

MASTER OF SCIENCE IN PROJECT MANAGEMENT



MSc in Project Management*

The MSc in Project Management provides the skills necessary to become an executive Project Manager, to lead and deliver advanced and effective project management, along with a valuable academic qualification. It does so at a time when companies and organisations are increasingly focused on the short- and long-term benefits of high quality project management. Upon completion of the course you will be in an excellent position to exploit a full range of pan-regional and multi-sectoral opportunities in project management.

Programme outline

Our MSc in Project Management is designed to meet the standards of globally recognised governing bodies.

You will therefore gain an understanding of all fundamental project management disciplines and phases, and how to apply them in widely differing working environments

Six core modules cover core subjects such as Planning and Budgeting, Execution and Control, Contracts and Procurement, and Sustainability. You will then specialise by studying two elective modules in subjects such as Total Quality Management, Operations Modelling and Construction.

Crucially, you will also be introduced to areas such as Organisational and Behavioural Management. An understanding of organisations, people and cultures is crucial in the today's multicultural

workplace, and essential to successful project management

You will complete your qualification with an original dissertation. You should graduate with the knowledge and expertise necessary to carry out project management design, planning, execution and delivery on time and on budget.

Moreover, you will have a thorough grounding in all current project methodologies. This will open up flexible career structures in senior executive management that transcend sectors and regions, enabling you to practice effective project management in all professional environments.

Programme structure

The programme comprises eight modules – six compulsory and two elective – culminating in a dissertation. Each module lasts eight weeks. You take one module at a time in order to study a specific subject in-depth without distractions.

A. Core modules

- Introduction to Project Management
- Planning and Budgeting with Risk
- Execution and Control with Risk
- Organisation and Behavioural Management
- Contracts and Procurement
- Sustainability, Programme and Portfolio Management

B. Elective modules

- Total Quality Management
- Operations Modelling and Simulation
- Project Management Application: Construction
- Strategic Operations Management
- Business Process Management and Systems

Dissertation

Students refine their dissertation topic in conjunction with their Personal Dissertation Advisor, an academic supervisor who will provide support throughout the writing process.

Programme duration

The programme is 30 months in duration based on the recommended study schedule. Should students need to alter their study path due to work or family commitments they can do so in consultation with a Student Support Manager.

**Pending Senate approval*





MSc in Project Management Modules

Core Modules

Introduction to Project Management

Aim: To provide an understanding of the main phases in a project's lifecycle, and the role/requirements of project management in those phases.

This module will introduce you to all the processes, tools, methods and factors than can impact and influence project success. This will involve both theoretical and practical perspectives as you evaluate alternative strategies with regard to objectives such as schedule, milestones, budget, quality and resources. You will also analyse and evaluate current approaches to project management, and apply planning, monitoring and risk management techniques to a chosen project application area.

Planning and Budgeting with Risk

Aim: To enable the understanding and application of techniques necessary to plan, monitor and control projects.

You will be introduced to all the issues involved in planning and evaluating revenue expenditure. Topics will include analyzing time and cost estimates, understanding the importance of managing project change, and establishing effective communication systems. You will also learn how to implement quality control processes and develop a documented and comprehensive project plan.

Execution and Control with Risk

Aim: Learn how to put a plan into practice, while establishing monitoring and control structures.

You will learn how to implement a project plan by authorising the execution of the activities required to produce project deliverables. This will incorporate reporting, analysis and progress measurement; recognizing and responding to risk events and issues; communicating with team members and stakeholders; acceptance of deliverables and administrative and financial closure.

Organisation and Behavioural Management

Aim: To provide the understanding necessary to manage projects within company organisations, and to develop, lead and manage project teams.

This module equips you to enable and support project team members so that they are able to do their job to the maximum of their ability, and in line with costs and timings. This will involve assessing the use of tools and techniques to help with leadership and personal development; managing conflict situations to minimise the impact on project progress; using project tools and techniques to optimise team performance.

Contracts and Procurement

Aim: To introduce the nature and importance of contracts and procurement within project management.

Procurement and contracts are integral to successful project management. This module will teach you how to approach all the key issues with regard to short- and long-term contracts, and small and large contracts. Topics covered include the examination of procurement strategies, responsiveness, and supplier-client relationships. You will also examine tendering, bidding and order management processes, as well as all the relevant legal and commercial implications.

Sustainability, Programme and Portfolio Management

Aim: To provide an understanding of how to manage multiple projects, taking into account sustainability across a number of factors

This module will introduce you to the nature and importance of concepts that go beyond the twin imperatives of time and (financial) cost. Specific topics include sustainability in terms of social equity, economic efficiency and environmental performance; project management life cycles; resource management; change management. You will learn how to assess and evaluate the performance of multiple projects, and how to apply a range of tools and techniques when managing product portfolios.



MSc in Project Management Modules

Elective Modules

Total Quality Management

Aim: To provide a thorough understanding of quality management and quality assurance tools

You will acquire an understanding of the management aspects of quality development and examine the applications of quality assurance tools. You will study subject areas including the role and function of Total Quality Management; acceptance sampling; European Foundation for Quality Management excellence model and benchmarking; control charts; advanced quality planning; design of experiments; reliability definitions; problem solving tools; the impact of quality management on customer service and customer relationship management; and quality standards such as ISO etc.

Operations Modelling and Simulation

Aim: To provide an understanding of the role of modelling and simulation in the development of business processes

This module focuses on key elements of modelling and simulation, including analytical techniques of systems, statistical aspects of modelling, system dynamics and value chain and process mapping. You will be exposed to a variety of commercially available tools and will learn to understand a range of analytical methods and their application, the dynamic nature of systems and their behavioural characteristics, and how real system modules are developed, tested and validated.

Strategic Operations Management

Aim: To demonstrate operations strategies can deliver competitive advantage

You will study topics including the examination of modern business drivers and competitive performance (time compression, responsiveness, waste elimination, etc.); the achievement of competitive advantage through operations management; globalisation and supply chains; agility and Efficient Consumer Response; and operations performance measurement. Within each topic, you will analyse leading-edge operational practice.

Business Process Management and Systems

Aim: To help students to understand how enterprise systems and business information management functions are mapped within supply chain management functions, and into e-business networks.

You will explore the wide variety of theories and systems that can be termed Business Process Management Systems. This covers areas such as quality control, IT and management theories. Promising technologies for next generation e-business and enterprise systems will be particularly discussed and practical tools used in enterprises, e.g. SAP, Oracle, will be demonstrated. There will be an emphasis on the integration of software techniques and relationship to building an interface that business managers can use.

Project Management

Applications: Construction

Aim: To provide an understanding of all the key issues that impact on the management of construction projects.

Construction projects are complex, expensive and multi-disciplinary. This specialised module introduces current and recent developments in the field of 'Construction' project management, with emphasis on life cycle and market factors, and the way in which construction risks are integrated with project management principles and practices. The subject is covered from multiple viewpoints – owners, contractors, construction managers – with regard to design management, risk management, scheduling, communication and quality assurance.

Dissertation

The culmination of your programme, this written project demonstrates your mastery and integration of all your previous learning. The dissertation is the cornerstone of the UK university system. It is an original, scholarly work that applies your new knowledge and experience and allows you to prove your mastery of the techniques you have studied.

Students choose their dissertation topic in conjunction with their Personal Dissertation Advisor, an academic supervisor who will provide support throughout the study and writing process.