

COURSE SPECIFICATION

BSc (Hons) Cyber Security and Forensic Computing

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Please refer to the Course Specification Guidance Notes for guidance on completing this document.

Course Title	Cyber Security and Forensic Computing
Final Award	BSc (Hons) Cyber Security and Forensic Computing
Exit Awards	CertHE, DipHE, BSc
Course Code / UCAS code (if applicable)	U2753PYC
Mode of study	Full time
Mode of delivery	Campus
Normal length of course	3 years, 4 years with placement
Cohort(s) to which this course specification applies	September 2024 onwards
Awarding Body	University of Portsmouth
Teaching Institution	University of Portsmouth
Faculty	Faculty of Technology
School/Department/Subject Group	School of Computing
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-computing
Course webpage including entry criteria	https://www.port.ac.uk/study/courses/bsc-hons-cyber- security-and-forensic-computing
Professional and/or Statutory Regulatory Body accreditations	
Quality Assurance Agency Framework for Higher Education Qualifications (FHEQ) Level	Level 6

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 <u>Course and Module Catalogue</u> for further information on the course structure and modules.

Educational aims of the course

While there are many professional training courses in the cyber security and forensics domain, each concerned with a single element of the profession, this BSc (Hons) Cyber Security and Forensic Computing degree has been designed to prepare students and enhance their ability to work professionally in a number of associated disciplines.

Graduates will be conversant with technical, legal, and social aspects of the civil and criminal activities used in the abuse of digital technology. Graduates from this course may aim for a career in the forensic industry, law enforcement, penetration testing, cyber security analyst or developer, as a specialist in the police force, or as a systems security analyst either for a technical or a commercial organisation. Alternatively, students may wish to continue study at postgraduate level.

In addition, and more generally, the course aims to develop within individuals a level of understanding, knowledge, and skills to engage in offensive and defensive cyber security, analyse penetrated systems, and secure them. Furthermore, to seize, secure, and analyse digital media for the purposes of forensic examinations.

- Provide a challenging, stimulating, and self-rewarding study environment.
- Develop a range of key skills by means of opportunities provided in the study units.
- Accommodate student needs in relation to maximising their career potential by enabling them to develop knowledge, understanding, and skills in their chosen subject area.
- Promote career aspirations by including study topics on general professional practice.

Course Learning Outcomes and Learning, Teaching and Assessment Strategies

The <u>Quality Assurance Agency for Higher Education (QAA)</u> sets out a national framework of qualification levels, and the associated standards of achievement are found in their <u>Framework for Higher Education</u> <u>Qualifications</u> 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	Techniques required for seizure, preservation, analysis, and presentation of digital evidence.	Lectures and Lab work	Reports Examinations
A2	The core principles of computing include databases, network specification, and design.	Lectures and Lab work	Reports Examinations
A3	The principles and techniques for conducting forensic investigations, the legal responses to cybercrime, and investigations in their social, historical, organisational, and global context.	Lectures and Lab work	Reports Examinations
Α4	Information security and cryptography principles and concepts, the protection of digital data from loss and corruption, and information systems design and component infrastructure.	Lectures and Lab work	Reports Examinations
A5	Legal and ethical considerations of codes of conduct and practice.	Lectures and Lab work	Reports Examinations

LO number	Learning outcome	Learning and Teaching methods	Assessment methods
B1	Develop general abilities of an intellectual, analytical, creative and problem-solving nature.	All	All
B2	Evaluate a range of tools developed to infiltrate digital platforms.	Lectures and Lab work	Reports Examinations
B3	Evaluate risk situations and determine mechanisms to mitigate the risk.	Lectures and Lab work	Reports Examinations
B4	Apply professional codes of conduct and appreciate the ethical considerations that underpin them.	Lectures and Lab work	Reports Examinations
B5	Develop critical skills with regard to literature searching, appraising, and evaluating from a variety of sources and synthesising the results.	Lectures and Seminars	Essays and Reports

C. Practio	C. Practical (Professional or Subject) skills, able to:			
LO number	Learning outcome	Learning and Teaching methods	Assessment methods	
C1	Select effective and productive technical/legal/business methods and tools for the successful investigation and evidence presentation.	Lectures and Lab work	Reports Examinations	
C2	Assess and plan to mitigate risks to digital information.	Lectures and Lab work	Reports Examinations	
С3	Assess cryptanalytic techniques as part of digital evidence extraction.	Lectures and Lab work	Reports Examinations	
C4	Appraise security threats to systems and networks	Lectures and Lab work	Reports Examinations	
C5	Articulate the use of evidence in legal proceedings	Court Simulation	Reports Examinations	

D. Transf	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.	Lectures and Seminars	Reports and Essays	
D2	Read and understand documents related to digital evidence, security, and criminology.	Lectures and Lab work	Reports Examinations	
D3	Use information technology to handle data and simulations to assist with digital examination and data capture.	Lectures and Lab work	Reports Examinations	
D4	Assess problem domains and formulate appropriate problem-solving strategies.	Lectures and Lab work	Reports Examinations	
D5	Demonstrate a professional capability, with a global understanding, in an investigation setting and work in teams to achieve goals.	Lectures and Lab work	Reports	

Academic Regulations

The current University of Portsmouth <u>Academic Regulations: Examination & Assessment Regulations</u> will apply to this course. Approved course exemptions can be found <u>here</u>.

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 <u>MyPort</u> 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 <u>Policy for Listening to and Responding to the Student Voice</u> 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
- Quality Assurance Agency Framework for Higher Education Qualifications
- Requirements of Professional and/or Statutory Regulatory Bodies: British Computing Society
- 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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Document Details	
CSD Template date	January 2025
Author	Martin Sparrius
Date of production and version number	September 2021 v1
Date of update and version number	September 2024 v6
Minimum student registration numbers	20