2010.pdf : section 4.2 of the latter document is superseded by the provisions of QP.04.

institutional level (QP.04 p. 8). On this basis, the following protocol has been developed by the 13 IoTs, in consultation with QQI and with the support and coordination of IOTI, to meet the requirements of the 2012 Act and QP.04.

The protocol was approved by QQI on 3 November 2014.

QQI's policy QP.04, subject to compliance with this protocol, grants autonomy to IoTs to validate research degrees up to NFQ Level 9. Following an application to QQI for an extension of DA to make awards at NFQ Level 9 in respect of all its own validated research degree programmes, and again subject to compliance with this protocol, the IoTs are afforded complete autonomy to award master's research degrees in respect of validated research degree programmes.

2. The Quality Assurance Infrastructure for Research at Level 9

The core principles and practices set out in section 3 below are intended to address at an overarching level the quality assurance approach of the sector to research degrees at NFQ Level 9. These principles should be embedded in detailed institutional policies and procedures by each IoT ahead of validating research degree programmes at NFQ Level 9, and before applying for an extension of DA to make master's degree awards in respect of these programmes. The principles and requirements reflect the collective experiences of the institutions, and the general community of practitioners in this area, both nationally and internationally, and are informed specifically by the following documents:

- HETAC's *Research Degree Programme Policy and Criteria* (2010)
- IUQB's *Good Practice in the Organisation of PhD Programmes in Irish Higher Education* (2nd edn., 2009)⁴
- Technological University Quality Framework (TUQF), *Quality Enhancement and Assurance of Research* (2014, forthcoming)
- *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (3rd edn. 2009)
- EUA's 'Salzburg Principles'⁵ and 'Salzburg II Recommendations'⁶
- European Commission Directorate-General Research and Innovation, *Principles for Innovative Doctoral Training* (2011)⁷
- The EU European Charter for Researchers and Code of Conduct for the Recruitment of Researchers.⁸

⁴ <http://www.iuqb.ie/GetAttachment3bf0.pdf?id=f6086812-ad36-4aaa-b38e-09f292be3af4> .Although it is concerned primarily with Level 10 PhD awards, many of the good practice principles set out in the IUQB document are also applicable to Level 9 research degrees.

⁵ http://www.eua.be/eua/jsp/en/upload/Salzburg_Report_final.1129817011146.pdf

⁶ http://www.eua.be/Libraries/Publications_homepage_list/Salzburg_II_Recommendations.sflb.ashx

⁷ http://ec.europa.eu/euraxess/pdf/research_policies/Principles_for_Innovative_Doctoral_Training.pdf

⁸ Available at: <http://ec.europa.eu/euraxess/index.cfm/rights/whatIsAResearcher>

The above documents should be consulted in the drafting of detailed institutional policies and procedures.

3. Principles and Practices

3.1 *Institutional Research Strategy*

IoTs publish research strategies, which are consistent with their published vision, mission, and strategic statements, and which demonstrate that research activities – including the development of research programmes – are visible and integrated features of their institutional visions and missions. IoTs have clear and generally understood processes for developing their research strategies, that are supported by institutional management and which allow staff to contribute to their development and implementation.

The research strategy provides a development path for institutional research-related activities and specifies the connection between the provision of research degrees and wider research and innovation activities. It normally addresses:

- the sustainability of specialist research activities at the institutional level or within the context of regional or other clusters/academic networks
- the recruitment and support of masters by research and doctoral students
- the design of research programmes
- the fostering and support of research activity amongst academic staff
- the institute's approaches to partnership with business, industry and other stakeholders, including higher education institutions, in research activities
- the institute's approach to research grant applications, intellectual property and commercialisation
- the process for recognising research groups, centres and other appropriate structures that foster the sustainable development of research activity
- human, financial, and capital resourcing
- the monitoring of research progress against key performance indicators, including relevant international benchmarks.

3.2 *Research capability and research support infrastructure and systems*

3.2.1 *Research prioritisation*

IoTs select priority research areas and develop their research capability around them. The trajectory of growth for priority research areas can range, initially, from the activities of individual researchers to the collective activities of groups of researchers within an academic unit; and, over time, to more formalised research centres that transcend traditional academic units. IoTs recognise the different growth trajectories of their priority research areas at different points in time and their contribution is recognised and supported accordingly within their overall strategic frameworks.

3.2.2 Developing and maintaining individual researcher capability

IoTs establish clear pathways which enable the development of individual researchers to achieve specialist research expertise, via access to peers, research groups, research centres, and external collaboration opportunities. Postgraduate provision is aligned with the development of researcher capability in the IoT's prioritised specialist areas of expertise, and takes place within a high quality research environment with appropriate laboratory or other space, equipment, and support infrastructure.

3.2.3 Research support infrastructure and systems

IoTs establish appropriate management and information systems and structures to direct and implement institutional research strategy, and to ensure a quality-driven postgraduate provision and research capability. A clear process for recruitment of researchers, including postgraduate students, is in place and is consistent with the Code of Conduct for Recruitment of Researchers. Induction and ongoing career development are also provided as critical supports.

Institutional systems are in place to manage and support applications for external funding to support research activities. Policies on Intellectual Property, Research Integrity, and Research Ethics are also developed as part of the general research infrastructure.

3.3 Researcher Formation and Postgraduate Programmes

IoTs are committed to supporting and promoting all aspects of the academic formation of postgraduate students and early-career researchers. Such aspects include the research project, taught modules, induction, personal development plan, transfer and progression between academic levels, and the engagement of individual researchers with relevant academic networks and the broader research community. Postgraduate research is carried out under the supervision and guidance of appropriately qualified members of academic staff of the institute or, where appropriate, the workplace, who are experienced in the research field involved.

3.3.1 Entitlements and responsibilities of research students

Clear Communication

Initial communication with research students provides information on research degree fees and regulations; sources of funding for grants/scholarships; arrangements for registration and expected term of enrolment; opportunities for teaching and external engagement and where to find general institute information relevant to their studies

Induction

Information/induction is also provided to research students at an early stage of the research programme on the objectives of the research project, and the opportunities for shaping the defined programme of study; the research student's general educational and developmental needs; the research student's responsibility for his/her personal professional development; the necessity of familiarising himself/herself with relevant institutional policies and regulations

(e.g. health and safety, Intellectual Property, ethics); the processes for monitoring progress including the need to maintain contact with supervisor(s) and prepare adequately for scheduled meetings.

Research Student Charter

A research students' charter is in place in each IoT which encompasses the entitlements and responsibilities in undertaking a postgraduate research degree.

3.3.2 Regulations for Research Degrees

IoTs publish clear regulations for their research degrees and these are accessible to all relevant stakeholders, including students, staff and examiners. They provide for entry requirements that are clear, transparent, applied in a consistent manner, and demonstrate equality of opportunity; support structures for research students at different levels of the institute (Department, School, Research Centre, etc.) or beyond the institute (regional cluster/transnational collaboration); arrangements for supervision of students (see below 3.3.3); procedures for monitoring and supporting research student progress; examination and assessment including thesis formats, role of peer-reviewed publications and other outputs, and oral examination; research integrity and ethics; and complaints and appeals processes.

The regulations also set out policy with regard to the registration of staff and governing body members as research students in an institute.

3.3.3 Supervision

IoTs appoint appropriately qualified supervisors or supervisory panels, who are capable of supporting research students and monitoring their progress. The graduate supervisory panel, which can operate within one institution or across institutions, consists of a minimum of a principal supervisor and at least one second supervisor. There is a clear process in place to ensuring the continuation of quality supervision in the event that a member of the supervisory panel leaves.

Supervisors are supported by a high quality research environment and appropriate support structures. Eligibility criteria for supervisors are published and may make provision for inputs from industry-based supervisors. IoTs provide formal supervisor training, based on national and international best practice. Information on the responsibilities of supervisors is published, is easily accessed, and directly communicated to both supervisor and research students. The effectiveness of supervision is evaluated on a regular basis. A clear process for addressing quality issues pertaining to postgraduate supervision is in place.

3.3.4 Assessment and progression

IoTs use agreed and published criteria for assessing all research degrees that are easily accessible by research students, supervisors, other relevant staff and examiners.

Guidelines and regulations are published pertaining to on-going progression reports; the format and submission of the research thesis; the format, preparation and conduct of the examination, with an oral examination being a mandatory requirement at doctorate level; satisfactory completion and assessment of taught modules and other structured learning; the selection and appointment of examiners; the communication of the outcome of the examination to the student; and the process for dealing with examinations where consensus cannot be reached by the examiners.

There are clear processes and structures in place to address breaches of regulations with regard to issues of research integrity and associated implications for progression.

Final assessment procedures are clear, transparent and implemented in a consistent, rigorous and fair manner. They are communicated clearly to research students, supervisors, and examiners ahead of the final assessment.

3.4 *Monitoring and evaluation of performance*

IoTs continually and formally evaluate their research degree provision, against internal and external benchmarks, including relevant international benchmarks. They use statistical information and other metrics as part of their quality assurance, including completion rates; completion times for full-time and part-time enrolment; independent regular progress reports from students and supervisors; and pass, referral, fail, and withdrawal rates.

IoTs also evaluate their performance in providing research degrees through analysis of feedback from students, industry collaborators, employers, funding agencies, project sponsors and external and internal examiners. Performance is also evaluated through the analysis of information on the destination and career paths of research graduates, and the impact of research outputs such as publications, patents, future grant applications etc.

4. Master's by research degree programmes: award standards and validation process

4.1 *General approach*

IoTs quality assure their masters by research degree programmes, and all of their research provision, in a holistic and integrated manner. The quality assurance policies and procedures used are part of a broad institutional infrastructure which supports or makes direct provision for:

- the linking of particular research degree programmes to research and more general institutional strategies, and to relevant national policies
- the formation of postgraduate students as work-ready graduates and/or early career researchers through structured research training
- the building of individual and institutional research capability in a collegial and stimulating environment

- the building of the necessary research infrastructure
- the maintenance of award standards.

Research degree programmes at NFQ Level 9 are validated in the context of this broad institutional infrastructure. IoTs validate in discipline areas where there is a sustainable capacity to provide relevant master's degree programmes.

4.2 Award standards

The learning outcomes of master's by research degree programmes in IoTs are consistent with the NFQ Award-type descriptor 'M', and the second cycle qualification descriptor of the Qualifications Framework of the European Higher Education Area (QF-EHEA).⁹ The programmes are structured to enable the attainment of the intended learning outcomes, and include:

- general and transferable skills training
- specialised training to foster a broad understanding of particular discipline areas, including research methods
- seminars and other activities to enable the dissemination and exchange of the outputs of research and scholarship and to foster peer review and quality assessment.

Master's by research degree programmes may be designed in consultation with business, industry, and other stakeholders and, where appropriate, in consultation or collaboration with other higher education institutions. They are normally of 1½ to 2 years duration (fulltime equivalent).

4.3 Validation process

All IoTs formally validate their master's by research degree programmes. Validation takes place at the disciplinary level. Each institution has a published institutional policy and process for the validation of disciplinary areas.

The following are the essential elements of the validation process:

- An application to validate a discipline area is made by an appropriate unit (school, department, research centre etc) to the Registrar
- Pre-set criteria for validation are established by the IoT. These embody the quality principles set out in section 3 above and provide for the evaluation of
 - the necessary link between research activity in a research unit and the institution's research strategy
 - the existing research capability/expertise of the research unit, and its growth trajectory
 - the sustainability of the research activity of the unit
 - institutional research supports and infrastructure.

⁹ *Determinations for the Outline National Framework fo Qualifications* (NQAI, 2003), p. 39, available at <http://www.nqai.ie/docs/publications/12.pdf> ; QF- EHEA is available at: http://www.ehea.info/Uploads/QF/050520_Framework_qualifications.pdf

- The applicant unit prepares a self-assessment report setting out how the pre-set criteria are or will be met.
- An expert panel is established by the Registrar, independent of the research unit, to evaluate the self-assessment report. The expert panel comprises an appropriate balance of senior researchers able to make national and international comparisons.
- The evaluation by the expert panel normally includes a site visit. The site visit and other elements of the process are organised by the Registrar and his/her office.
- The expert panel makes a recommendation to validate the discipline area or not. The expert panel may recommend that validation be granted subject to certain conditions.
- The recommendations of the expert panel are considered by Academic Council or an appropriate sub-committee of Academic Council. Final approval of the validation of a discipline area is granted by Academic Council.
- The reports and outcomes of the validation process are published.
- Validations of discipline areas are reviewed periodically and published.
- Information on validated discipline areas at Level 9 is maintained and published.

4.4 *Joint Validations*

IoTs may put in place arrangements with other IoTs to run single validation events where two or more institutions are seeking to validate Level 9 research programmes in the same discipline areas(s). In such cases, the collaborating institutions will establish a formal agreement setting out the process that will be followed. The process will be consistent with the validation process outlined in section 4.3.

5. Applications for an extension of DA to make awards at NFQ Level 9

An IoT may apply for an extension of DA to make awards at NFQ Level 9 in respect of all its own validated research degree programmes under QP.04, after its Academic Council confirms that it has policies and procedures in place that can support the quality assurance and validation of a research master's degree at Level 9 in accordance with these protocols. The Academic Council's attestation that it has the requisite policies in place demonstrates that it meets the criteria for extending DA to make awards at NFQ Level 9 in respect of all of its own validated research degree programmes.

QQI will extend DA following receipt of a formal request from an IoT that demonstrates that the criteria for extension have been met by the requesting Institute.