

COURSE SPECIFICATION MSc Engineering Management

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COURSE SPECIFICATION

Course Title	MSc Engineering Management
Final Award	MSc
Exit Awards	PGDip, PGCert
Course Code / UCAS code (if applicable)	P2918FTC / P2918PTC
Mode of study	Full time / Part time
Mode of delivery	Campus
Normal length of course	1 year / 3 years
Cohort(s) to which this course specification applies	September 2023 onwards
Awarding Body	Usually University of Portsmouth
Teaching Institution	University of Portsmouth
Faculty	Faculty of Technology
School/Department/Subject Group	School of Mechanical and Design Engineering
School/Department/Subject Group webpage	https://www.port.ac.uk/about-us/structure-and- governance/organisational-structure/our-academic- structure/faculty-of-technology/school-of-mechanical- and-design-engineering
Course webpage including entry criteria	https://www.port.ac.uk/study/courses/msc-engineering-management
Professional and/or Statutory Regulatory Body accreditations	Institution of Engineering and Technology (IET) IMechE
Quality Assurance Agency Framework for Higher Education Qualifications (FHEQ) Level	Level 7

This course specification provides a summary of the main features of the course, identifies the aims and learning outcomes of the course, the teaching, learning and assessment methods used by teaching staff, and the reference points used to inform the curriculum.

This information is therefore useful to potential students to help them choose the right course of study, to current students on the course and to staff teaching and administering the course.

Further detailed information on the individual modules within the course may be found in the relevant module descriptors and the Course Handbook provided to students on enrolment.

Please refer to the <u>Course and Module Catalogue</u> for further information on the course structure and modules.

Educational aims of the course

The course aims to equip students to work as technologists/a member of management team or leader, at an advanced level, in the fields of engineering and technology management. In addition, and more generally:

- To develop an understanding of technology and engineering management techniques in order to provide individuals with the capability to accept broader and more responsible roles, both technical and managerial, within an atmosphere of continual change
- To engender an understanding of the management role in the investigation, implementation and operation of manufacturing and service systems
- To provide a broad appreciation of material resource utilisation and recovery with consideration of effective planning procedures for minimum waste
- To engender an understanding of the management role in the investigation, implementation and operation of engineering systems for efficiency, cost effectiveness and quality of product.

Course Learning Outcomes and Learning, Teaching and Assessment Strategies

The <u>Quality Assurance Agency for Higher Education (QAA)</u> sets out a national framework of qualification levels, and the associated standards of achievement are found in their <u>Framework for Higher Education</u> <u>Qualifications</u> document.

The Course Learning Outcomes for this course are outlined in the tables below.

A. Knowledge and understanding of:

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
A1	Principles, procedures, strategies and general practice for engineering and technology management.	Lectures, Tutorials, Simulation.	Coursework, Exam, Report.
A2	Management and optimisation of information and resources for engineering and technology applications, including systems for discard, handling and recovery of waste materials.	Lectures, Tutorials, Simulation.	Coursework, Exam, Report.

B. Cognitive (Intellectual or Thinking) skills, able to:

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
B1	Develop and maintain operations to meet quality standards throughout manufacturing, organisation and supplier networks.	Lectures, Tutorials, Simulation.	Coursework, Exam.
B2	Critically formulate a strategy and operations for organisational structure, project and change management.	Lectures, Tutorials, Simulation.	Coursework, Exam.
В3	Critically design and implement information management and resources optimisation.	Lectures, Tutorials, Simulation.	Coursework, Exam.

C. Practical (Professional or Subject) skills, able to:

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
C1			

	Apply principles of supply chain management, system integration, operation and quality control to solve practical problems in implementation of the lean and agile engineering operations.	Lectures, Tutorials, Simulation.	Coursework, Exam.
C2	Reflects on and understand the engineering management in economic, social, ethical and environmental context	Lectures, Tutorials, Simulation.	Coursework, Exam.
C3	Diagnose, optimise and systematically manage engineering systems, processes, flow of materials and information, and resource utilisation	Lectures, Tutorials, Simulation.	Coursework, Exam, Report.

D. Transferrable (Graduate and Employability) skills, able to:

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
D1	Conduct appropriate research, read and understand complex engineering documentation and apply appropriate mathematical and analytical techniques in engineering and technology management.	Lectures, Tutorials.	Coursework, Presentation, Report.
D2	Communicate effectively in writing and other viable and appropriate forms of presentation.	Lectures, Group work.	Coursework, Presentation, Report.
D3	Ability to work effectively in multi-disciplinary teams to achieve objectives.	Group work, Simulation.	Coursework, Presentation.

Academic Regulations

The current University of Portsmouth Academic Regulations will apply to this course.

Support for Student Learning

The University of Portsmouth provides a comprehensive range of support services for students throughout their course, details of which are available at the MyPort student portal.

Evaluation and Enhancement of Standards and Quality in Learning and Teaching

The University of Portsmouth undertakes comprehensive monitoring, review and evaluation of courses within clearly assigned staff responsibilities. Student feedback is a key feature in these evaluations, as represented in our <u>Policy for Listening to and Responding to the Student Voice</u> where you can also find further information.

Reference Points

The course and outcomes have been developed taking account of:

- University of Portsmouth Curriculum Framework Specification
- University of Portsmouth Vision 2030 and Strategy 2025
- University of Portsmouth Code of Practice for Work-based and Placement Learning
- Quality Assurance Agency UK Quality Code for Higher Education
- Quality Assurance Agency Qualification Characteristic Statements
- Quality Assurance Agency Subject Benchmark Statement for Engineering
- Quality Assurance Agency Framework for Higher Education Qualifications
- Requirements of Professional and/or Statutory Regulatory Bodies: Institution of Mechanical Engineers (IMechE), Institution of Engineering and Technology (IET)

- Vocational and professional experience, scholarship and research expertise of the University of Portsmouth's academic members of staff
- National Occupational Standards

Disclaimer

The University of Portsmouth has checked the information provided in this Course Specification and will endeavour to deliver this course in keeping with this Course Specification. However, changes to the course may sometimes be required arising from annual monitoring, student feedback, and the review and update of modules and courses.

Where this activity leads to significant changes to modules and courses there will be prior consultation with students and others, wherever possible, and the University of Portsmouth will take all reasonable steps to minimise disruption to students.

It is also possible that the University of Portsmouth may not be able to offer a module or course for reasons outside of its control, for example, due to the absence of a member of staff or low student registration numbers. Where this is the case, the University of Portsmouth will endeavour to inform applicants and students as soon as possible, and where appropriate, will facilitate the transfer of affected students to another suitable course.

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Document details

Template Date	July 2022
Author	Jovana Radulovic
Date of production and version number	5 December 2018 v1
Date of update and version number	July 2023
Minimum student registration numbers	15