



**UNIVERSITY OF
PORTSMOUTH**

COURSE SPECIFICATION

BEng (Hons) Space Systems Engineering (DA)

COURSE SPECIFICATION

Course Title	<i>BEng (Hons) Space Systems Engineering (DA)</i>
Final Award	<i>BEng (Hons)</i>
Exit Awards	
Course Code / UCAS code (if applicable)	<i>U3566PDC</i>
Mode of study	<i>Part time</i>
Mode of delivery	<i>On campus</i>
Normal length of course	<i>4 years</i>
Cohort(s) to which this course specification applies	<i>from September 2025 intake onwards</i>
Awarding Body	<i>University of Portsmouth</i>
Teaching Institution	<i>University of Portsmouth</i>
Faculty	<i>Faculty of Technology</i>
School/Department/Subject Group	School of Electrical and Mechanical 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-electrical-and-mechanical-engineering
Course webpage including entry criteria	https://www.port.ac.uk/study/courses/undergraduate/b-eng-hons-space-systems-engineering-degree-apprenticeship
Professional and/or Statutory Regulatory Body accreditations	<i>Accreditation will be sought from the relevant PSRB</i>
Quality Assurance Agency Framework for Higher Education Qualifications (FHEQ) Level	<i>level 6</i>

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

The course aims to equip students to work as professional engineers in the space systems industry and allied engineering industries.

This course offers 360 credits of study delivered through day release on UoP campus, independent off campus study and on the job training and leads to a BEng (Hons) award.

Students learn about the design and production of space systems, their components and subsystems, as well as about relevant aspects of production, operation and maintenance of the equipment employed in the space engineering industry.

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 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	The requirements, architecture, design and verification and evaluation methodologies for spacecraft subsystems	<i>Lecture, tutorial, computer practical</i>	<i>Exam, coursework</i>
A2	Techniques, components and materials, and mathematical, analytical and evaluative tools used in space systems industry	<i>Lecture, tutorial, computer practical</i>	<i>Exam, coursework</i>
A3	Principles, processes and techniques used in design, manufacture, operation and maintenance of space systems, subsystems and components	<i>Lecture, tutorial, computer practical</i>	<i>Exam, coursework</i>

B. Cognitive (Intellectual or Thinking) skills, able to:			
LO number	Learning outcome	Learning and Teaching methods	Assessment methods
B1	Apply analytical and other problem-solving techniques to develop innovative solutions and use a holistic approach in solving problems, by applying judgement to criteria including risk, cost, safety and the environment	<i>Lecture, tutorial</i>	<i>Exam, coursework</i>
B2	Develop critical skills with regard to literature searching, appraising and evaluating from a variety of sources and synthesising the results	<i>Lecture, tutorial</i>	<i>Exam, coursework</i>
B3	Develop an awareness of the effects upon society of technological developments and develop a proper sense of professional conduct in relation to society's use of technology	<i>Lecture, tutorial</i>	<i>Exam, coursework</i>
B4	Plan, execute and report on individual projects	<i>Lecture, tutorial</i>	<i>Exam, coursework</i>

C. Practical (Professional or Subject) skills, able to:			
LO number	Learning outcome	Learning and Teaching methods	Assessment methods
C1	Be rational and pragmatic, interested in the practical steps necessary for a concept to become reality	<i>Lecture, tutorial</i>	<i>Exam, coursework</i>
C2	Mathematically model real engineering situations effectively and think creatively in order to develop design and sustainable analytical solutions	<i>Lecture, tutorial, computer practical</i>	<i>Exam, coursework</i>
C3	Communicate technical information in a lucid manner to both management and technical staff	<i>Lecture, tutorial</i>	<i>Exam, coursework</i>
C4	Be cost and value-conscious, and aware of the social, cultural, environmental, health and safety, and wider professional responsibilities they should display	<i>Lecture, tutorial</i>	<i>Exam, coursework</i>

D. Transferrable (Graduate and Employability) skills, able to:			
LO number	Learning outcome	Learning and Teaching methods	Assessment methods
D1	Communicate effectively in writing, speaking and in appropriate forms of presentation	<i>Lecture, tutorial</i>	<i>Exam, coursework</i>
D2	Read and understand documents related to engineering and software products and systems and use information technology to handle data, for simulation and to assist with design and testing	<i>Lecture, tutorial, computer practical</i>	<i>Exam, coursework</i>
D3	Apply mathematical techniques in engineering design and professional practice and assess problem domains and formulate appropriate problem solving strategies	<i>Lecture, tutorial, computer practical</i>	<i>Exam, coursework</i>

Academic Regulations

The current University of Portsmouth [Academic Regulations: Examination & Assessment Regulations](#) will apply to this course. Approved course exemptions can be found [here](#).

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...

specialist laboratory facilities, support prior to, during and following the placement through Student Placement and Employability Centre (SPEC), including visit and advice from placement tutor, and learning resources that will be available to students whilst off-campus.

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](#)
- [Office for Students Conditions of Registration](#)
- [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: **IET**

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

Changes to your course/modules

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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