



TUS

**Technological University of the Shannon:
Midlands Midwest**

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**Framework for the Development of Professional Doctorates in the
Technological University of the Shannon: Midlands Midwest 2024 - 2026**



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1.0 Introduction and Background

The field of graduate level education demonstrates substantial expansion in the Technological University of the Shannon: Midlands, Midwest (TUS) since the initial foundation of a cross-campus Graduate School. Situated within the wider function of Research, Development and Innovation (RDI), the Graduate School has cross campus remit with two offices that are operational on the TUS Athlone and TUS Moylish, Limerick campuses respectively. At both institutional and school levels, TUS have significant plans for the continual expansion of doctoral education which encompasses the development of professional doctorate degrees (amongst other doctoral degree types). This document provides the framework for the development, delivery, operationalisation and governance of professional doctorate programmes in TUS: Midlands Midwest, contextualising the development and subsequent delivery of these degrees within international and national policy and global trends in Higher Education (HE) graduate education provision. Significantly, it maps the skills, graduate attributes and competencies to be attained by graduates, aspects of the operational profile and the structure and governance of professional doctorate degrees. Significantly, this document is informed by the Salzburg II Recommendations and the Salzburg Principles (European University Association (EUA), 2010) which represented some of the most large-scale reforms of doctoral education in the EU in the past two decades.

The remainder of this document is divided into six principal sections. The first section (1.1) maps the landscape for professional doctorate provision in Ireland while linking it to relevant international and European developments and the TUS Strategic Plan. Part 2 outlines the skills, principals and attributes to be engendered in professional doctorates at TUS informed by national and international policy guidance. Part 3 focuses on programme structure and Part 4 outlines some recommendations with regards to approval by professional bodies.

1.1 Mapping the Landscape of Professional Graduate Education in Ireland

In Ireland and globally, the provision of professional doctorates is a marked and relatively recent feature of HE landscapes. This is also evident in the expansion of professional doctorate provision across Ireland's HEIs and farther afield, including the UK and Europe. In the UK for example, the professional doctorate showed rapid development in the 2000s which coincided with increased academic and societal discussions about the ability of the traditional PhD degree to prepare graduates for the world of work (UKCGE, 2002, p. 7). While the PhD degree prepares candidates principally for academic careers, the professional doctorate prepares people for

highlevel working in particular professions, especially at strategic levels, in research and linking research to strategy (UKCGE, 2002, p. 15). However, substantial numbers of persons with professional doctorates also pursue academic careers. The Salzburg Recommendations, adopted by the European University Association (EUA) Council in 2010 reiterated three key messages which are central to the successful completion of doctoral study as follows:

- *“Doctoral education has a particular place in the European Research Area (ERA) and the European Higher Education Area (EHEA). It rests on the practice of research, which makes it fundamentally different from the first and second cycles.*
- *Doctoral candidates must be allowed independence and flexibility to grow and develop. Doctoral education is highly individual and based on original research. The path of progress of the individual is unique, in terms of the research project as well as in terms of the individual professional development.*
- *Doctoral education must be developed by autonomous and accountable institutions taking responsibility to cultivate the research mindset. Institutions need flexible regulation to create special structures and instruments and continue advancing European doctoral education” (EUACDE, 2019, p. 7).*

In Ireland, the *Towards a Future Higher Education Landscape* document (HEA, 2012) notes Ireland’s strong performance with regards to the attainment of tertiary-level qualifications in comparison to the OECD average particularly at undergraduate degree level (NFQ Level 8). However, the OECD review of doctoral education revealed that Ireland was significantly below both the EU and OECD averages with regards to NFQ Level 10 graduation rates, recommending that Ireland would essentially double the number of doctoral graduates (OECD cited in HEA, 2012, p. 2). Significantly, the *Towards a Future Higher Education Landscape* document reiterates the importance of professional doctorates as per below:

PhD provision is but one element of Level 10 education and training, and a growth in alternate means of Level 10 provision such as industrial/professional doctorates is expected to be reflected in the missions of some institutions and appropriately supported through research funding instruments (HEA, 2012, p. 8).

The Hunt Report (Department of Education and Skills, 2011) made a similar call to the OECD for the further expansion of doctoral education in Ireland, stating that this ‘is part of a strategy to build world class research teams, generate new knowledge and

new innovations, and provide all economic sectors with a supply of skilled and educated graduates' (p. 68). The Hunt Report further states that meeting the demand for doctoral graduates in industry has a '*a catalytic effect on the ability and willingness of diverse sectors of the economy to conduct research and development*' (ibid.). More recently, *Impact 2030: Ireland's Research and Innovation Strategy* (Department of Further, Higher and Higher Education, Research, Innovation and Science (DFHERIS) 2022) reiterates the importance of a talent pipeline of doctoral students to continue to grow Ireland's reputation in research internationally and the new *National Framework for Doctoral Education* (HEA, 2023) provides a robust structure for facilitating excellence, encouraging HEIs to work together for improved student experience and to maximise employability (HEA, 2023, p. 2). TUS has a strong record in terms of graduate employability and has a strong focus on student engagement, employability and work-based learning. The development of professional doctorates, which are oriented principally to persons who are already in professional employment who bring to bear (multidimensional) experiential knowledge on their learning, represents a significant learning pathway that is attractive to graduates and employers in the Midlands and Midwest regions and beyond.

Concomitantly, the Central Statistics Office (CSO) illuminates that doctoral education can be significantly expanded in Ireland; approximately 1.6% of graduations in 2016 (590) across all Irish HEIs were at Doctoral level, NFQ Level 10 (CSO, 2023). Nationally, this figure dipped again between 2016 and 2019. At the same time, however PhD enrolments have risen by 26% from 2016 to 2022/2023 as per recent figures from the HEA as reported by O'Shea (2023). While it is likely that this will convert into higher numbers of NFQ Level 10 graduates over the next five years (e.g. up to and including 2028), the expansion of professional doctorates nationally and internationally represents an important opportunity for TUS (and Higher Education Institutes (HEIs) generally) to further build on their research successes and continue to impact positively upon regional, national and international societies and economies. As per recent figures, there were approximately 11000 PhD and research Masters students in Ireland in 2023, about 27% of whom are non-EU students (Harris, cited in Houses of the Oireachtas, 30 March 2023). Professional doctorates represent an important pathway to target international and national markets.

1.2 Doctoral Education in the TUS Strategic Plan

The development of professional doctorate programmes further aligns with the TUS Strategic Plan and specifically with Strategic Priority 2: Research. The overall aim of Strategic Priority 2 is to *'deliver impactful applied research, growing the research community, engaging in next generation thinking and tackling issues at a regional, national and global level'* (TUS, 2022, p. 20). Specifically, the key objectives of this strategic priority are to:

- Drive increased participation in research that leads to growth in academic and student researchers;
- Embed a whole of institution research culture that strengthens alignment between research, teaching and learning, and support functions;
- Create a connected community of research-active staff, students and stakeholders underpinned by structures that promote creativity and drive innovation;
- Build capacity through RUN-EU and wider international partnerships and collaborations to target specific research areas that support employment and address societal needs (ibid., p. 26).

The expected outcome of Strategic Priority 2 is as follows; *'Our applied research will generate new knowledge and provide impactful solutions that address regional, national and global challenges and opportunities'* (p. 26). The development of professional doctorates represents a significant educational prospect towards attaining this outcome and the key objectives as per above. Furthermore, as the TUS aims to expand the number of graduate students who are registered on research degree programmes to 7% of the total student population in 2026, the provision of professional doctorate degrees can significantly assist in reaching this target. Moreover, such degrees can also be of benefit for the TU sector and the attainment of 65% of staff with an NFQ Level 10 qualification within 10 years of designation (HEA, 2012, p. 16). RUN – EU also offers significant opportunities for development of professional doctorate programmes run entirely online or with hybrid/face-to-face offerings.

2.0 Professional Doctorates: Principals, Skills and Attributes

There are various definitions of professional doctorates but it is defined here as an NFQ Level 10 research degree oriented primarily (but not exclusively) to professionals in particular disciplinary fields which encompasses structured modules and interrelated research components including a dissertation, which is subsequently

examined at NFQ Level 10. This conceptualisation is also informed by other prevailing definitions of professional doctorates including:

A Professional Doctorate is a programme of advanced study and research which, whilst satisfying the University criteria for the award of a doctorate, is designed to meet the specific needs of a professional group external to the University, and which develops the capability of individuals to work within a professional context

(Professor Steve Hoddell, cited in UK Council for Graduate Education (UKCGE) Professional Doctorates (2002) in UKCGE (2024).

A professional doctorate is the equivalent of a PhD degree, focusing on the development of advanced level research skills whilst remaining oriented to professional practice in a distinct area/combination of complementary areas. Several types of professional doctorate qualifications currently available in Ireland include (amongst others):

- Doctorate in Professional Studies (D.Prof.)
- Professional Doctorate in Education (D.Ed.)
- Professional Doctorate in Healthcare Practice
- Professional Doctorate in Engineering (PDEng)
- Professional Doctorate in Human Performance and Innovation.

Internationally, there has also been significant institutional and government investment in professional doctorates. In the UK, for example, several universities now offer Doctor of Business Administration (DBA) degrees by distance and online provision (as well as face-to-face). There are also professional doctorates in areas such as clinical psychology, counselling, work-based learning and education at several universities.

2.1 Key Policy Framework on Professional Doctorates: The National Framework for Doctoral Education (NFDE)

The definition of professional doctorates provided in this framework is informed strongly by the *National Framework for Doctoral Education* (NFDE) (HEA, 2023, p. 6). As per the HEA, it is essential that professional doctorate provision engenders the following statement below.

Doctoral education programmes in Ireland educate and develop researchers to the highest skills levels so that they become creative, critical and independent individuals who will advance the boundaries of research. Through the process of doctoral education, the student is provided with opportunities to develop a

range of skills to a very advanced level. These skills relate both to the research process itself and to broader professional training and development.

Furthermore, the nine framework principles (HEA et al., 2023, p. 3) should inform the design and development of professional doctorates which encompasses the following:

- “The core of doctoral education is deep engagement with a question, problem or hypothesis at the frontier of knowledge, and advancement of this frontier under the guidance of expert and committed supervision. to be awarded a doctoral degree, the candidate must have made an original contribution to knowledge.
- Successful completion and examination of the research thesis, comprising work of publishable quality, is the basis for the award of the doctoral degree. The thesis can be presented in a variety of formats.
- Doctoral education increases significantly students' depth and breadth of knowledge of their discipline and develops their expertise in research methodology which is applicable to both a specific project and a wider context. It provides a high-quality research experience, training (including a formalised integrated programme of personal and professional development) and output consistent with international norms and best practice.
- Doctoral education is conducted in a learning community where sufficient critical mass of internationally recognised research activity exists to allow students to gain access to a training programme of appropriate breadth and to interact with peers engaged in their field, nationally and internationally.
- Recognising that each doctorate is unique, doctoral education is also flexible so as to support students within individual disciplines or within interdisciplinary or multidisciplinary groups.
- Doctoral education is conducted in a research environment with a high degree of academic quality and infrastructure and where it is consistent with institutional strategies. Academic quality includes quality supervision and training for supervisors.
- The admission of doctoral students takes into account preparedness of the applicant, the availability of qualified, competent and accessible supervision and the resources necessary to conduct the research.
- Doctoral education is supported by established structures with: - supervision by a principal supervisor(s), normally with a supporting panel approved by the institution; - formal monitoring of progress to completion against published criteria, supported by institutional arrangements; - clearly defined examination

processes, involving external examiners, assessment criteria and declared outcomes.

- A robust quality assurance system underpins all doctoral provision.

Similarly, the advancement of knowledge, innovation, critical thinking and skills development is also embedded in the following statement from the NFDE (HEA et al., 2023, p. 4) as that which should be embedded at the core of professional doctorate provision (Ibid., p. 4)

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

Significantly, the NFDE (HEA et al., 2023, p. 4) also reiterates that the following principals should be embedded in all doctoral-level education:

- Original contribution to knowledge
- Institutional responsibility
- Quality of learning environment
- Learning experience
- Disciplinary diversity.

Furthermore, the NFDE (HEA, 2023, p. 4) states that the skills and attributes listed below, as per the *IUA PhD Graduates' Skills Statement*, are educational objectives for all graduates of doctoral programmes in Ireland which also includes professional doctorates;

- Research skills;
- Ethics and social understanding;
- Communication skills;
- Personal effectiveness transferable skills;
- Team-working and leadership skills;
- Communication skills;
- Entrepreneurship and innovation skills.

2.2 The TUS Postgraduate Research Regulations 2023-2026

Commensurate with the *TUS Postgraduate Research Regulations 2023-2026*, students who are completing professional doctorate programmes will attain the

Criteria for Award of Doctor of Philosophy (NFQ Level 10) as engendered in the following 2.4.2 Criteria for Award of Doctor of Philosophy (p. 15); namely, students will have conducted original, independent research; they will have obtained broad knowledge of a field of study, comprehensive knowledge of the topic on which they are focused and make novel contributions to knowledge as per below:

The Doctor of Philosophy award is conferred for advanced levels of achievement, in which the research student demonstrates outstanding scholarship and ability. The research student must demonstrate that they have conducted original, independent research, have a broad knowledge of a particular field of study, a comprehensive knowledge of the specialist area upon which their research is focused, and have made a novel contribution to knowledge in their field. Required taught modules must also be completed.

As per the QQI National Framework for Doctoral Education (HEA, 2023) and the *TUS Postgraduate Research Regulations 2023-2026*, the learning outcomes of professional doctorate programmes must fulfil the following criteria:

Learning outcomes at this level relate to the discovery and development of new knowledge and skills and delivering findings at the frontiers of knowledge and application. Further outcomes at this level relate to specialist skills and transferable skills required for managing such as the abilities to critique and develop organisational structures and initiate change.

As per current Doctor of Philosophy (PhD) programme offerings in TUS, professional doctorates should correspond to and operationalise Table 2, TUS Adopted Award Standard on p. 16 of the *TUS Postgraduate Research Regulations 2023-2026* with regards to the following:

- Knowledge-breadth
- Knowledge-kind
- Know-how and skill range
- Know – how and skill selectivity
- Competence – context, role, learning to learn and classification.

Significantly, professional doctorate programmes should operationalise the NFQ Grid of Level Indicators as per this link with regards to knowledge, know-how and skills and competence as appropriate to NFQ Level 10 degrees [NFQ Grid of Level Indicators | Quality and Qualifications Ireland \(qqi.ie\)](https://www.qqi.ie/quality-and-qualifications-ireland)

3.0 Programme Structure

Professional doctorates engender taught modules as well as operationalising significant (interlinked) research components. All modules have ECTS credits. Appropriate prior professional experience as Recognition of Prior Learning (RPL) may also be accepted in lieu of some modules but this is generally taken on a case-by-case basis.

The main features of Professional Doctorate programmes are as follows:

- The duration of professional doctorate programme is three to four years fulltime; part-time options of up to six years are also available;
- Entry requirements tend to vary but are usually a Level 9 Master's degree (sometimes with professional experience);
- The first two years of the programme usually engenders primarily taught modules on topics that are relevant to the field of study. However, this also encompasses modules focusing on developing research skills and in some cases, a minor dissertation can be completed at the end of two years.
- Not all professional doctorates have exit awards after the first two years but some do (e.g. leads to a Master's degree after two years). Programmes can also engender exit awards after successful completion of the first two years of the programme (e.g. M.Sc., MA).
- While the first two years of professional doctorate programmes are usually based around structured modules, the latter two years should focus primarily on producing a research dissertation. The length of the dissertation shows variance between programmes but is (usually) approximately 50,000 words in length.
- Professional doctorates are delivered in a range of formats; online, blended/hybrid and face-to-face;
- Programmes could be based in TUS solely or specific modules/programmes can be developed in consultation/partnership with external institutions including RUN-EU partners;
- TUS policies and procedures for RPL may be drawn upon to determine some criteria for admission and award;
- Each professional doctorate programme should have a dedicated programme board who have main responsibility for the operationalisation of the programme, decisions pertaining to admission, progression and awards;
- Assessment can take a wide variety of formats appropriate to specific modules including portfolios, e-portfolios, essays, examinations, case studies, systematic reviews, presentations, annotated bibliographies, diaries etc.
- The final dissertation for professional doctorate programmes shall be assessed by an oral *viva voce* examination.

3.1 Programme Admission

For professional doctorates, decisions about admissions are usually made in relation to an application process which encompasses an application form, research proposal (approximately 3000 words) and an interview. This is comparable to other professional doctorate degrees in Ireland and elsewhere.

- To ensure quality and streamlining across the TUS, dedicated quality assurance (QA) processes for assessing the quality of applications should be devised by individual departments and schools across all TUS campuses in conjunction with the Graduate School.
- The TUS policy and procedures for RPL may be applied in relation to eligibility for admission.
- Individual programme boards should set the minimum application criteria including relevant professional experience, during internal and external validation processes. This recognises the variance in entry criteria across universities nationally and internationally in professional doctoral programmes, and discipline-specific requirements.
- In determining specific requirements for admission, programme boards should be cognisant that some professional doctorates also require a minimum amount of industry/professional experience (typically up to three years or more). Individual programmes should have a clear justification for admission criteria and in the case of professional experience, the minimum amount of experience that would be considered should be clearly stipulated.
- Where English is not the first language of applicants (and English is the language of instruction) evidence of competence in English should be supplied. Minimum requirements for entry (and any desirable requirements) should be posted on the TUS website and relevant documentation.

3.2 Programme Structure

All professional doctorate programmes should operationalise high quality provision in terms of module development and delivery as per national and international policy.

The principals from the *NFDE* (HEA, 2023) should be embedded in all aspects of programme design and delivery, in individual taught modules and in the provision of appropriate learning environments;

- The skills and attributes as per the *NFDE* (HEA, 2023) should be intrinsic to all professional doctorates offered;
- Modules offered on individual programmes should be appropriate and relevant to the programme on offer;

- Professional doctorate programmes should also adopt the TUS Adopted Award Standard on p. 16 of the *TUS Postgraduate Research Regulations 2023-2026*.
- Modules should be designed and delivered at NFQ Level 10. In some circumstances, modules offered at NFQ Level 9 (or equivalent) could be considered. However, in these circumstances, assessment criteria and processes, learning outcomes and course materials provided to Professional Doctorate candidates should meet NFQ Level 10 requirements.
- Industry mentors who have significant professional expertise in specific disciplines/professions are significant for these programmes.

3.3 Training and Development

Specific training in professional doctorate provision shall be provided by the TUS Graduate School to support individual schools and departments. This shall be developed in conjunction with the TUS Quality Office. The Graduate School will also provide a range of training in supports (in conjunction with other Faculties, Departments, Units) to supervisors, schools and professional doctorate students. This includes the following (please note: this is not an exhaustive list).

- Research supervision
- Research leadership
- Project management
- Equality, Diversity and Inclusion (EDI)
- Advances in research methods
- Doing employment-related research and the principals of work-integrated learning (WIL)
- Transdisciplinary and interdisciplinary research.

3.4 Regulatory Framework

The regulatory framework of all professional doctorate programmes is the *TUS Postgraduate Regulations 2023-2026*. In their current form, the following aspects of these regulations link strongly to the provision of professional doctorate degrees. However, some regulatory changes shall be required within the current regulations to incorporate professional doctorate programmes:

- Principles, Governance and Policies
- Governance of Research Degree Provision (especially parts 1.2.1 to 1.2.3) Qualification requirements
- Supervision
- Studentship
- Progression, Confirmation and Transfer

- Examination
- Reviews and disputes.

Essentially, the following processes and practices as per the current regulatory *acquis* can be operationalised using the current processes and structures via the Faculty Research Committees (FRCs), the Graduate School and the Postgraduate Studies and Research Subcommittee. This means that applications for the approval of external and internal examiners, supervisors etc. shall be approved by FRCs in conjunction with the Graduate School and the Postgraduate Studies and Research Subcommittee.

The following processes can be incorporated into this structure:

- The approval of external examiners (viva voce)
- The approval of internal examiners (viva voce)
- Approval of supervisors, co-supervisors and mentor supervisors
- Change of supervision applications
- Appointments of independent chairs for transfer viva exams and final viva examinations.

The Graduate School shall work with individual faculties to develop appropriate forms that are needed for professional doctorates as per above. The compendium of forms developed by the Graduate School in 2023/2024 can be easily adapted to the above functions. Administrative responsibility for organising *viva voce* examinations shall remain with the Graduate School.

Other decisions about programme admission and module content, examinations etc should be made by individual programme boards in conjunction with the Registrar, in consultation with the Graduate School and should be in line with Academic Council and TUS regulations.

3.5 Induction and use of TUS Facilities/Services

- All students registered on professional doctorates must be provided with highquality induction on entry to programmes. This can be offered face-to-face, online or using a hybrid model depending on the programme structure. This can be offered by individual faculties, the Graduate School and/or faculties and the Graduate School working together.
- All students who are registered on professional doctorate programmes shall be entitled to access TUS facilities and services including the library, counselling and other student supports as well as the Virtual Learning Environment (VLE).

This applies regardless of the programme delivery model (e.g. online, hybrid, face-to-face).

- Students on professional doctoral programmes shall also be eligible to enrol in TUS research events including summer schools, winter schools, conferences or Short Advanced Programmes (SAPs) that are open to other doctoral candidates in TUS. Note: this is not an exhaustive list.

3.6 Programme Administration

Professional doctorate programmes can be administered primarily within specific faculties. Looking at the structure of professional doctorates across countries and universities, administrative structure varies depending on resources. In some universities, which are larger, they are administered solely within faculties. However, as TUS has a Graduate School and there are constraints in resources, programmes could be administered is as follows:

- Admissions and entry administered at faculty level
- Decisions on progression made at faculty level
- Modules and all examinations and assessments for first two years of the programme administered by Faculty (save for research project which could also be co-administered or have input from the Graduate School, particularly if the work presented was to be developed later as the basis for the final thesis)
- Research components in years III and IV (e.g. supervision, approval of examiners) to be administered by the Graduate School in conjunction with individual programme boards and FRCs. In this case, FRCs and boards have decision-making powers with regards to external examiners, internal examiners and student progression etc which are then passed to the Graduate School and Postgraduate Studies and Research Subcommittee for processing and oversight.
- This reflects the current process of approvals that operate in FRCs and the TUS Graduate School.
- Note: while professional doctorates have distinct taught components, they are also research degrees. This qualification is only awarded when the thesis makes a significant contribution to knowledge, and all other requirements are fulfilled as per NFQ Level 10 Grid of Level Indicators.

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