

CHAPTER 2

Programme Structure and Credits

2.1 Introduction

There are two main elements to the research programmes at TU Dublin:

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| Element 1 | Original Research |
| Element 2 | Professional Skills Development |

This chapter describes the programme structure and credits, using the European Credit Transfer System (ECTS). Annual progression boards consider the results of both annual evaluations of research (element 1) and professional skills development (element 2) and will decide on the progression of each student to the following year. However, the basis for the award of all research degrees at TU Dublin is successful completion and examination of the research thesis, comprising work of publishable quality.

2.2 Element 1 - Original Research

Each individual student follows their own research path, the core of which must be a coherent body of original research, at the end of which, the candidate must submit a comprehensive thesis for examination. The basis for the award of all research degrees at TU Dublin is successful completion and examination of the research thesis, comprising work of publishable quality. In addition PhD, DMus and MPhil candidates must complete a *viva voce* examination following submission of the thesis.

Individual students may require training in discipline specific skills, in order to implement their research work-programme. These training requirements are electives and are identified through the research planning process described in section 2.2.1. The supervisor(s) will work with the graduate student to determine how best to address their training needs. This training may be formal modules provided by TU Dublin or other Universities or non-formal provided by the supervisors or other experts. Such training in discipline specific skills is unique to each individual student and their project and is an inherent part of any PhD. As such, this training is included in Element 1 of research programmes and is not accredited separately. If individual students wish for this training to be included in their record, they should complete the PGR 6 form, with the training details. The form should be returned to the Graduate Research School Office, well in advance of any training event and the Graduate Research School Office, will liaise with the module provider and ensure that all discipline specific training successfully completed by the student is noted on their record in the Student Information System.

Attendance and oral/poster presentations at national and international conferences and dissemination of research results in peer-reviewed journals, books and/or other media are strongly encouraged. These components are also included in Element 1 of research programmes and are therefore not accredited separately.

2.2.1 Research and Professional Development Plan

The research teams, inclusive of the graduate student and their supervisors, meet initially to discuss the research question(s) and methodologies to be used. The team also assesses any skills training the graduate research student may require in order to effectively implement the methodologies and answer the identified research question(s), and take into account the acquisition of particular skills at appropriate times. The skills training should also take account of any future professional needs and career plan of the student.

Following the initial meeting, the research team develop the research programme with reference to any project plan which may have been developed as part of a funding application, through the mechanism of a research and professional development plan (RPDP). The RPDP includes

- Current literature and state-of-the-art
- How your project will advance state-of-the-art and contribute new knowledge
- Aims, objectives and central research question
- Details of research design and methodologies for the project duration
- Schedule of work-packages/methodologies including measurable outcomes, milestones and deliverables with time-lines
- Risks that may prevent or delay deliverables and risk mitigation plan
- Data Management Plan
- Research Impact Statement
- Plans for dissemination of results,
- Possible lay-out of final thesis.

The Research and Professional Develop Plan (RPDP) [Form PGR 2A] should be completed and kept under constant review.

2.2.2 Annual Evaluations

For Stage 1 and Stage 3 students, Element 1 also incorporates annual evaluations which are discussed in detail in Chapter 3.¹ Briefly, the Research and Professional Develop Plan (RPDP) [Form PGR 2A] should be reviewed annually by the student in consultation with the supervisor(s). In addition, the student is required to complete an annual progress report [Form PGR 2B] and attend an annual evaluation event. Credits (ECTs) are not applied to the Research (Element 1), including the annual evaluations, of the programme.

For Stage 2 students, Element 1 also incorporates transfer or confirmation examinations, which are discussed in detail in Chapter 3 and summarised below in section 2.2.3. Credits (ECTs) are not applied to the Research (Element 1), including transfer/confirmation examinations, of the programme.

2.2.3 Transfer/Confirmation Examinations

Before the end of Stage 2, all PhD/DMus students must undertake a confirmation examination, which is discussed in detail in Chapter 3. Students on the PhD and DMus programmes can also transfer between the programmes in a process described in Chapter 3.

Students on the MPhil programme can transfer to the PhD/DMus programme before the end of Stage 2, in a process similar to the confirmation examination. Students on the PgDip(Res) programme can similarly transfer to the MPhil programme.

2.3 Element 2 - Professional Skills Development

Research programmes at TU Dublin develop creative, critical and independent individuals who advance the boundaries of research. Graduate research students are provided with opportunities to develop a range of skills, including both research and professional skills. The National Framework for Doctoral Education endorses the following skills and attributes, and these are also key educational objectives for all graduates of TU Dublin research programmes:

¹ Stage 1 equates to year 1 of a full-time programme and years 1 and 2 of a part-time programme. Stage 2 equates to year 2 of a full-time programme and years 3 and 4 of a part-time programme, and so on.

- research skills and awareness;
- ethics and social understanding;
- communication skills;
- personal effectiveness/development;
- team-working and leadership;
- career management;
- entrepreneurship and innovation

These skills are developed by research students by completion of Element 1 and in particular, by completion of modules in Element 2. Under Element 2, there are 5 modules, namely,

Module 1	Research Integrity	5 ECTS
Module 2	Starting Your Research	5 ECTS
Module 3	Progressing Your Research	5 ECTS
Module 4	Completing Your Research	5 ECTS
Module 5	Work-based Learning	5 ECTS

Professional Doctorate students should consult the relevant Student Handbook for the Element 2 - Professional Skills Development requirements delivered in Years 1 and 2. All Professional Doctorate students must complete Module 1 Research Integrity and all discipline, professional practice and research skills modules required for their award.

2.3.1 Training Events and Indicative Calendars

Training in Research Integrity (RI) is compulsory for all research students and the module is approved for 5 ECTS.

Professional Doctorate students should consult the relevant Student Handbook for the training events and indicative calendars. A blended mode of delivery is employed for Professional Doctorate training, where there is a pre-planned mix of in-person on-campus and online contexts.

Additional training in professional skills development is delivered to each graduate research student at TU Dublin in a 1 week intensive training block, delivered on three occasions each year. An indicative calendar is given below.

Date	Module 1 - Research Integrity 5 ECTS	Module 2 - Starting your Research 5 ECTS	Module 3 - Progressing your Research 5 ECTS	Module 4 - Completing your Research5 ECTS	Module 5, Work based Learning 5 ECTS
Monday	Induction for all students				
	Research Integrity				Work-based Learning for employment-based students
Tuesday		Starting your Research: Research Design & Methods	Open Research Agenda	National Development Plans, European Missions and UN SDGs	
		Parallel Workshops on Qualitative, Quantitative, Mixed Research Methods.	Panel Discussion on Open Research	Research Impact	
Wednesday		Data Analysis & Data Visualisation	Information Retrieval	Thesis Preparation	
				Panel Discussion; Preparing for Your Viva Voce	
Thursday		National Development Plans, European Missions and UN SDGs	Communication and Writing Skills	Entrepreneurial Activities	
			Networking		
			Getting Published		
Friday		Project Management	Intellectual Property in Research	Career Planning	
		Data Management			

Students attend sessions appropriate to their stage of the programme. For example, new students attend induction and events providing introductions to research methodologies, while Stage 3 students are provided with training to prepare for thesis submission and examination.

Students may be assigned to discipline specific groups depending on the training topic. For example, all Stage 1 students will be provided with a general introduction to Research Methods, but may be divided into 3 groups for sessions on Qualitative or Quantitative or Mixed Research Methods. Similarly, all Stage 2 students will participate in a session devoted to disseminating research, but may be divided into 2 groups for sessions on Getting Published in 1. The Arts and Social Sciences and 2. Sciences and Engineering.

Group Activities are designed to broaden the skills of research students and include interdisciplinary, teams working on use-inspired, real-world challenges.

2.3.2 Credit Requirements

Modules for each stage are delivered over five 6 hour days (30 hours), with additional online training and self-directed learning (70 hours) and therefore each is approved for 5 ECTS. The minimum ECTS for element 2 is as follows:

For PhD/DMus programmes: 20 ECTS (i.e. completion of Modules 1-4).

For MPhil programme: 10 ECTS (i.e. completion of Modules 1-2).

For PgDip(Res) programme: 5 ECTS (i.e. completion of Module 1).

For Professional Doctorate programmes: see Student Handbook.

Additional training and therefore ECTS may be required for different funded programmes, e.g. SFI CRTs.

Only two attempts at the professional development training are permitted, and non-attendance will be considered as an unsuccessful attempt. A student may only defer attendance at professional development training to the next available session.

A student must have achieved the required ECTS credits for professional development before submitting their thesis for examination.

RPL may be considered and is described in detail in section 1.4.

Professional development training may be replaced, whole or in part, with approved training delivered at other HEIs and initiatives elsewhere, such as the National CRTs or International MSCAs. All replacement training should be at an advanced level and include some form of assessment. The student must show that the learning outcomes for professional development training described in section 2.3.1 above, can be met through the proposed replacement and should complete the application for approval for replacement training (PGR 6 form). The form should be returned to the Graduate Research School Office, well in advance of any training event and application for retrospective approval will not be considered.

2.3.3 Module Boards

The Graduate Research School Office is responsible for organising the module board meetings for the professional development training to consider the assessment results for each student. Module boards will take place in February, July and November each year. Module Boards will be chaired by the Head of the Graduate Research School and all lecturers involved in delivering the training weeks and the Faculty Heads of Research will be in attendance. The Head of the Graduate Research School will issue results to all students using the Student Information system (Banner).

Module Boards for discipline specific modules are organised by the relevant discipline school. The outcomes of these module boards for any graduate research student will be forwarded to the Graduate Research School for inclusion in their student record.

2.3.4 Timetables

Research students are assigned to different blocks, depending on their date of registration. An indicative timetable for programme activities, depending on the registration dates is given below. Dates are subject to change and are confirmed annually online and in the student handbook.

