

Programme Specification

1	Awarding body	University of London	
2	Teaching Institution	Birkbeck College	
3	Programme Title(s)	BSc Digital and Technology Solutions	
4	Programme Code(s)	UBSDIGTS_C	
5	UCAS code	N/A	
6	Home Department	Computer Science and Information Systems	
7	Exit Award(s)	Cert CE, Cert HE, Dip HE	
8	Duration of Study (number of years)	4	
9	Mode of Study	FT PT ✓ DL	
10	Level of Award (FHEQ)	6	
11	Other teaching depts or institution	Management (contributing 3 x 15 credit modules at level 4)	
12	Professional, Statutory Regulatory Body(PSRB) details	N/A	
13	QAA Benchmark Statement	Computing	

¹⁴ Programme Rationale & Aims

This programme delivers the <u>Digital and Technology Solutions Professional Degree</u>

<u>Apprenticeship Standard (Software Engineer)</u>. Apprentices taking the Degree will benefit by gaining an honours degree alongside the experience they are gaining as an apprentice in the workplace.

The Degree enables apprentices working in a software development role to develop their understanding of theoretical issues in the area of software engineering. The programme also has a strong emphasis on the development of software development skills, through hands-on, lab-based teaching. This includes opportunities for apprentices to undertake a software development project that takes a product from conception through to release.

¹⁵ Entry Criteria

Apprentices should have Maths and English GCSE grade A-C or equivalent, and A level grades BBC or acceptable alternatives totalling 112 UCAS points (e.g. BTEC Diploma in Information Technology, Extended Diploma at Level 3).

For applicants with work experience who do not meet the above entry criteria, entry is via a short admissions test in Maths and English.



16 Learning Outcomes

- 1. Demonstrate knowledge and competence in all core areas of software engineering practice, including systems analysis, systems design, systems implementation, systems verification and validation, systems deployment and systems evolution.
- 2. Demonstrate knowledge and competence in areas informing software engineering practice; notably, cyber security, risk assessment and management, data design and management, networking and usability engineering.
- 3. Show a clear understanding of software engineering theory, through systematic research and evaluation of relevant sources.
- 4. Show a clear understanding of business and management practices in the area of software development.
- 5. Demonstrate an understanding of, and ability to work-within, professional codes of practice, and legal boundaries, and to engage in ongoing professional development.
- 6. Show clear evidence of the ability to produce high quality output to strict deadlines as both an individual and as part of a team.
- 7. Demonstrate the ability to produce high level written, oral, and graphical communication in both technical and non-technical environments.
- 8. Demonstrate the ability to plan and project manage all aspects of a software development project involving a real world client.
- 9. Be able to think critically, logically analyse, and adapt as necessary.
- 10. Demonstrate the ability to identify, formulate, and solve software engineering problems using established processes.

These learning outcomes summarize the learning outcomes set out in the <u>Apprenticeship</u> Standard.

17 Learning, teaching and assessment methods

The programme will be delivered via a range of learning and teaching methods including lectures, seminars, workshops, tutorials and individual supervision meetings.

In-course assessment will include module coursework assignments, mid-term tests, end of year examinations and a final year project at level 6 that includes an assessed presentation.

Year 1 – 75% exam, 25% coursework

Year 2 – 50% exam, 50% coursework

Year 3 – 75% exam, 25% coursework

Year 4 – 50% exam, 50% coursework

Digital Portfolio and Final Project

Students must maintain a digital portfolio of their completed work to demonstrate their achievements and capabilities. The portfolio will contain practical outputs of the assessments



Compulsory

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undertaken, including software designs, applications, reports and other module assignments. This portfolio will not be separately assessed.

Students must also complete a final year project. This project is work-based, and designed to provide students with an opportunity to demonstrate the broad range of skills, knowledge and behaviours required in Software Engineering. The project requires students to build an original and substantial piece of software for a real world client. The project overall is assessed on a project proposal (10%) and project portfolio (90%). The project portfolio is itself assessed on practical work (40%), written report (45%) and a presentation (15%).

18 | Programme Description

COIY028H6

The Programme is designed for those working as apprentices in Software Engineering or related sectors. The Programme places emphasis on the development of core software engineering skills and knowledge (e.g. systems analysis and design, programming, testing, etc.). It also places specific emphasis on business and management practices in the software engineering sector, as well as on the development of key skills (e.g. teamwork), and professional practice. The Programme is part-time, with a duration of four years. Students study two or three evenings per week. Successful entry to the Programme is based on previous academic achievement or by selection test.

¹⁹ P	19 Programme Structure			
Part 1	Part Time programme – 4 years			
Year 1				
Level	Module Code	Module Title	Credits	Status*
4	COIY040H4	Mathematics for Computing	15	Compulsory
4	- 		15	Compulsory
4	BUMN116H4	Personal and Professional Development I	15	Compulsory
4	BUMN077H4			Compulsory
4	COIY016H4	Systems Analysis and Design I 15 Compu		Compulsory
5	5 BUCI036H5 Computer Networking		15	Compulsory
Year 2				
Level	Module Code	Module Title	Credits	Status*
5	BUCI005H5	Working in Teams	15	Compulsory
5		Software Engineering I 15 Com		
,	COIY018H5	Software Engineering I	15	Compulsory
5	COIY018H5 COIY019H5	Systems Analysis and Design II	15 15	Compulsory Compulsory
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5	COIY019H5	Systems Analysis and Design II	15	Compulsory
5 5	COIY019H5 BUCI066H5 FDPD023S5	Systems Analysis and Design II Software and Programming I	15 15	Compulsory Compulsory
5 5 5	COIY019H5 BUCI066H5 FDPD023S5	Systems Analysis and Design II Software and Programming I	15 15	Compulsory Compulsory
5 5 5 Year 3	COIY019H5 BUCI066H5 FDPD023S5	Systems Analysis and Design II Software and Programming I Work-Based Learning Module	15 15 30	Compulsory Compulsory Compulsory
5 5 7 7ear 3	COIY019H5 BUCI066H5 FDPD023S5 Module Code	Systems Analysis and Design II Software and Programming I Work-Based Learning Module Module Title	15 15 30 Credits	Compulsory Compulsory Compulsory Status*
5 5 7 Year 3 Level	COIY019H5 BUCI066H5 FDPD023S5 Module Code COIY030H6	Systems Analysis and Design II Software and Programming I Work-Based Learning Module Module Title Professional Issues in Computing	15 15 30 Credits	Compulsory Compulsory Compulsory Status* Compulsory
5 5 7 <i>Year</i> 3 Level 6 6	COIY019H5 BUCI066H5 FDPD023S5 Module Code COIY030H6 COIY026H6	Systems Analysis and Design II Software and Programming I Work-Based Learning Module Module Title Professional Issues in Computing Software and Programming II	15 15 30 Credits 15 15	Compulsory Compulsory Compulsory Status* Compulsory Compulsory

Database Management





6	BUCI028H6	Cloud Computing Concepts	15	Compulsory
Year 4				
Level	Module Code	Module Title	Credits	Status*
6	BUCI060S6	Final Year Project (Software Engineer)	30	Core
6	COIY045H6	Information Security 15 C		Compulsory
6	BUCI046H6	Mobile Computing 15		Compulsory
6	BUCI056H6	Software and Programming III 15		Compulsory
6	BUCI045H6	Intro to Data Analytics using R 15		Compulsory

Status*

CORE – Module must be taken and passed by student; COMPULSORY – Module must be taken, mark can be reviewed at sub-exam board; OPTIONAL – Student can choose to take this module

20	Regulations		
	 Admissions This programme adheres to the College Admissions Policy: http://www.bbk.ac.uk/registry/policies/documents/admissions-policy.pdf 		
	Credit Transfer Accredited Prior Learning will be considered in line with the College Policy on Accredited Prior Learning http://www.bbk.ac.uk/registry/policies/documents/accreditation-prior-learning.pdf		
	Programme Regulations This programme adheres to the College Common Awards Scheme		

• Programme Specific Regulations (or not applicable) N/A

http://www.bbk.ac.uk/registry/policies/regulations

21 Student Attendance Framework – in brief

The full version of the 'Student Attendance Framework' is available http://www.bbk.ac.uk/mybirkbeck/services/rules/Attendance-Framework.pdf .

Principle

Consistent and regular student attendance in class (or equivalent) promotes and affords student success. Inconsistent and irregular attendance is less likely to result in student success and is consistent with lower marks and degree classifications being achieved and awarded.

Attendance expectation

Birkbeck, University of London expects you to consistently attend all timetabled sessions, including lectures, seminars, group and individual tutorials, learning support sessions, workshops, laboratories, field trips, inductions and demonstrations.

E-Registers



All Birkbeck students are issued with student cards. Students are expected to take them to classes and to assessment venues and to present them to a member of staff if requested. This is for the purpose of identifying Birkbeck students.

22 Student Support and Guidance

All Birkbeck students have access to a range of student support services, details can be found on our website here: http://www.bbk.ac.uk/mybirkbeck/services/facilities
This includes study support for those with disabilities.

Methods of Enhancing Quality and Standards

The College has rigorous procedures in place for the monitoring and enhancing its educational provision. This includes regular monitoring of programmes drawing on feedback from various sources including external examiner's reports, student feedback, student achievement and progression data. In addition, departments are reviewed every four to five years through the internal review process that includes external input.

For more information please see the Academic Standards and Quality website http://www.bbk.ac.uk/registry/about-us/operations-and-quality .

24	Programme Director	Paul Yoo
25	Start Date (term/year)	Autumn 2017
26	Date approved by TQEC	Autumn 2016 (by Chair's action)
27	Date approved by Academic Board	Spring 2017
28	Date(s) updated/amended	23 March 2022