

## DOCTOR OF SCIENCE

## NFQ LEVEL 10

A PhD from LYIT is a globally recognised postgraduate academic degree awarded to a candidate who has submitted a thesis or dissertation, based on extensive and original research in their chosen field. In most countries a PhD is the highest level of degree a student can achieve. Normally a PhD involves three to four years of full-time study in which the student completes a substantial piece of original research.

Many students who pursue a PhD, do so because they are passionate about a specific subject and want to use their research time to make important discoveries within that field. One of the great things about your PhD is that you will be able to conduct your own research.

The best reasons to do a PhD are:

- You can make an original contribution to knowledge in your field.
- It may help your long-term career goals.
- You can work in an area that is personally interesting and enjoyable.
- It's an opportunity to demonstrate your intellectual potential.

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. 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. LYIT provide 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. A PhD is a diverse and varied qualification with many different components:

- Carrying out a literature review (a survey of current scholarship in your field).
- Conducting original research and collecting your results.
- Producing a thesis that presents your conclusions.
- Writing up your thesis and submitting it as a dissertation.
- Defending your thesis in an oral viva voce exam.

A PhD at LYIT will develop key skills and attributes as per the key educational objectives for all graduates of Irish doctoral programmes:

Research skills and awareness:

- Ethics and social understanding
- Communication skills
- Personal effectiveness/development
- Team-working and leadership
- Career management
- Entrepreneurship and innovation

Our PhD students will also develop the following skills set as part of their research programme:

- Analysis and problem solving
- Project management and organisation
- Research and management information
- Self-management

They will also gain research skills and techniques such as:

- Recognising research problems;
- Critical thinking
- Knowledge of current work in their field
- Research methodology
- Critical reviewing
- Documenting and reporting

As part of LYIT's structured PhD programme of their research studies students will complete 30 credits in total of taught modules including a Certificate in **Research Practice and Professional Development** (20 credits for PhD) which will cover topics such as:

- Introduction to Research Practice
- Qualitative Research Practice
- Quantitative Research Practice
- Ethical Issues in Research
- Legal & Enterprise Issues in Research
- Professional Development & Leadership Skills
- Academic writing: dissertation writing and writing for publication.

In addition to this students will choose additional electives from our broad range of taught masters modules with the appropriate computing discipline in order to meet the 30 credit requirement.

The course will be available to applicants who meet one of the following criteria:

- An Honours Degree in Computing with first or second-class honours or an equivalent qualification.
- A level-8 conversion style Higher Diploma in Computing with Merit 2 or higher.
- Level 7 Degree graduates in Computing with at least 3 years relevant work experience.
- Candidates who do not have an Honours degree but have significant relevant experience may also be eligible for consideration via Recognition of Prior Learning (RPL)