

Programme Specification for Postgraduate Programme Leading to: MSc Project and Infrastructure Management



Applicable for all postgraduate students starting in 2019

Version No.	Date	Notes – QA USE ONLY	QAO
2019-20 v1	22 August 2019	Programme specification document updated for postgraduate entrants in 2019.	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/ Dept of Civil and Environmental Engineering / Civil Engineering/
4. Contributing college/department/division /associated institution	None
5. Programme accredited by	The programme will be submitted for accreditation to the JBM and IMechE
6. Final award(s) and FHEQ Level of Award	MSc Project and Infrastructure Management FHEQ Level 7
7. Programme title	MSc Project and Infrastructure Management
8. Programme types (Single honours/joint)	N/A
9. Normal length of programme (in months) for each mode of study	12 Months
10. Maximum period of registration for each mode of study	Normal length plus 2 years up to a maximum of 5 years
11. Variation(s) to September start	None
12. Modes of study	Full -Time
13. Modes of delivery	Standard
14. Intermediate awards and titles and FHEQ Level of Award	Postgraduate Certificate in Project and Infrastructure Management (FHEQ Level 7) Postgraduate Diploma in Project and Infrastructure Management (FHEQ Level 7)
15. UCAS Code	N/A
16. HECoS Code	TBC
17. Route Code	H200PPROINFM
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 Brunel Placement Learning Policy, as published under the 'Placements' section of the ' Managing Higher Education Provision with Others ' page. 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)	N/A
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.	N/A
22. Further information about the programme is available from:	Course webpage

23. EDUCATIONAL AIMS OF THE PROGRAMME

The primary aim of this programme is to create master's degree graduates (from engineering and built-environment background) with qualities and transferable skills for demanding employment in the engineering and construction sector. The graduates will have the independent learning ability required for continuing professional development and acquiring new skills at highest levels.

Specific aims are as follows:

- To provide education at postgraduate level in engineering, focussing on project and infrastructure management.
- To develop comprehensive understanding of the current theories and practices for managing contemporary engineering projects from inception to completion and for maintaining/managing the resulting infrastructure throughout its life time.
- To develop creative and professional working knowledge to enable graduates to follow a successful engineering career with national and international organisations.
- To provide a pathway that will prepare graduates for successful careers including, where appropriate, progression to CEng status.

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)
	K	The principles of strategic planning and risk analysis in successful project and infrastructure management.				CE5518 CE5519
	K	The theoretical basis for the organisation of project infrastructure development and how management of budgets, human resources and supply chains can affect overall project success.				CE5519 CE5514 MN5506

	K	The interplay between engineering project, infrastructure management and sustainability in the complex real-world situations.				CE5518 CE5008 MN5554
	C	Select, use and evaluate appropriate investigative techniques.				CE5513
	C	Assemble and analyse critically relevant primary and secondary data.	Y			CE5516
	C	Recognise and assess the problems and critically evaluate solutions to challenges in managing projects and infrastructure.				CE5518 MN5554 CE5520
	C	Evaluate the environmental and financial sustainability of current and potential engineering activities.				CE5508 CE5514 CE5518 CE5519
	S	Define and organise a substantial advanced investigation.				CE5513 CE5516
	S	Select and employ appropriate advanced research methods.				CE5513
	S	Organise technical information into a concise, coherent document.				CE5518 CE5520 MN5506 MN5554 CE5519
	S	Effectively employ a variety of styles of communication aimed at different audiences.				All taught modules
	S	Plan, manage, evaluate and orally-present personal projects.	Y			CE5516
	S	Work as part of, and provide initiatives within, a team.				CE5513
	S	Critically reflect on personal learning and development needs.				CE5518 CE5513
	Learning/teaching strategies and methods to enable learning outcomes to be achieved, including formative assessments					
	<ul style="list-style-type: none"> • Study Students will be introduced to subject material, including key concepts, information and approaches, through a mixture of standard lectures and seminars, self-study and individual research reports. A number of innovative strategies will also be adopted to enhance the learning and teaching of students. These include: actively using the university's Virtual Learning Environment (VLE) platform to facilitate teaching and learning, organising compulsory regular field trips and guest lectures. Our strong contact with industry and Industrial Advisory Board will be used to invite guest speakers from industry to present valuable insight into the real world of engineering and infrastructure project delivery. All these strategies are designed to inspire students and challenge them to expand their own knowledge and understanding. • Work Preparation for work will be achieved through the development of 'soft' skills such as communication, planning, management and team work. Other ways to be employed to develop their work skills include engaging the students actively in their own personal development planning, which is more or less an innovative strategy. Through the Professional Development module (CE5513), students will be required to actively pursue their own personal development planning through continuously recording and keeping records of their own personal development throughout the course duration. Personal tutors will offer support to their tutees by regularly checking these records (termed, Personal Development Log (PDL)) and discussing any relevant issues. • Play Many of the practical activities in which the students engage develop into enjoyable experiences, for example working in teams and field work. A number of engineering societies are available in SED, for example, the Civil Engineering Society (CivSoc), Mechanical Engineering EQ8, etc. These are run by the students (with limited staff support) and form the focus for many extra-curricular, and fun, activities. • Grow We encourage students to develop personal responsibility throughout the course. Many elements of coursework involve, and reward, the use of initiative and imagination. Students are guided into this through the use of an assessed Personal Development Plan, which is linked to one-to-one tutorials. This aids them in developing 					

	reflective skills.
	Summative assessment strategies and methods to enable learning outcomes to be demonstrated.
	<p>Assessment will allow students to demonstrate their abilities in a range of styles relevant to professional project and infrastructure managers. These will include:</p> <ul style="list-style-type: none"> • Essays – demonstration of depth and breadth of knowledge and written communication skills • Presentations and posters – ability to summarise and communicate orally and visually • Technical analytical reports – ability to collect, analyse and interpret a range of evidence, including in the field and case study projects. • Group report – contribution as a team member to a collaborative challenge • Project proposal – ability to identify a research/design focus and produce a realistic plan for its execution • Personal Development Plan – develop ability to reflect on learning and planning development goals • Formal examinations – ability to quickly formulate arguments and solve problems • Dissertation (MSc) – ability to plan, execute and communicate an advanced piece of research – CE5516, the Project Dissertation specification, requires students to undertake research relevant to their specific programme. <p>Deadlines will be distributed through the year, allowing time for constructive feedback.</p>

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 All modules are 15 credits unless otherwise specified. CE5518 Sustainable Project Management MN5554 Quality Management and Reliability CE5514 Risk and Financial Management MN5506 Managing People and Organisation CE5519 Infrastructure Management CE5513 Research Methods and Professional Development CE5508 Geo-Environmental Management for Civil Engineers CE5520 Procurement and Contract Management CE5516 MSc Project Dissertation – 60 credits	Optional modular block codes, titles and credits
FHEQ Level 7 Progression and Award Requirements As per Senate Regulation 3 PGDip may not be awarded by substitution of the dissertation (CE5516) for modular/assessment blocks in the taught part of the programme.	
<small>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.</small>	