Validated Programme Element Specification for BPC University Foundation in Information and Computer Science

Applicable for all undergraduate students commencing the programme element on or after 1st September 2023

Version No.	Date	Notes – Brunel QUALITY ASSURANCE USE ONLY	QA
v1	*July 2023*	*Validated Programme Specification Element (VPES) for 2023-24 created.*	*BGS*
v2	*Sept 2023*	*New module codes added for new modules NV0619/NV0699 Mathematics, NV0618/NV0698 Critical Thinking and Expression, NV0621/NV0681 Introduction to Programming and NV0620/NV0680 Introduction to Research Methods*	*BGS*

Validated programme element	
1. Awarding and validating institution	Brunel University London
2. Providing institution(s)	Brunel University London Pathway College
3. Associated Brunel University college / department / division	College of Engineering, Design and Physical Sciences Department of Computer Science
4. Associated Contributing Brunel University college / department / division	N/A
5. Validated for inclusion in Brunel University programmes at level	Foundation
6. 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)
7. Type of programme element	Foundation Level
8. Most recent approval	Periodic Programme Review March 2023
9. Normal length of element for each mode of study	26 weeks
10. Maximum length of element for each mode of study	See Programme Specification for Brunel programme of which this element forms part
11. Programme Intakes	January, May and September Gulf-sponsored students: September and January

12. Modes of study	Full-time
13. Modes of delivery	Standard
14. HECoS code	In line with Brunel University London programme
15. BPC-related Route Code(s)	G500UNVBCOMP: BSc Business Computing G500UNVBCHCI: BSc Business Computing (Human-Computer Interaction) G500UNVBCEB: BSc Business Computing (eBusiness) G500UNVBCSM: BSc Business Computing (Social Media) G400UNVCS: BSc Computer Science G400UNVCSAI: BSc Computer Science (Artificial Intelligence) G400UNVCSDMG: BSc Computer Science (Digital Media and Games) G400UNVCSNC: BSc Computer Science (Network Computing) G400UNVCSSE: BSc Computer Science (Software Engineering For Gulf-sponsored students: G500UNVBCOMG: BSc Business Computing G500UNVBCHCG: BSc Business Computing (Human-Computer Interaction) G500UNVBCEBG: BSc Business Computing (eBusiness) G500UNVBCSMG: BSc Business Computing (Social Media) G400UNVCSG: BSc Computer Science G400UNVCSAIG: BSc Computer Science (Artificial Intelligence) G400UNVCSDGG: BSc Computer Science (Digital Media and Games) G400UNVCSNCG: BSc Computer Science (Network Computing) G400UNVCSSEG: BSc Computer Science (Software Engineering)
16. Relevant subject benchmark statements and other external and internal reference points used to inform programme design	UK Quality Code for Higher Education Most recent QAA Subject Benchmark Statement- Computing Brunel 2030
17. 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 5.5 (with 5.5 minimum in each component part) or equivalent For Gulf-sponsored students: English Language entry requirements: minimum of IELTS 6.0 (with 5.5 minimum in each component part) or equivalent Academic Entry Requirements for Computer Science UK: 5 GCSE Passes, grades A-C (including Mathematics)

18. 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.
19. Any departure from relevant regulations specified in Senate Regulation 2 must be stated here and approved by Senate.	None
20. Further information about study with BPC can be found on the BPC website.	https://pathway.brunel.ac.uk/

21. EDUCATIONAL AIMS OF THE PROGRAMME ELEMENT

The aim of this programme is to provide a theoretical and applied knowledge and skills required at foundation level. In completing the programme, students will be able to demonstrate understanding of research methods and methodologies, critical and creative thinking, management, decision-making, ICT and analytical skills in the production of written and oral assignments, to develop the prescribed level of inter-disciplinary language competence. Students will examine a range of research approaches, techniques and methodologies, and manage their personal development enhancing their intellectual and practical skills, which build a set of transferable skills as appropriate for continuing at the undergraduate level

22. 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)**
Foundation	K1	Demonstrate knowledge and understanding of how computer systems, internet, enterprise applications and sustainability in IT projects impact the broad range of businesses and daily life.			NV0605/ NV0615
Foundation	K2	Construct arguments using research methods and demonstrate an understanding of critical			NV0600 NV0618/ NV0698

		thinking to develop varied perspectives on related subject disciplines.			NV0620/ NV0680
Foundation	K3	Suggest appropriate strategies for responding to changes in the business environment, develop a conceptual understanding of the role of relevant principles, and understand the values of global social and environmental responsibility.			NV0606/ NV0616
Foundation	K4	Demonstrate knowledge and application of basic mathematics and statistics in well-defined contexts as well as in justifying the use of relevant tools and techniques.			NV0619/NV0699
Foundation	K5	Understand the application of problem-solving techniques in the context of well-defined scenarios, showing judgement in the selection and application of selected computer packages and programming languages.			NV0608/NV0609 NV0621/NV0681
Foundation	C1	Critically analyse and demonstrate originality and creativity in the application of knowledge and literature, with a practical understanding of how research techniques are used to answer research questions.			NV0600 NV0620/NV0680 NV0618/NV0698
Foundation	C2	Demonstrate the ability to work in an effective manner as a member of a team and appropriately communicate to plan projects effectively by using Microsoft Project, to analyse data using Microsoft Excel and appropriate ICT tools under guidance.			NV0605/ NV0615

Foundation	C3	Develop and apply their own perspectives to studies, and critical evaluation skills to integrate theory and practice to solve problems.			NV0619/NV0699 NV0606/ NV0616
Foundation	C4	Demonstrate judgement, critical thinking and problem-solving skills to develop a logical approach to formulate a solution to a problem to produce a computer programme with a degree of independence.			NV0608/NV0609 NV0621/ NV0681
Foundation	S1	Employ relevant analytical skills and methodologies to present findings using appropriate referencing techniques, informed by a critical perspective of theory and a wide range of learning sources.			NV0600 NV0620/ NV0680
Foundation	S2	Demonstrate an understanding of mathematical concepts and the ability to analyse mathematical problems in finance and management accounting.			NV0618/NV0699
Foundation	S3	Demonstrate a systematic understanding of relevant knowledge and utilise this to effectively communicate using quantitative or qualitative information in an organisational context.			NV0605 NV0606/ NV0616 NV0618/NV0698
Foundation	S4	Demonstrate the ability to undertake problem identification and analysis to appropriately design, develop, integrate and test. computing system using a programming language.			NV0608/NV0609 NV0621/NV0681
Foundation	S5	Demonstrate the ability to use appropriate practices and perform work within a professional, legal and ethical framework –			NV0605/NV0615 NV0606/ NV0616

		including data management and use, security, equality, diversity and inclusion (EDI)			NV0600

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 4/6 hours contact time per week which is normally delivered in 2-hours 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

- Structure: Sessions are normally conducted according to preparation for specific topics and provide a collegiate atmosphere to encourage students to interact with class members building their class, or 'team', knowledge and skills. For each module, there is one hour a week tutorial session.

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.

Formative assessment is a key aspect of the programme 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.

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 appropriate assessment of learning outcomes. These methods include individual and group projects; open-book examinations; oral presentations; case studies and portfolios and closed-book final examinations.

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

Programme Element Structure

Compulsory assessment block codes, titles and credit

Optional assessment block codes, titles and credits

Compulsory study block codes, titles and credit volume

Optional Study block codes, titles and credit volume

Compulsory modular block codes, titles and credits

Code	Title	Credit Points
NV0600	Interactive Learning Skills and Communication 1	15
NV0605/ NV0615	Principles of ICT	15
NV0606/ NV0616	Management	15
NV0608/ NV0609	Introduction to Computing	15
NV0620/ NV0680	Introduction to Research Methods	15
NV0618/ NV0698	Critical Thinking and Expression	15
NV0619/ NV0699	Mathematics	15
NV0621/ NV0681	Introduction to Programming	15

Optional modular 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	**Progression requirements as per Brunel University London Senate Regulation 2** All modules pass at grade C-/50% except NV0600 pass at grade D-/40% For Gulf-sponsored students: NV0600 pass at grade D-/40% NV0615 pass at grade B-/60% NV0616 pass at grade B-/60% NV0609 pass at grade C-/50% NV0681 Introduction to Programming pass at grade C-/50% NV0680 Introduction to Research Methods pass at grade C-/50% NV0698 Critical Thinking and Expression pass at grade C-/50% NV0699 Mathematics pass at grade C-/50%
NV0600 Interactive Learning Skills and Communication 1 NV0605/NV0615 Principles of ICT NV0606/NV0616 Management NV0608/NV0609 Introduction to Computing NV0621/NV0681 Introduction to Programming NV0620/NV0680 Introduction to Research Methods NV0618/NV0698 Critical Thinking and Expression NV0619/NV0699 Mathematics	

Progression of Gulf-sponsored students
Gulf-sponsored students that successfully complete a Foundation level programme at Brunel University London Pathway College will progress directly to level 4 at Brunel University London. Only students that are sponsored by Gulf States are permitted to completed the Gulf-sponsored routes.

Reassessment
Students will be entitled to be re-assessed in any modules for which they have failed, at the first attempt, to achieve the pass mark(s) as defined above under 'Progression requirements'; any such reassessment of a module may be attempted on two occasions only and shall be capped at the pass mark for the module as defined above under 'Progression Requirements'. Students who fail to achieve the pass mark in a module in the first reassessment will be required to retake the module before attempting the final reassessment in the module.

From January 2016 – Students enrolling from 2016 will be entitled to be re-assessed in any modules for which they have failed, at the first attempt, to achieve the pass mark(s) as defined above under 'Progression requirements'; any such reassessment of a module may only be attempted on one occasion and shall be capped at the pass mark for the module as defined above under 'Progression requirements'.

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, and may be checked by the Quality Assurance Agency for Higher Education.