



Waterford Institute *of* Technology

INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

POSTGRADUATE

Master of Science in Innovative Technology Engineering

Department of Engineering Technology

LEVEL **9**

WINNER

Postgradireland
Engineering
Postgraduate
Course of the
Year 2011



The Master of Science in Innovative Technology Engineering degree aims to produce graduates with strong skills in critical thinking and with a creative attitude necessary to instigate future developments in the field of Engineering Technology. The student will attain an academic mastery in their field of specialisation while developing a broad knowledge of other related fields and how these converge.

Master of Science in Innovative Technology Engineering

Course Outline

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The student will embark on a programme that will assess and analyse a number of emerging technologies and the developing potential for the convergence of these technologies. The course aims to prepare students for a rewarding career in industry or academic research. In addition, the course will facilitate the development of a set of personal and professional attributes that will allow them greater flexibility in the development of their own career options. The programme is designed to develop the student's knowledge and skills in strategies for innovation management, product design and development and optimum routes to market. The student will also carry out postgraduate level research of industrial relevance in selected topic areas.

The Masters degree requires successful completion of six mandatory modules and four out of eight elective modules. The student must also complete an applied programme consisting of a Research Dissertation and an Industrial Research seminar series.

Programme Structure

The programme is delivered in a modular format as follows:

Semester 1 (Sep - Dec)	Semester 2 (Jan - Apr)	Semester 3 (May - Aug)
Strategic Technological Innovation Nanotechnology Biomedical Science Industrial Research I Quality Management and Regulatory Affairs (elective) Cognitive Technologies (elective) Control Engineering (elective) Mechanics of Materials (elective)	Novel Materials, Properties and Exploitation Convergent Technologies for Bio-Medical & Electro-Mechanical Applications Green Technology and Alternative Energy Sources Industrial Research 2 Product Design & Development (elective) Technology Management (elective) New Product Development Strategies (elective) Entrepreneurship (elective)	Dissertation

Career Opportunities

Career opportunities for graduates of this programme can be found in the Medical Devices, Pharmaceutical, Green Technology, Information and Communications Technology, New Business Development and Academic Research sectors.

Typical job functions include Design Engineer, Research Engineer, Project Engineer, Project Manager, Technical Manager, New Technologies Manager, New Product Development Manager, New Business Venture consultant and many others.

Entry Details

Students wishing to apply for this course will normally require a second class honours degree or equivalent. The course is ideally suited for graduates of engineering programmes such as electronic, mechanical, chemical, manufacturing or materials engineering. International students are required to meet the WIT postgraduate TOEFL (600)/IELTS (6.5) English Language requirement standard. Students from other associated engineering and science disciplines are welcome to apply. The programme is available in both full-time and part-time modes.

Fees

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

www.wit.ie

Contacts

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