

KEY PROGRAMME INFORMATION

<p>Originating institution(s) Bournemouth University</p>	<p>Faculty responsible for the programme Faculty of Science and Technology</p>
<p>Final award(s), title(s) and credit 120 (60 ECTS) Level 4, 120 (60 ECTS) Level 5, 120 (60 ECTS) Level 6, 120 (60 ECTS) Level 7 credits</p> <p><i>Computing Pathway</i></p> <ul style="list-style-type: none"> - MSci Computer Science - MSci Computer Science (Applied) - MSci Computer Science (Software Engineering) <p><i>Cyber Security Pathway</i></p> <ul style="list-style-type: none"> - MSci Computer Science (Cyber Security) - MSci Computer Science (Information Assurance) - MSci Computer Science (Networks) <p><i>Data Analytics Pathway</i></p> <ul style="list-style-type: none"> - MSci Computer Science (Artificial Intelligence) - MSci Computer Science (Data Science) 	
<p>Intermediate award(s), title(s) and credits Refer to respective programme specifications for BSc programme structures.</p> <p><i>Computing Pathway</i> - 120 (60 ECTS) Level 4, 120 (60 ECTS) Level 5, 120 (60 ECTS) Level 6 credits</p> <ul style="list-style-type: none"> - BSc (Hons) Computer Science - BSc (Hons) Computing - BSc (Hons) Software Engineering <ul style="list-style-type: none"> - Dip HE Computing - 120 (60 ECTS) Level 4, 120 (60 ECTS) Level 5 credits - Cert HE Computing - 120 (60 ECTS) Level 4 credits <p><i>Cyber Security Pathway</i> - 120 (60 ECTS) Level 4, 120 (60 ECTS) Level 5, 120 (60 ECTS) Level 6 credits</p> <ul style="list-style-type: none"> - BSc (Hons) Cyber Security with Digital Forensics - BSc (Hons) Cyber Security Management - BSc (Hons) Networks and Cyber Security <ul style="list-style-type: none"> - Dip HE Cyber Security - 120 (60 ECTS) Level 4, 120 (60 ECTS) Level 5 credits - Cert HE Computing - 120 (60 ECTS) Level 4 credits <p><i>Data Analytics Pathway</i> - 120 (60 ECTS) Level 4, 120 (60 ECTS) Level 5, 120 (60 ECTS) Level 6 credits</p> <ul style="list-style-type: none"> - BSc (Hons) Data Science and Artificial Intelligence - BSc (Hons) Business Computing with Analytics <ul style="list-style-type: none"> - Dip HE Data Analytics - 120 (60 ECTS) Level 4, 120 (60 ECTS) Level 5 credits - Cert HE Computing - 120 (60 ECTS) Level 4 credits 	
<p>UCAS Programme Code(s)</p>	<p>HECoS (Higher Education Classification of Subjects) Code and balanced or major/minor load. 100366</p> <p>CAH Code: 11 Does this programme require ATAS: NO</p>
<p>External reference points</p>	

Programme Specification – Section 1

<ul style="list-style-type: none"> • The UK Quality Code for Higher Education; • Chapter A1: The National Level (incorporating the Framework for Higher Qualifications (FHEQ) in England, Wales and Northern Ireland); • Chapter A2: The Subject and Qualification Level (incorporating the Subject benchmark statements for Computing (2022)); • BCS – The Chartered Institute for IT guidelines • United Nations Sustainable Development Goals (SDGs) 	
Professional, Statutory and Regulatory Body (PSRB) links n/a	
Places of delivery Bournemouth University, Talbot Campus	
Mode(s) of delivery Full-time Full-time sandwich	Language of delivery English
Typical duration 4 years full-time 5 years full-time sandwich Level 4: 1 year Level 5: 1 year Optional sandwich placement: 1 year Level 6: 1 year Level 7: 1 year	
Date of first intake September 2025	Expected start dates September
Maximum student numbers 30	Placements The 30-week sandwich placement is optional and should take place after Level 5. There is no optional placement offered at Level 7 level.
Partner(s) N/A	Partnership model N/A
Date of this Programme Specification April 2025	
Version number 1.0-0925	
Approval, review or modification reference numbers E242510	
Author Nan Jiang	

PROGRAMME STRUCTURE

Programme Award and Title: MSci Computer Science; MSci Computer Science (Applied); MSci Computer Science (Software Engineering)								
Year 4/Level 7								
Unit Name	Core/Option	No. of Credits	Assessment Element Weightings			Expected Contact hours per unit	Unit Version No.	HECoS Code (plus balanced or major/ minor load)
			Exam 1	Cwk 1	Cwk 2			
Distributed Ledger Technologies: Blockchain and Beyond	Core	20		100%		30	1.0	100362 (major), 100361 (minor)
Computational Modelling	Core	20		100%		30	1.0	101029 (major), 100966 (minor)
Quantum Computing	Core	20		100%		30	1.0	101300 (major), 101029 (minor)
Network Science	Core	20		100%		30	1.0	100365
Integrated Masters Teamwork	Core	40		100%		15	1.0	100367
<p>Exit qualification: MSci Computer Science, MSci Computer Science (Applied), MSci Computer Science (Software Engineering)</p> <p>Sandwich PG award: Requires 120 credits at Level 4, 120 credits at Level 5, 120 credits at Level 6, 120 credits at Level 7 and successful completion of a placement year.</p> <p>Full-time PG award: Requires 120 credits at Level 4, 120 credits at Level 5, 120 credits at Level 6, 120 credits at Level 7.</p>								

Programme Award and Title: MSci Computer Science (Cyber Security)								
Year 4/Level 7								
Unit Name	Core/Option	No. of Credits	Assessment Element Weightings			Expected Contact hours per unit	Unit Version No.	HECoS Code (plus balanced or major/ minor load)
			Exam 1	Cwk 1	Cwk 2			
Cyber Threat Intelligence	Core	20		100%		30	1.0	100376 (major), 100755 (minor)
Computational Modelling	Core	20		100%		30	1.0	101029 (major), 100966 (minor)
Quantum Computing	Core	20		100%		30	1.0	101300 (major), 101029 (minor)
Network Science	Core	20		100%		30	1.0	100365
Integrated Masters Teamwork	Core	40		100%		15	1.0	100367
<p>Exit qualification: MSci Computer Science (Cyber Security)</p> <p>Sandwich PG award: Requires 120 credits at Level 4, 120 credits at Level 5, 120 credits at Level 6, 120 credits at Level 7 and successful completion of a placement year.</p> <p>Full-time PG award: Requires 120 credits at Level 4, 120 credits at Level 5, 120 credits at Level 6, 120 credits at Level 7.</p>								

Programme Specification – Section 1

Programme Award and Title: MSci Computer Science (Information Assurance)								
Year 4/Level 7								
Unit Name	Core/Option	No. of Credits	Assessment Element Weightings			Expected Contact hours per unit	Unit Version No.	HECoS Code (plus balanced or major/ minor load)
			Exam 1	Cwk 1	Cwk 2			
Infrastructure and System Security	Core	20		100%		30	1.0	100376
Computational Modelling	Core	20		100%		30	1.0	101029 (major), 100966 (minor)
Quantum Computing	Core	20		100%		30	1.0	101300 (major), 101029 (minor)
Network Science	Core	20		100%		30	1.0	100365
Integrated Masters Teamwork	Core	40		100%		15	1.0	100367

Exit qualification: MSci Computer Science (Information Assurance)

Sandwich PG award: Requires 120 credits at Level 4, 120 credits at Level 5, 120 credits at Level 6, 120 credits at Level 7 and successful completion of a placement year.

Full-time PG award: Requires 120 credits at Level 4, 120 credits at Level 5, 120 credits at Level 6, 120 credits at Level 7.

Programme Award and Title: MSci Computer Science (Networks)								
Year 4/Level 7								
Unit Name	Core/Option	No. of Credits	Assessment Element Weightings			Expected Contact hours per unit	Unit Version No.	HECoS Code (plus balanced or major/ minor load)
			Exam 1	Cwk 1	Cwk 2			
Cloud Computing, Edge Computing and IoT	Core	20		100%		30	1.0	100373
Computational Modelling	Core	20		100%		30	1.0	101029 (major), 100966 (minor)
Quantum Computing	Core	20		100%		30	1.0	101300 (major), 101029 (minor)
Network Science	Core	20		100%		30	1.0	100365
Integrated Masters Teamwork	Core	40		100%		15	1.0	100367

Exit qualification: MSci Computer Science (Networks)

Sandwich PG award: Requires 120 credits at Level 4, 120 credits at Level 5, 120 credits at Level 6, 120 credits at Level 7 and successful completion of a placement year.

Full-time PG award: Requires 120 credits at Level 4, 120 credits at Level 5, 120 credits at Level 6, 120 credits at Level 7.

Programme Specification – Section 1

Programme Award and Title: MSci Computer Science (Artificial Intelligence)								
Year 4/Level 7								
Unit Name	Core/Option	No. of Credits	Assessment Element Weightings			Expected Contact hours per unit	Unit Version No.	HECoS Code (plus balanced or major/ minor load)
			Exam 1	Cwk 1	Cwk 2			
Language Models and NLP	Core	20		100%		30	1.0	100961
Computational Modelling	Core	20		100%		30	1.0	101029 (major), 100966 (minor)
Quantum Computing	Core	20		100%		30	1.0	101300 (major), 101029 (minor)
Network Science	Core	20		100%		30	1.0	100365
Integrated Masters Teamwork	Core	40		100%		15	1.0	100367

Exit qualification: MSci Computer Science (Artificial Intelligence)

Sandwich PG award: Requires 120 credits at Level 4, 120 credits at Level 5, 120 credits at Level 6, 120 credits at Level 7 and successful completion of a placement year.

Full-time PG award: Requires 120 credits at Level 4, 120 credits at Level 5, 120 credits at Level 6, 120 credits at Level 7.

Programme Award and Title: MSci Computer Science (Data Science)								
Year 4/Level 7								
Unit Name	Core/Option	No. of Credits	Assessment Element Weightings			Expected Contact hours per unit	Unit Version No.	HECoS Code (plus balanced or major/ minor load)
			Exam 1	Cwk 1	Cwk 2			
Machine Learning and Applications	Core	20		100%		30	1.0	100992
Computational Modelling	Core	20		100%		30	1.0	101029 (major), 100966 (minor)
Quantum Computing	Core	20		100%		30	1.0	101300 (major), 101029 (minor)
Network Science	Core	20		100%		30	1.0	100365
Integrated Masters Teamwork	Core	40		100%		15	1.0	100367

Exit qualification: MSci Computer Science (Data Science)

Sandwich PG award: Requires 120 credits at Level 4, 120 credits at Level 5, 120 credits at Level 6, 120 credits at Level 7 and successful completion of a placement year.

Full-time PG award: Requires 120 credits at Level 4, 120 credits at Level 5, 120 credits at Level 6, 120 credits at Level 7.

AIMS OF THE DOCUMENT

The aims of this document are to:

- define the structure of the programme;
- specify the programme award titles;
- identify programme and level learning outcomes;
- articulate the regulations governing the awards defined within the document.

AIMS OF THE PROGRAMME

The integrated Master's program aims to offer undergraduate students a seamless pathway to advanced specialisation in their subject domain, preparing them for either a technical or research-based career. The program combines a three or four-year undergraduate curriculum with six taught units at the postgraduate level (totalling 120 credits). This structure enables students to deepen their knowledge and develop higher-level skills within their discipline.

Note this document serves as an overarching guide for all eight integrated Master's programmes. For the undergraduate part, please refer to the respective programme specifications.

ALIGNMENT WITH THE UNIVERSITY'S STRATEGIC PLAN

This integrated Master's program aligns with the BU 2025 strategic plan and the University's fusion agenda. It embodies the principles of Fusion Learning by sharing three taught units at Level 7 with the MSc Computer Science program and including a team-based project unit. This structure enables students to acquire advanced subject knowledge and conduct research into complex problem domains, developing actionable solutions.

LEARNING HOURS AND ASSESSMENT

Bournemouth University taught programmes are composed of units of study, which are assigned a credit value indicating the amount of learning undertaken. The minimum credit value of a unit is normally 20 credits, above which credit values normally increase at 20-point intervals. 20 credits is the equivalent of 200 study hours required of the student, including lectures, seminars, assessment and independent study. 20 University credits are equivalent to 10 European Credit Transfer System (ECTS) credits.

The assessment workload for a unit should consider the total time devoted to study, including the assessment workload (i.e. formative and summative assessment) and the taught elements and independent study workload (i.e. lectures, seminars, preparatory work, practical activities, reading, critical reflection).

Assessment per 20 credit unit should normally consist of 3,000 words or equivalent. Dissertations and Level 6 and 7 Final Projects are distinct from other assessment types. The word count for these assignments is 5,000 words per 20 credits, recognising that undertaking an in-depth piece of original research as the capstone to a degree is pedagogically sound.

STAFF DELIVERING THE PROGRAMME

Students will usually be taught by a combination of senior academic staff with others who have relevant expertise including – where appropriate according to the content of the unit – academic staff, qualified professional practitioners, demonstrators/technicians and research students.

INTENDED LEARNING OUTCOMES – AND HOW THE PROGRAMME ENABLES STUDENTS TO ACHIEVE AND DEMONSTRATE THE INTENDED LEARNING OUTCOMES

PROGRAMME AND LEVEL 7 INTENDED PROGRAMME OUTCOMES

<p>A: Subject knowledge and understanding</p> <p>This programme/level provides opportunities for students to develop and demonstrate knowledge and understanding of:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme/level learning outcomes:</p>
<p>A1 Principles, concepts and techniques of computer science and related research, at, or informed by, the forefront of the academic discipline.</p> <p>A2 Enabling technologies for computer science and its applications within the discipline.</p> <p>A3 A rigorous scientific and engineering approach to investigating and solving current computer science problems within complex or unpredictable scenarios.</p> <p>A4 The management and development of effective computational artefacts to address computer science or other problems.</p> <p>A5 The professional, legal, and ethical responsibilities of computer scientists and of computer science personnel within the organisational, technical, and global contexts in which computer science approaches are applied.</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • lectures (A1 – A5); • seminars (A1 – A5); • directed reading (A1 – A5); • use of the VLE (A1 - A5); • independent research (for project) (A1 - A5). <p>Assessment strategies and methods:</p> <ul style="list-style-type: none"> • coursework (A1 – A5); • project (A1 - A5).
<p>B: Intellectual skills</p> <p>This programme/level provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme/level outcomes:</p>
<p>B1 Critical thinking, problem-solving and decision-making to solve computer science problems with a high degree of autonomy.</p> <p>B2 Analyse, interpret, synthesis, and critically evaluate concepts, principles and practices at the forefront of the area of study.</p> <p>B3 Critically evaluate and justify alternative approaches to solutions development at the forefront of the area of study.</p> <p>B4 Formulate, plan, execute, and report on a project demonstrating innovation and/or originality.</p> <p>B5 Communicate findings to specialists and a diverse range of non-specialist audiences, adhering to professional and academic standards.</p>	<p>Learning and teaching strategies and methods:</p> <ul style="list-style-type: none"> • lectures (B1 – B3, B5); • labs/seminars (B1 – B5); • workshops (B1 – B5); • use of the VLE (B1 – B3); • independent research (for project) (B1 - B5). <p>Assessment strategies and methods:</p> <ul style="list-style-type: none"> • coursework (B1 - B5); • project (B1 - B5).
<p>C: Practical skills</p> <p>This programme/level provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme/level learning outcomes:</p>
<p>C1 Retrieve, select and evaluate information from a variety of sources demonstrating originality in the application of knowledge;</p>	<p>Learning and teaching strategies and methods:</p>

Programme Specification - Section 2

<p>C2 Analyse, specify, design and implement effective computer science applications to meet business goals given complex or open constraints;</p> <p>C3 Select appropriate methods and tools for solving computer science problems within complex or unpredictable scenarios;</p> <p>C4 Plan, monitor and evaluate the progress and operation of a computer science project.</p>	<ul style="list-style-type: none"> • lectures (C1 – C3); • labs/seminars (C1 – C4); • workshops (C1 – C4); • use of the VLE (C1 – C2); • coursework (C1 – C4); • independent research (for project) (C1 – C4); • group exercises (C1 – C4). <p>Assessment strategies and methods:</p> <ul style="list-style-type: none"> • coursework (C1 – C4); • project (C1 – C4).
<p>D: Transferable skills</p> <p>This programme/level provides opportunities for students to:</p>	<p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme/level learning outcomes:</p>
<p>D1 Demonstrate well-developed problem-solving skills and originality in the application of knowledge in the discipline .</p> <p>D2 Gather, select, and analyse a range of experimental and fieldwork data, and present professionally using appropriate media.</p> <p>D3 Structure and communicate ideas professionally and effectively, adhering to appropriate professional and academic standards.</p> <p>D4 Demonstrate initiative, self-direction, and exercise personal responsibility for management of own learning in a proactive and effective manner.</p> <p>D5 Distil, synthesise, and critically analyse alternative approaches and methodologies to problems and research results reported in literature and elsewhere.</p>	<p>Learning and teaching strategies and methods:</p> <ul style="list-style-type: none"> • lectures (D1 - D5); • labs/seminars (D1- D5); • workshops (D1 – D5); • use of the VLE (D3 - D5); • independent research (for project) (D1 – D5) • directed reading (D1, D2, D4,- D5). <p>Assessment strategies and methods:</p> <ul style="list-style-type: none"> • coursework (D1 - D5); • project (D1- D5).

Programme Specification - Section 2

Programme(s) Skills Matrix

Programme Intended Learning Outcomes		A 1	A 2	A 3	A 4	A 5	B 1	B 2	B 3	B 4	B 5	C 1	C 2	C 3	C 4	D 1	D 2	D 3	D 4	D 5
L7	Distributed Ledger Technologies: Blockchain and Beyond	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L7	Machine Learning and Applications	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L7	Language Models and NLP	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L7	Infrastructure and System Security	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L7	Cyber Threat Intelligence	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L7	Cloud Computing, Edge Computing and IoT	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X
L7	Computational Modelling	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L7	Quantum Computing	X	X	X	X	X	X	X		X	X	X		X		X	X	X	X	X
L7	Network Science	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L7	Integrated Masters Teamwork			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

ADMISSION REGULATIONS

The entry requirements can be viewed on the university website: [Courses | Bournemouth University](#)

PROGRESSION ROUTES

Recognition arrangements provide formally approved entry or progression routes through which students are eligible to apply for a place on a programme leading to a BU award. Recognition does not guarantee entry onto the BU receiving programme only eligibility to apply. In some cases, additional entry criteria such as a Merit classification from the feeder programme may also apply. Please see the [recognition register](#) for a full list of approved Recognition arrangements and agreed entry criteria.

ASSESSMENT REGULATIONS

The regulations for this programme are the University's Standard Integrated Masters Assessment Regulations.

WORK BASED LEARNING (WBL) AND PLACEMENT ELEMENTS

Students, under the guidance of lecturers and the Placement Office, are required to complete a sandwich year with a 30-week minimum placement requirement before Level 6.

The placement is assessed on a pass/fail basis using the log book and employer appraisal. If the 30 week optional sandwich placement is selected it must be completed between Levels 5 and 6.

Placement draws on some or all of the units studied on the first two levels of the programme. It provides the opportunity for the student to develop their abilities and understanding of software engineering related subjects, as well as providing a platform for successful entry into the profession following graduation. It applies and develops understanding and skills acquired in Levels 4 and 5, makes a major contribution to the understanding of the final level units, further develops final projects or dissertation research by utilising the context of the work experience as appropriate and enhances students' prospects of future employment.