



Waterford Institute *of* Technology

INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

POSTGRADUATE

MSc in Computing (Communications Software)

LEVEL **9**

Department of Computing, Mathematics and Physics



The MSc in Computing (Communications Software) aims to produce graduates with knowledge, skills and expertise in Communications Software Development. This Masters has been successfully running since 2005 producing graduates of the highest calibre, to meet the growing demands of the Communications Software Industry.

MSc in Computing (Communications Software)

Course Outline

This taught MSc in Computing (Communications Software) has been successfully running since 2005 in WIT, producing graduates of the highest calibre to meet the growing demands of the Communications Software industry. The Information and Communications Technology (ICT) sector plays a significant role in Ireland, comprising of more than one thousand organisations ranging from large multinationals such as Google and Cisco, down to start-up companies. The taught MSc programme has been developed within the Department of Computing, Maths & Physics in WIT with close collaboration with the TSSG (Telecommunications Software & Systems Group) research group and is offered as a one-year full-time or two years part-time course. These flexible offerings make the course particularly attractive to those graduates wanting to upskill and keep up to date with the latest developments in the ICT software sector.

Specifically, the course aims to produce graduates who can:

- Reason and problem-solve to a high level in the context of communications software technology and its role in business, industry and research
- Participate constructively in the strategic development of new communications technologies
- Participate in the development of high-quality communications software products
- Undertake research based projects for industry, providing effective advice and leadership where required
- Manage technology based projects that require the handling of innovation and change in dynamic environments

Programme Structure

Semester 1 (Sep - Jan)	Semester 2 (Feb - May)	Semester 3 (Jun - Sep)
Communications Infrastructure & Security Agile Software Development Research Methods and Dissertation Proposal Choose one elective Relational Persistence - elective Dynamic User Interface Development - elective Mobile Application Development - elective	Design Patterns Communications Services Management Interim Dissertation Report Choose one elective Enterprise Component Development - elective Graph Theory & Optimisation - elective	Dissertation

Students must successfully complete 6 taught modules, the Research Methods module and a Dissertation. Those students who only complete the taught modules may be awarded a Postgraduate Diploma in Computing.

Career Opportunities

Graduates of this course will be well-equipped for employment in software development, system and network management and research throughout the ICT sector. This sector plays a very significant role in Ireland and is made up of more than a thousand organisations, ranging from large multinational corporations to small start-up ventures. Almost all leading global players in the industry have a large presence in Ireland (e.g. Google, IBM, Intel, Apple, Microsoft, Ericsson). The bulk of this activity is communications-related and includes the development and management of applications and services as well as the underlying telecommunications infrastructure. These applications and services are generally Internet-based and increasingly targeted at mobile devices.

A graduate of this course will also be well equipped to pursue a research-oriented career in academia or industry.

TSSG

This MSc programme is closely linked to the highly successful Telecommunications Software & Systems Group (TSSG) at WIT. The TSSG was founded in 1996 within the Department of Computing, Mathematics & Physics at WIT and has grown to be one of the leading communications software research centres in Europe. The TSSG is entirely self-financing and competes successfully for funding at national and international level, and has won the the largest share of European FP6 and FP7 funding in Ireland. Total funding to date has amounted to more than €40 million and there are more than 30 currently active projects. The TSSG ranks as one of the top 10 research institutes in the EU engaged in Future Internet research. For further information see <http://www.tssg.org>

Entry Details

Entry Requirements

Students wishing to apply for this programme will normally require an honours degree in Computing or equivalent

The number of places available on the course will be limited. Therefore an interview process may be required in the student selection procedure.

International students are required to meet the WIT postgraduate TOEFL (600)/IELTS (6.5) English Language requirement standard.

Fees

For information on fees please visit our web page at www.wit.ie/pg

Contacts

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