

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

Applicable for all undergraduate students commencing the programme element on or after 1st September 2021

Version No.	Date	Notes – Brunel QA USE ONLY	QAM/O
1	Jul 2021	Specification for Academic Year 2021-22 created.	RDC

Validated programme element	
1. Awarding and validating institution	Brunel University London
2. Providing institution(s)	London Brunel International College
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. Type of programme element	First Year
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	September January
12. Modes of study	F/T
13. Modes of delivery	Standard
14. N/A	N/A
15. N/A	N/A
16. JACS code	In line with Brunel University London programme

17. LBIC-related Route Code(s)	<p>G500UNVBCOMP: BSc Business Computing G500UNVBHCI: BSc Business Computing (Human-Computer Interaction) G500UNVBCEB: BSc Business Computing (eBusiness) G500UNVBSCM: 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)</p>
18. Relevant subject benchmark statements and other external and internal reference points used to inform programme design	<p>QAA UK Quality Code for Higher Education which includes the English Framework for Higher Education Qualifications within Part A on Setting and Maintaining Academic Standards Most recent QAA Subject Benchmark Statement- Computing Brunel 2030 Brunel Placement Learning Policy, as published under the 'Placements' section of the 'Managing Higher Education Provision with Others' page</p>
19. Admission Requirements/pre-requisites for the programme element	<p>See https://www.lbic.navitas.com/academic-requirements for standard entry requirements</p> <p>English Language entry requirements: minimum of IELTS 6.0 (with 5.5 minimum in each component part) or equivalent.</p>
20. Other relevant information	<p>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.</p>
21. Any departure from relevant regulations specified in Senate Regulation 2 must be stated here and approved by Senate.	None
22. Further information about study with LBIC can be found from the LBIC website.	https://www.lbic.navitas.com/

23. 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.

24. 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	Demonstrate an understanding of the QAA Subject Benchmark Statements for Computing: architecture, computer-based systems, networks, databases, data structures, HCI, information retrieval, information systems, multimedia, operating systems, programming fundamentals (C+ and Java), systems analysis and design.	-	-	NC1600
4	K	Show knowledge of the fundamentals of computer systems and their feasibility, security and efficacy as required by students entering NQF 5 Computing-based degree programmes.	-	-	NC1600
4	K	Apply the principles of ICT and Communications relevant to all generic subject disciplines.	-	-	NC1600 NC1603 NC1604
4	K	Be able to apply ICT as a fundamental tool for extracting, sourcing, describing and presenting data and information in a variety of relevant forms, and distributing data and information via a range of channels and formats.	-	-	NC1604
4	K	Be able to design and construct programs using object oriented techniques	-	-	NC1600 NC1601 NC1602 NC1604
4	K	Be able to use suitable data representations and employing appropriate data manipulation techniques in the context of problem solving	-	-	NC1600 NC1601 NC1602 NC1604
4	K	Be able to define the basic principles of systems theory	-	-	All
4	K	Be able to use one common systemic structure in the field of computing accurately identifying relevant subsystems (or components) and data (or information flows)	-	-	NC1600 NC1603
4	K	The ability to Interpret, express and analyse formal systems and applications	-	-	NC1601 NC1602 NC1604
4	K	The ability to extract, analyse and interpret data	-	-	NC1601 NC1602 NC1603 NC1604
4	K	Demonstrate techniques and forms of effective and clear communication in a variety of academic and professional settings in accordance with Level B2 'Independent User' as described by the Council of Europe.	-	-	NC1600
4	K	The role and importance of the study of the history of scholarship as a basis to determining a full understanding, correct use of accurate nomenclature and an appreciation of fundamental concepts associated with a subject area.	-	-	All

4	C	Apply basic research techniques to sourcing and selecting appropriate academic data and literature.	-	-	All
4	C	Combine oral, written, listening, reading, non-verbal and diagrammatic skills to effect clear communication.	-	-	All
4	C	Ability to analyse data and various modes of information using appropriate techniques.	-	-	NC1600
4	C	Ability to begin to evaluate and start to apply, reasoned thinking and supportive evidence collation to conflicting sets of information and academic opinion.	-	-	NC1600
4	S	Employ relevant analytical skills and methodologies.	-	-	NC1600 NC1604
4	S	Ability to engage critically with regard to the underlying challenges facing businesses.	-	-	All
4	S	Select, read, digest, summarise and synthesise information in a variety of forms, both qualitative and quantitative (text, numerical data and diagrammatic) and in an appropriate manner to identify and determine key facts/themes and relevancy.	-	-	All
4	S	Use and clearly communicate discursive, numerical, statistical and diagrammatic ideas, concepts, results and conclusions using appropriate technical and non-technical language and language style, structure and form.	-	-	All
4	S	Apply basic research and referencing techniques to all aspects of study, information collation, information presentation and formulation of academic opinion.	-	-	All

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 hours contact time per week which is normally delivered in 2 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 on line 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).

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

Programme Element Structure

Compulsory modular block codes, titles and credits

Code	Title	Credit Points
NV1600	Interactive Learning Skills and Communication 4	20
NC1600	Group project	40
NC1601	Introductory Programming	20
NC1602	Data and Information	20
NC1603	Information Systems and Organisations	20
NC1604	Logic and Computation	20

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)
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<p>The following assessment or modular blocks are core</p> <p>NV1600 Interactive Learning Skills and Communication 4 NC1600 Group project NC1601 Introductory Programming</p>	<p>Progression requirements as per Brunel University London Senate Regulation 2</p> <p>NV1600 – Pass at Grade C-/50% NC1600 - Pass at Grade D-/40% NC1601 - Pass at Grade D-/40%</p> <p>In addition -No credit at Grade F -No more than 40 non-core credits in Grade band E (E+, E, E-)</p>
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<p>Reassessment</p> <p>Reassessment entitlements are as defined for Level 4 in Brunel University Senate Regulation 2, except that the ILSC module [NV1600] shall not count in the re-assessment limit.</p>

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.