

Programme Specification for Postgraduate Programme

Leading to:

MSc Engineering Management (online)



Applicable for all postgraduate students on the Inter Active Pro on-line mode of study starting in September 2021

Version No.	Date	Notes – Quality Assurance USE ONLY	AO
2021-22 v1	13 August 2021	Programme Specification for 2021/22 entrants.	JP

Postgraduate Taught Programme	
1. Awarding institution	Brunel University London
2. Teaching institution(s)	Brunel University London
3. Home college/department/division	College of Engineering, Design and Physical Sciences/ Department of Mechanical and Aerospace Engineering
4. Contributing college/department/division /associated institution	None
5. Programme accredited by	Not Accredited
6. Final award(s) and FHEQ Level of Award	MSc Engineering Management FHEQ level 7
7. Programme title	MSc Engineering Management (online)
8. Programme type (Single honours/joint)	N/A
9. Normal length of programme (in months) for each mode of study	Online learning – Full Time – 12 months Online learning – Part Time – 24 months
10. Maximum period of registration for each mode of study	Normal length of programme plus two years up to a maximum of five years
11. Variation(s) to September start	January and May
12. Modes of study	Part Time and Full time
13. Modes of delivery	Online
14. Intermediate awards, titles and FHEQ Level of Award	Postgraduate Certificate in Engineering Management - FHEQ Level 7 Postgraduate Diploma in Engineering Management - FHEQ Level 7
15. UCAS Code	N/A
16. JACS/HECoS Code	H900/100184
17. Route Code	H900POENGMGT
18. Relevant subject benchmark statements and other external and internal reference points used to inform programme design	UK Quality Code for Higher Education QAA Subject Benchmark Statement (Engineering) Brunel 2030 Engineering Council, UK-SPEC document “Chartered Engineer and Incorporated Engineer Standard”
19. Admission Requirements	Details of entry requirements are provided on the University's and College website. Levels of English for non-native speakers are outlined on Brunel International's language requirements pages.
20. Other relevant information (e.g. study abroad, additional information on placements)	Online platform for teaching/learning.
21. Programme regulations not specified in Senate Regulation 3. Any departure from regulations specified in Senate Regulation 3 must be stated here and approved by Senate.	None

22. Further information about the programme is available from:

Course webpage <https://info.online.brunel.ac.uk/engineering-management-msc>

23. EDUCATIONAL AIMS OF THE PROGRAMME

The aim of the programme is to develop professionals in the area of Engineering Management who can take the skills they develop on the programme and make a significant difference in the marketplace. The online approach to teaching is designed to nurture practical business skills and confidence, and places huge emphasis on real-world challenges. Students will gain an in-depth understanding of operations management and strategy, how to analyse and design effective supply chain operations, how to use data, models and software to solve problems and inform decisions, the role of human resources in manufacturing and services, inventory management, accounting, quality and reliability and project management. In addition to the modules, the individual thesis offers the opportunity to apply the knowledge and skills developed on the programme. The programme aims to provide the student with specialist knowledge and skills necessary for a career in engineering management.

24. PROGRAMME AND INTERMEDIATE LEARNING OUTCOMES

The programme provides opportunities for students to develop and demonstrate knowledge and understanding (K) cognitive (thinking) skills (C) and other skills and attributes (S) in the following areas:

Level	Category (K = knowledge and understanding, C = cognitive (thinking) skills, S = other skills and attributes)	Learning Outcome	Masters Only	Associated Assessment Blocks Code(s)	Associated Study Blocks Code(s)	Associated Modular Blocks Code(s)
7	K	The student should develop a systematic advanced understanding of both operations management and engineering knowledge, as well as a crucial awareness of latest problems and/or new insights within engineering management.				MN5612 MN5615 MN5614

7	K	Students should develop a comprehensive and in depth understanding of a range of research tools and techniques applicable to a wide range of engineering management problems				MN5619 MN5617 MN5618 MN5614 MN5620
7	K	Students should demonstrate originality in the application of operations management and engineering knowledge, together with an advanced practical understanding of how established techniques of research and enquiry are used to create an interpret engineering management knowledge.				MN5612 MN5614 MN5619 MN5620
7	K	To assess and evaluate different methodologies and demonstrate the ability to critically assess the application of operations and engineering research and where appropriate, to propose new hypotheses				MN5619 MN5617 MN5612 MN5620

7	K	A highly developed and critical understanding of operations concepts that enable the student to critically evaluate research and advanced scholarship in the operations management				MN5612 MN5617 MN5614 MN5613 MN5611 MN5619
7	C	The student should develop the ability to investigate and solve complex operations issues both systematically and creatively, make sound judgements, and effectively communicate their conclusions (via reports) to a range of audiences, including engineering managers				MN5612 MN5615 MN5617 MN5614 MN5613 MN5619
7	C	Demonstrate commitment, self-direction, apply advanced and independent thinking skills and originality in tackling and solving complex engineering management problems, as well as acting autonomously in planning and implementing tasks at a professional level.				MN5612 MN5615 MN5614 MN5619 MN5611

7	C	The student will be equipped to be able to continue to advance their knowledge and understanding of engineering management areas, and aspire to develop new skills to an advanced level				MN5615 MN5617 MN5619
7	S	Engineering management students should be able to exercise and demonstrate high levels of initiative in their work				MN5617 MN5619
7	S	Students should be confident to make informed decisions in complex and unpredictable scenarios				MN5617 MN5614 MN5619
7	S	Students will be equipped to pursue independent engineering management learning required for CPD.				MN5615 MN5619 MN5613

Learning/teaching strategies and methods to enable learning outcomes to be achieved, including formative assessments

Acquisition of above points is achieved via the online resources provided (e.g video's) and directed private study as appropriate:

Online teaching schemes and related materials are used to deliver essential material, apply acquired knowledge via exercises and/or to develop critical insight or reflect on material.

Directed private study is used to (a) supplement and consolidate the points above and (b) broaden individual knowledge and understanding of the subject matter.

The Research Project provides experience in defining and organizing a substantial individual investigation into an engineering topic and present the information in the form of a report.

Online materials include:

- Media rich instructional videos covering key syllabus topics
- Video transcripts in form of electronic flashcard
- Reading lists
 - o Library for core text and supplementary reading
 - o Links to additional reading materials and sources
- Exercises and tasks
 - o Discussions questions
 - o Quizzes
 - o Instant feedback tasks
- Discussion forums for liaising with peers and teaching assistants
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Delivery is supported by InterActive Pro.

Summative assessment strategies and methods to enable learning outcomes to be demonstrated.

The assessment of modules will be carried out by means of coursework that seek to fully meet the learning outcomes of the individual modules. The dissertation module requires the student to complete an independent and in-depth investigation into an engineering management issue or problem. Assessment of the thesis, will take place at the end of stage two of the course. The specific ways in which each area is assessed is spelled out in the appropriate module specification.

25. Programme Structure, progression and award requirements

Programme structures and features: levels, assessment blocks, credit and progression and award requirements

- **Compulsory block:** one which all students registered for the award are required to take as part of their programme of study. These will be listed in the left hand column;
- **Optional block:** one which students choose from an 'option range'. These will be listed in the right hand column;
- A **core assessment** is an assessment identified within an assessment block or modular block (either compulsory or optional) which must be passed (at grade C- or better) in order to be eligible to progress and to be eligible for the final award. All core assessments must be specified on the programme specification next to the appropriate assessment or modular block:
 Where students are expected to pass the block at C- or better, but not necessarily all elements, then the block itself is core.
 e.g. AB5500 Project (40)
 Core: Block
 Where only some elements of assessments are required to be passed at C- or better, these will be identified by listing each element that is core
 e.g. ABXXX1 Title (XX credits)
 Core: 1 & 4
 Where students are expected to pass all assessments in a block then this will be identified. By setting the assessment this way, students are also required to pass the block by default. This will be identified thus:
 e.g. ABXXXX Title (XX credits)
 Core: All, Block
- A **non-core assessment** does not have to be passed at grade C- or better, but must D- or better in order to be eligible for the final award.

FHEQ level 7

Compulsory assessment block codes, titles and credit	Optional assessment block codes, titles and credits
Compulsory study block codes, titles and credit volume	Optional Study block codes, titles and credit volume

Compulsory modular block codes, titles and credits	Optional modular block codes, titles and credits
<p>All modules are 15 credits unless otherwise specified</p> <p>MN5620 Research Methods for Engineering Projects MN5613 Managing People and Organisations MN5614 Project Management MN5617 Systems Modelling and Simulation MN5612 Logistics and Global Supply Chain Management MN5615 Quality Management and Reliability MN5618 Advanced Measurement Systems and Data Analysis MN5611 Financial Management</p> <p>MN5619 Research Project (60 credits)</p> <p>Core: Block</p>	

FHEQ Level 7 Progression and Award Requirements

[As per Senate Regulation 3](#)

A PGDip may be awarded by substitution of the dissertation (MN5619) for up to 30 credits of modular/assessment blocks in the taught part of the programme, provided the learning outcomes have been met.

Please note: this specification provides a concise summary of the main features of the programme and the learning outcomes that a student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods can be found in the modular block, assessment and study block outlines and other programme and block information. The accuracy of the information contained in this document is reviewed by the University from time to time and whenever a modification occurs.