



**UNIVERSITY OF  
PORTSMOUTH**

## **COURSE SPECIFICATION**

***BSc COMPUTER SCIENCE and ADVANCED  
TECHNOLOGIES TOP-UP***

# COURSE SPECIFICATION

Course Title	<i>BSc COMPUTER SCIENCE and ADVANCED TECHNOLOGIES TOP-UP</i>
Final Award	<i>BSc</i>
Exit Awards	<i>BSCO   Bachelor of Science  </i>
Course Code / UCAS code (if applicable)	<i>U3640FTC</i>
Mode of study	<i>Full time</i>
Mode of delivery	<i>Campus</i>
Normal length of course	<i>1 year</i>
Cohort(s) to which this course specification applies	<i>September 2025, Jan 2026, Jun 2026 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	<i>School of Computing</i>
School/Department/Subject Group webpage	<a href="https://www.port.ac.uk/about-us/structure-and-governance/organisational-structure/our-academic-structure/faculty-of-technology/school-of-computing">https://www.port.ac.uk/about-us/structure-and-governance/organisational-structure/our-academic-structure/faculty-of-technology/school-of-computing</a>
Course webpage including entry criteria	<a href="https://www.port.ac.uk/study/courses/undergraduate/bs-c-hons-computer-science-and-advanced-technologies-top-up">https://www.port.ac.uk/study/courses/undergraduate/bs-c-hons-computer-science-and-advanced-technologies-top-up</a>
Professional and/or Statutory Regulatory Body accreditations	<i>no accreditation for L6 top-up degrees</i>
<a href="#">Quality Assurance Agency Framework for Higher Education Qualifications (FHEQ) Level</a>	<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 Computer Science specialists, skilled in the latest advancements of technology developments by building on existing Foundation Degree / HND or equivalent qualifications appropriate to the discipline of Computer Science  
This course offers 120 credits of study at level 6 and leads to a BSc (Hons) award.

Students learn about key elements necessary to explore and apply the latest technological advances in the areas of Security management, Advanced database management, AI and complex problem-solving.

## 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	<i>Knowledge of AI concepts and their value as applied technology.</i>	Lectures, seminars, lab, group work	portfolios, coursework
A2	Understanding the various methodologies available to support critical research in the areas of Computer Science disciplines	Lectures, seminars, group work,	Portfolios, presentations etc.

<b>B. Cognitive (Intellectual or Thinking) skills, able to:</b>			
<b>LO number</b>	<b>Learning outcome</b>	<b>Learning and Teaching methods</b>	<b>Assessment methods</b>
B1	Critically analyse and evaluate the performance of different data mining technique		Practical lab
B2	Evaluate database architectures (distributed, mobile, and web environments) with regard to performance issues.	Lectures, seminars,	<i>Coursework</i>
B3	Critically evaluate options for complex large-scale data management.	Lectures, Seminars	<i>Coursework</i>
B4	Analyze and apply machine learning approaches by comparing and implementing different types of machine learning (supervised, unsupervised, and reinforcement learning), and demonstrate practical solutions for AI-based problems.	Practical Labs	<i>Coursework</i>
B5	Critically review academic, industry, and research literature relating to a specific research topic and area.	Seminar	<i>Presentation</i>
B6	Critically evaluate different research philosophies and methods to address a given research question and formulate an appropriate data access strategy.	Seminar	<i>Presentation, portfolio</i>
B7	Critically evaluate personal research-skill strengths and weaknesses and develop a reflective log and development plan in relation to research development	Seminar	<i>Project log</i>

<b>C. Practical (Professional or Subject) skills, able to:</b>			
<b>LO number</b>	<b>Learning outcome</b>	<b>Learning and Teaching methods</b>	<b>Assessment methods</b>
C1	Critically review application systems in order to optimise performance and assess their potential to be scaled	<i>Practical lab work, simulations etc.)</i>	<i>portfolio</i>
C2	Recommend hardware and software solutions where database applications are to be scaled	<i>Lectures Practical Lab demonstrations</i>	<i>portfolios, presentation</i>
C3	Design and evaluate AI models by developing, implementing, and critically evaluating AI applications, including working machine learning models, using mathematical and programming techniques	<i>Practical Lab</i>	<i>Coursework</i>
C4	Apply evolutionary algorithms methods for solving complex scheduling and optimization problems, demonstrating their practical applications in AI	<i>Lectures Practical labs</i>	<i>Demo/present</i>

<b>D. Transferrable (Graduate and Employability) skills, able to:</b>			
<b>LO number</b>	<b>Learning outcome</b>	<b>Learning and Teaching methods</b>	<b>Assessment methods</b>
D1	Demonstrate a professional and ethical approach to research within a given discipline area and culture	<i>lectures, seminars, self-study</i>	<i>Portfolio</i>
D2	Communicate and present a well-justified case for research design appropriate to the specific research issue being addressed/explored	<i>lectures, seminars, self-study</i>	<i>Presentation</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.

### **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:

*Insert additional reference points or delete as required*

- [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](#)
- Quality Assurance Agency Framework for Higher Education Qualifications Requirements of Professional and/or Statutory Regulatory Bodies: Our L6 top-up degrees are not part of the BCS accreditation
- 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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