COURSE SPECIFICATION

MEng Civil Engineering

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Course Title	**MEng Civil Engineering**

Final Award	MEng
Exit Awards	CertHE, DipHE, BEng
Course Code / UCAS code (if applicable)	U0178PYC
Mode of study	Full time
Mode of delivery	Campus
Normal length of course	4 years, 5 years with placement
Cohort(s) to which this course specification applies	September 2023 intake onwards
Awarding Body	University of Portsmouth
Teaching Institution	University of Portsmouth
Faculty	Faculty of Technology
School/Department/Subject Group	School of Civil Engineering and Surveying
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-civil-engineering-and-surveying
Course webpage including entry criteria	https://www.port.ac.uk/study/courses/meng-civil-engineering
Professional and/or Statutory Regulatory Body accreditations	Joint Board of Moderators
Quality Assurance Agency Framework for Higher Education Qualifications (FHEQ) Level	Levels 4, 5, 6, 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 Course and Module Catalogue for further information on the course structure and modules.

Educational aims of the course

To provide an educational base from which individual aspirations to Chartered status can develop and also to produce civil engineering graduates who are practical, articulate, numerate, literate, imaginative, versatile, confident and inquisitive.

The core elements of UK Standard for Professional Engineering Competence (UK-SPEC) are embedded in the programme learning outcomes. The course learning outcomes are aligned to that of the Accreditation of Higher Education Programmes (AHEP) document and integrated within the five engineering-specific areas of learning;

- **Science and mathematics (AHEP reference: M1)**

Apply a comprehensive knowledge of the appropriate mathematical methods, scientific and engineering principles to the solution of complex civil engineering and construction problems.

- **Engineering analysis (AHEP references: M2, M3 & M4)**

Formulate and analyse complex civil engineering problems by critically evaluating technical literature and information, and by selecting and applying appropriate computational and analytical tools and techniques.

- **Design and innovation (AHEP references: M5 & M6)**

Apply an integrated systems approach and consider constraints to design innovative and original solutions for complex civil engineering problems and assess alternative solutions and specification of final design.

- **The engineer and society (AHEP references: M7, M8, M9, M10 & M11)**

Evaluate and mitigate environmental impacts including lifecycle, health, commercial and security risks associated with Civil Engineering projects or activities and to develop knowledge of the professional and ethical responsibility of Civil Engineers.

- **Engineering practice (AHEP references: M12, M13, M14, M15. M16, M17 & M18)**

Investigate cutting-edge practices in civil engineering including fieldwork, laboratory skills, and materials selection, project planning management and implementation and to develop an awareness of quality issues. Evaluate and work effectively as part of a team and individually to achieve goals and develop responsibility, management and leadership. Develop effective interpersonal, communication and general skills for enhancing professional and career development and evaluate the effectiveness of the methods used.

Course Learning Outcomes and Learning, Teaching and Assessment Strategies

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

The 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	Fundamental concepts, principles and theories of core subjects relating to civil engineering **(AHEP references: M1, M2, M3, M5 &, M13)**	Lectures, tutorials, laboratory work, fieldwork and site visits.	Examinations and coursework.
A2			

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
	Construction and business practice, economics and project management **(AHEP references: M7, M8, M9, M10, M13, M14, M15 & M16)**.	Lectures, tutorials, laboratory work, fieldwork and site visits, design and management projects	Examinations, coursework, reports
A3	Environmental and sustainability considerations and constraints, health and safety and security risk management and quality management (**AHEP references: M7, M9, M10, M14 & M15)**.	Lectures, tutorials, laboratory work, fieldwork and site visits.	Examinations, coursework.
A4	Design and the integrated process **(AHEP references: M5, M6 & M15).**	Lectures, exercises and a design and management project.	Reports, individual or group presentations
A5	The industrial context of engineering and the varied roles of engineers in industry through project work and or first -hand Experience (Sandwich students) **(AHEP references: M14, M15, M16, M17 & M18)**.	Lectures, exercises and project work. industrial placement of one academic year	Portfolios

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

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
B1	Apply and evaluate mathematical, scientific and engineering analysis techniques to solve complex problems **(AHEP references: M1, M2, M3 & M4)**	Lectures, tutorials, practical work	Examinations, coursework
B2	Plan, conduct and report laboratory experiments and field investigations **(AHEP references: M12, M13, M16 & M17)**	Laboratory exercises, fieldwork	Coursework
B3	Synthesise critically evaluate information from a variety of sources in the solution of an integrated design problem and in the creation of new systems and processes **(AHEP references: M4, M5, & M6)**	Individual and group projects	Reports, individual or group presentations
B4	Plan, manage and undertake a report on a significant project **(AHEP references: M1, M2, M3, M4, M12, M13, M16 & M17)**	Individual project	Reports, presentations

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

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
C1	Use surveying and soil investigation equipment **(AHEP references: M12, M13, M16 & M17)**	Fieldwork, laboratory exercises	Coursework, reports
C2	Use standard and specialist laboratory equipment and/or diving equipment **(AHEP references: M12, M13, M16 & M17)**	Fieldwork, laboratory exercises	Coursework, reports
C3	Use computers and IT tools for the solution of complex problems (**AHEP reference: M3)**.	Computer practical/ simulations	Coursework, reports

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
C4	Design of major civil engineering systems, components and processes **(AHEP references: M5, M6, M7, M9, M10 & M14).**	Lectures, seminars and project work.	Coursework, reports

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

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
D1	Evaluate and work effectively as an individual and as part of a team to achieve goals **(AHEP references: M8, M11, M16 & M17)**.	Group work, individual project	Reports, individual or group presentations
D2	Communicate effectively in writing, orally, through graphical representations and drawing and evaluate the methods used **(AHEP references: M16 & M17)**.	Lectures, seminars, group work	Reports, individual or group presentations
D3	Apply analytical techniques, computational methods, creativity and innovation to identify appropriate solutions for unfamiliar problems **(AHEP references: M1, M2, M3, M5 & M6).**	Lectures, tutorials, group work	Coursework, reports
D4	Evaluate and mitigate environmental impacts and health, commercial and security risks associated with projects or processes **(AHEP references: M7, M9, & M10)**.	Lectures, tutorials, computer practical work	Coursework
D5	Plan and record CPD for personal and professional development and adopt a professional and ethical behaviour **(AHEP reference: M8, M11 & M18)**.	Lectures, seminars, group work	Coursework, reports

Academic Regulations

The current University of Portsmouth Academic Regulations will apply to this course. This also includes the Policy for Recognition of Prior Learning.

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.

In addition to these University support services this course also provides

- Extensive induction programme introduces the student to the University and their course.
- Each student has a personal tutor, responsible for pastoral support and guidance.
- Excellent Laboratory/Teaching facilities.
- Student course and unit handbooks provide information about the course structure and University regulations etc.
- Feedback is provided for all assessments.
- Personal Development Planning (PDP) for all awards.
- Support prior to and during placements.
- Maths support

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 Policy for Listening to and Responding to the Student Voice 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
- Quality Assurance Agency Framework for Higher Education Qualifications
- Requirements of Professional and/or Statutory Regulatory Bodies: **Joint Board of Moderators**
- **Joint Board of Moderators Guidelines for Developing Degree Programmes (AHEP4)**
- Vocational and professional experience, scholarship and research expertise of the University of Portsmouth's academic members of staff
- National Occupational Standards
- UK Standard for Professional Engineering Competence (UK-SPEC)
- Accreditation of Higher Education Programmes (AHEP, fourth edition)
- Subject Benchmark Statements for Engineering

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

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