

MSC (TECHNOLOGY MANAGEMENT)

Overview

NFQ Level 9, Major Award

(Joint Degree between University College Cork and the University of Galway)

The MSc in Technology Management is a part-time distance education programme running over 24 months from the date of first registration for the programme.

The programme is delivered part-time over four semesters on a distance-learning basis and incorporates a combination of self-instructional printed materials (i.e. student guide, printed course modules), in addition to regular seminars and tutorials, which are complementary to the programme. These will be supported by a web-based, online learning tool, which is available 24 hours a day, 7 days a week.

Students will take a total of 8 core modules of 5 credits each, 1 core 10 credit module and 1 elective modules of 10 credits, totalling 60 credits, over 4 semesters in two academic years. Due to the part-time nature of the programme with the studies spread over 2 academic years, the grouping of modules in each semester will vary according to the specified enrolment cycles and overall organisation of the programme by the co-ordinating University (the University of Galway). In addition, students will also undertake a research dissertation module of one year (3 semesters) duration in the second academic year of studies, with the value of 30 credits.

Programme Requirements

For information about modules, module choice, options and credit weightings, please go to Programme Requirements (p. 1).

Programme Requirements

Code	Title	Credits
Year 1 ¹		
Students take 40 credits as follows:		
<i>Core Modules</i>		
MT6001	Managing Innovation	5
MT6003	Managing Technology Projects	5
MT6008	Technology Finance and Capital	5
MT6009	Strategy and Management of Technology	10
MT6010	People Management for Technology Organisations	10
MT6018	User Centred Design	5
Year 2 ²		
Students take 50 credits as follows:		
<i>Core Modules</i>		
MT6000	Dissertation in Technology Management ³	30
MT6005	Innovation and Technology Transfer	5
MT6006	Marketing Technology Products	5
MT6007	Technology Innovation and Entrepreneurship	5
MT6017	Data Analysis for Process and Product Development	5
Total Credits		90

¹ Students register with the University of Galway or UCC and take credits on a distance-learning basis.

² Students register with the Partner University at which the dissertation will be supervised (the University of Galway, or UCC).

³ MT6000 is undertaken over Semesters 1, 2 and 3 in Year 2.

Examinations

Full details and regulations governing Examinations for each programme will be contained in the *Marks and Standards Book* and for each module in the *Book of Modules*.

Programme Learning Outcomes

Programme Learning Outcomes for MSc in Technology Management (NFQ Level 9, Major Award)

On successful completion of this programme, students should be able to:

- Analyse the processes and operations in their companies, identify areas of improvement towards operational excellence / world class manufacturing, and design plans of action for such improvements;
- Describe the modern concepts of business and manufacturing operations, including lean manufacturing, six-sigma, just in time, total quality management, continuous process improvement, rapid prototyping and product development, and their role in improving competitiveness;
- Identify the concepts that would have greater impact in their companies and plan for change management;
- Describe comprehensive and effective approaches to the management of innovation, including work processes and human resource and team work aspects, and organise their companies for effective and sustainable innovation;
- Deploy effective methods of managing technology innovation and manage projects to deliver technology-based change;
- Recognise the role of modern IT systems in improving business processes throughout the supply and distribution chains and maximising response capacity to market changes and opportunities, and lead the implementation of such systems in their companies in order to achieve strategic objectives;
- Define approaches and manage projects for strategic deployment of technology change in companies for innovation and competitiveness;
- Apply a problem-solving approach to process and product improvement, making use of simulation and modelling tools as appropriate;
- Design a scientific research based approach to address a new problem seeking an innovative solution that deploys state of the art methods, knowledge and thinking, carry out the planned work, analyse findings systematically and critically, and report work and conclusions in an effective manner.