Validated Programme Element Specification for
BPC First Year University Studies in Information and Computer Science

Applicable for all undergraduate students commencing the programme element on or after 1st September 2024

Version No.	Date	Notes – Brunel QA USE ONLY	QA
v1	*Feb 2024*	*New specification for 2024-25 for 15-30 restructure*	*BGS*
v1.1	*Apr 2024*	*New module codes added*	*BGS*

Validated programme element	
1. Awarding and validating institution	Brunel University London
2. Providing institution(s)	Brunel University London Pathway College (BPC)
3. Associated Home Brunel University college / department / division	College of Engineering, Design and Physical Sciences / Department of Computer Science / Computer Science
4. Associated Contributing Brunel University college / department / division	None
5. Programme Element accredited by	N/A
6. Validated for inclusion in Brunel University programmes at Level	FHEQ level 4
7. Validated for inclusion in Brunel University programmes (list):	BSc Business Computing BSc Business Computing (Human-Computer Interaction) BSc Business Computing (eBusiness) BSc Business Computing (Social Media) BSc Computer Science BSc Computer Science (Artificial Intelligence) BSc Computer Science (Digital Media and Games) BSc Computer Science (Network Computing) BSc Computer Science (Software Engineering)
8. Normal length of element for each mode of study	26 weeks First Year University Studies in Info and Computer Science (Alternative FHEQ Level 4) • FHEQ Level 4 September commencement: no change • FHEQ Level 4 January commencement: -3 months
9. Maximum length of element for each mode of study	See Programme Specification for Brunel programme of which this element forms part
10. Programme Intakes	September January
11. Modes of study	F/T
12. Modes of delivery	Standard
13. JACS code	In line with Brunel University London programme

14. BPC-related Route Code(s)	G500UBUSCOMP BSc (Hons) Business Computing G500UBUSCOMH BSc (Hons) Business Computing (Human-Computer Interaction) G500UBUSCOME BSc (Hons) Business Computing (eBusiness) G500UBUSCOMS BSc (Hons) Business Computing (Social Media) G500UNVBCOMP BPC for alternative Foundation Level and FHEQ Level 4 G400USCMPSC1 Computer Science Computer Science with Placement G400UCSARTIN Computer Science (Artificial Intelligence) Computer Science (Artificial Intelligence) with Placement G400UDIGMEDI Computer Science (Digital Media and Games) Computer Science (Digital Media and Games) with Placement G400UNETWKCM Computer Science (Network Computing) Computer Science (Network Computing) with Placement G400USOFENG1 Computer Science (Software Engineering) Computer Science (Software Engineering) with Placement G400UNVCS BPC for alternative Foundation Level and FHEQ Level 4
15. Relevant subject benchmark statements and other external and internal reference points used to inform programme design	QAA UK Quality Code for Higher Education Most recent QAA Subject Benchmark statement - Computing Brunel 2030
16. Admission Requirements/pre-requisites for the programme element	See https://pathway.brunel.ac.uk/academic-requirements for standard entry requirements English Language entry requirements: minimum of IELTS 6.0 (with 5.5 minimum in each component part) or equivalent.
17. Other relevant information	The programme element is compliant with both the generic assessment regulations of Navitas UK and those more specifically of the College and Brunel University, see Senate Regulations 2 and 4. All students entering the Department follow a common FHEQ level 4 programme and at FHEQ level 5 they take the group project and 2 out of the remaining 4 assessment blocks. The remaining two assessment blocks are common to all Business Computing programmes. Whilst a prospective student must apply for a particular course they will be free to change after arrival: • they can choose between the Business Computing and Computer Science branches at the end of FHEQ level 4, and • at the end of FHEQ level 5 they can optionally select a particular specialism. To enable informed decision-making we will run taster events at the end of FHEQ level 4 and FHEQ level 5. This flexibility is being marketed as an advantage of the Brunel programmes. The current programme addresses the specifications for accreditation requirements of the British Computer Society as set out in the Student Handbook and we expect to obtain continued accreditation for the revised programme.
18. Any departure from relevant regulations specified in Senate Regulation 2 must be stated here and approved by Senate.	None
19. Further information about study with BPC can be found on the BPC website.	https://pathway.brunel.ac.uk/

20. EDUCATIONAL AIMS OF THE PROGRAMME ELEMENT

The educational aims of the programme element are to:

1. Develop students' knowledge and understanding, and competence in, data structure and algorithms (Java), quantitative modelling, computer hardware software and information systems, working markets and environments and general study and research skills.
2. Develop in students an appreciation of the business application of ICT and content of the programme with a view to enhancing their overall understanding of such entities in commercial-based industries, their place and purpose in society and at an international level, in order that they may make a further career decisions in an informed manner
3. Develop in students an appreciation and desire to learn based on competent intellectual and practical skills that build to a set of transferable skills that will support them in all aspects of their onward academic studies/careers and support their decision making in an informed manner.
4. Ensure that students have attained the prescribed level of inter-disciplinary language competence.

21. LEARNING OUTCOMES

The programme element provides opportunities for students to develop and demonstrate knowledge and understanding (K) cognitive (thinking) skills (C) and other skills and attributes (S) in the following areas:

Level	Category (K = knowledge and understanding, C = cognitive (thinking) skills, S = other skills and attributes)	**Learning Outcome**	**Associated Assessment Blocks Code(s)**	**Associated Study Blocks Code(s)**	**Associated Modular Blocks Code(s)**
4	K	The basic properties of software artefacts: information, algorithms, programs, and common commercial system and network architectures			**NC1605 NC1606 NC1607 NC1608 NC1609 NC1610**
4	K	System development approaches, requirements capture; design methods, models, tools and techniques; implementing and testing systems; software maintenance.			**NC1605 NC1606 NC1607 NC1608 NC1609 NC1610**
4	K	Basic appreciation of project management issues arising from team-based software development			**NC1606 NC1607**
4	K	Understanding the importance of demonstrating professional and ethical behaviour.			**NC1605**
4	C	To be able to learn and adapt quickly to the specific techniques or approaches that an organisation uses.			**NC1605 NC1610 NC1608**
4	C	To code and test a simple software artefact.			**NC1605 NC1606 NC1607 NC1608 NC1609 NC1610**
4	C	Evaluate and judge the reliability of sources of information for research,			**NV1601**

		and use appropriate citation and bibliography writing conventions in familiar contexts			
4	S	To communicate clearly, both verbally and in writing, with clients, managers and technical colleagues.			**NC1605** **NC1606** **NC1607** **NC1608** **NC1609** **NC1610** **NV1601**
4	S	To work effectively as a member of a team recognising the different roles within a team and different ways of organising teams.			**NC1605** **NC1606** **NC1607** **NC1608** **NC1609** **NC1610**
4	S	To work independently and be able to reflect on their work.			**NC1605** **NC1606** **NC1607** **NC1608** **NC1609** **NC1610** **NV1601**

Learning/teaching strategies and methods to enable learning outcomes to be achieved, including formative assessments.

The Programme Element will be delivered using a combination of Lectures/Labs/Tutorials/Self-directed study:

Lecture

- Purpose: - To deliver basic module material.
- Structure: Each module has -6 hours contact time per week which is normally delivered in 4 hour blocks. No period of contact should exceed fifty (50) minutes at one time without a minimum of a ten (10) minute break.

Lab

- Purpose: Lab sessions provide a forum in which students can practice their practical skills.
- Structure: Each lab is normally of two hours in duration whilst breaks are to be provided at the discretion of the lecturer. No period of contact should exceed fifty (50) minutes at one time without a minimum of a ten (10) minute break.

Tutorial

All modules will have a tutorial session in preparation for formative assessment.

Formative assessment

This is a key aspect of the programme element and is varied to ensure that a student has a variety of learning opportunities. This will include: individual and group formative assessment methods: presentations, individual and group work; and peer review.

Self-directed study

Each student is expected to undertake a minimum number of hours in individual study per week in order to support and build the skills, knowledge and understanding presented in each lecture and small group tutorial session per week. It is expected that students will increase the number of individual study hours as they approach formal assessment events. The ability for students to expand their learning by creating effective self-directed study patterns is a transferable skill deemed fundamental to further academic success as well as a key time-management tool.

All students are provided with access to a range of online resources through the student portal. Electronic journals and electronic books are available through the Brunel University e-resources gateway.

There will be a focus of using freely available tools and benefiting from the resources available on the internet to support learning.

Guest speakers from relevant industries will provide additional perspectives for students.

Summative assessment strategies and methods to enable learning outcomes to be demonstrated.

Summative assessment methods are varied to ensure students have a variety of learning opportunities throughout their programme. These will include: closed book; individual and group projects; oral presentations; case studies and portfolios and final examination (closed book).

22. Programme element structure and progression requirements (if applicable)

Programme Element Structure

Compulsory modular block codes, titles and credits

Code	Title	Credit Points
NV1601	Interactive Learning Skills and Communication 4	15
NC1605	Group Project	45
NC1606	Introductory Programming	15
NC1607	Programming Applications	15
NC1608	Data and Information	15
NC1609	Information Systems and Organisations	15
NC1610	Logic and Computation	15

Compulsory assessment block codes, titles and credits

Assessment and Progression Requirements

For inclusion in Programmes:

BSc Business Computing
BSc Business Computing (Human-Computer Interaction)
BSc Business Computing (eBusiness)
BSc Business Computing (Social Media)
BSc Computer Science
BSc Computer Science (Artificial Intelligence)
BSc Computer Science (Digital Media and Games)
BSc Computer Science (Network Computing)
BSc Computer Science (Software Engineering)

The following assessment or modular blocks are core

NV1601 Interactive Learning Skills and Communication 4
NC1605 Group project
NC1606 Introductory Programming

Progression requirements as per Brunel University London Senate Regulation 2

NV1601 – Pass at Grade C-/50%
NC1605 - Pass at Grade D-/40%
NC1606 - Pass at Grade D-/40%

In addition
-No credit at Grade F
-No more than 40 non-core credits in Grade band E (E+, E, E-)

Reassessment
Reassessment entitlements are as defined for Level 4 in Brunel University Senate Regulation 2, except that the ILSC module [NV1601] shall not count in the re-assessment limit.

Please note: this specification provides a concise summary of the main features of the programme element and the learning outcomes that a student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods can be found in the modular block, assessment and study block outlines and other programme and block information. The accuracy of the information contained in this document is reviewed by the University from time to time and whenever a major modification occurs.