Course Specification

Course Summary Information		
1	**Course Title**	*BSc (Hons) Secondary Computing with QTS*
2	**Course Code**	*US0894*
3	**Awarding Institution**	*Birmingham City University.*
4	**Teaching Institution(s)** (if different from point 3)	
5	**Professional Statutory or Regulatory Body (PSRB) accreditation** (if applicable)	*Department for Education (DfE) and Ofsted*

6	**Course Description**
	If you have a passion for computing and computer science, inspiring and educating young learners, and want the best possible career opportunities after graduating, then this is the course for you.

The School of Education and Social Work is a leading provider of Initial Teacher Training (ITT) in the West Midlands with a strong partnership across a diverse range of secondary schools. Located in the heart of the West Midlands, you will gain practical experience in a range of schools with a rich variety of cultural and linguistic influences, religious beliefs and social diversity. The School of Computing and Digital Technology provides access to networking laboratories equipped to industry standards and running the latest software, giving you the best possible introduction to the technologies you will encounter and facilitating you with the knowledge, skills and understanding to prepare both yourself and your own students for the world of work.

You will also benefit from the unique and strong partnership between computer science teacher educators and subject specialists who are at the forefront of practice in their fields.

- Education modules are taught at our recently extended £71 million City South Campus in Edgbaston, which includes brand new state-of-the-art facilities.
- Computing modules are delivered in the City Centre Campus within the School of Computing and Digital Technology. Facilities are specifically designed to develop your knowledge and skills to teach the subject at secondary school level, and beyond.
- We have a long and successful track record in the training of secondary teachers.
- The course is delivered in collaboration between computer science specialist tutors in the School of Education and Social Work, and academic computer scientists within the School of Computing and Digital technology.
- For the computer science modules, you will be taught alongside undergraduates studying the BSc (Hons) Computer Science degree courses at the University.
- The course aims to develop your computer science knowledge and understanding at degree level alongside gaining a professional qualification (QTS).
- You will spend time in a range of local secondary schools on a professional placement, equipping you with a wealth of practical experience to develop you as a computer science teacher, working in partnership with experienced school subject mentors.

Course overview
Do you want to develop the skills needed to be an effective and successful computer science teacher? This course will develop your skills in producing computer systems solutions. You will gain a sound mathematical and scientific understanding alongside developing the professional attitude needed in a professional context.

While studying for your degree, you will also have access to dedicated industry-standard facilities in a fully equipped lab running the latest software. In addition, the School of Computing and Digital Technology is home to a Cisco Systems and a Microsoft Academy Centre. These facilities provide

opportunities that will prepare you for a successful career in computer science education. The University is also a regional centre for providing CPD to computer science teachers across the Midlands which has led to the development of strong links with partner schools.

The BSc (Hons) Secondary Computing with Qualified Teacher Status (QTS) trains you to:

- Teach your subject in secondary schools within the age range 11-16, with post-16 enhancement.
- Develop the subject knowledge required to teach computer science up to A level within secondary schools and sixth-form colleges.
- Develop the skills required to teach computer science within secondary education.
- Work in a wide variety of schools and IT departments to develop as a computer science subject specialist.

7	Course Awards		
7a	**Name of Final Award**	**Level**	**Credits Awarded**
	Bachelor of Science with Honours Secondary Computing with Qualified Teacher Status.	Level 6	360
7b	**Exit Awards and Credits Awarded**		
	Certificate of Higher Education Secondary Computing Education Studies	Level 4	120
	Diploma of Higher Education Secondary Computing Education Studies	Level 5	240
	Bachelor of Science Secondary Computing Education Studies*	Level 6	300
	Bachelor of Science with Honours Secondary Computing Education Studies*	Level 6	360
	*without recommendation for QTS		

8	**Derogation from the University Regulations**
	For Education modules:
	Assessment Cycle / Resit attempts: Professional Practice 1, 2, 3. Placements are to be passed within two attempts (initial attempt and one resit). In-year retrieval cannot be applied to these modules.
	Condonement (discretionary application by PABs (exam boards)):
	All assignments relate to the PSRB requirement of teachers meeting the Teachers' Standards (DfE 2012). If trainees do not pass an element of the course, they have not demonstrated key elements of the Teachers' Standards. Consequently, Condonement cannot be applied on this course.

9	**Delivery Patterns**

Mode(s) of Study	Location(s) of Study	Duration of Study	Code(s)
Full Time	City South City Centre	3 years	

10	Entry Requirements
	The admission requirements for this course are stated on the course page of the BCU website at https://www.bcu.ac.uk/courses/computing-with-qts-bsc-hons-2019-20 or may be found by searching for the course entry profile located on the UCAS website.

11	Course Learning Outcomes
	By the end of the course you will:
1	Demonstrate knowledge and understanding of essential facts, concepts, theories and principles of computer technology
2	Have knowledge and understanding of contemporary tools and technologies to produce solutions relevant to the domain of computer science to meet a set of agreed requirements.
3	Understand the roles and responsibilities of a professional working within the computing profession.
4	Specify the requirements and practical constraints of computer-based systems (including computer systems, information systems, and distributed systems) considering a wide range of aspects including commercial, economic, legal, ethical and social issues.
5	Evaluate systems in terms of general quality attributes and possible trade-offs presented within the given problem the ability to recognise any risks or safety aspects that may be involved in the operation of computing equipment within a given context.
6	Be able to meet the Teachers' Standards and apply them to the role of the teacher
7	Conduct yourself in a manner that is consistent with the values of the profession. (Part 2 of the Teachers' Standards)
8	Be able to create a learning environment in which all learners progress and thrive
9	Be confident in addressing the needs of all learners and their communities within a regional, national and global context.
10	Demonstrate excellent subject and pedagogical knowledge and their effective application in learning and teaching settings.

12	**Course Requirements**

| 12a | **Level 4:** |

In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
CMP4266	Computer Programming	20
CMP4267	Computer Systems	20
DIG4166	Website design and development	20
CMP4269	Network Fundamentals	20
EDU4167	Contemporary issues in computer science education	20
EDU4169	The Emerging Teacher	20
EDU4170	Professional Practice 1	0

Level 5:

In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
CMP5332	Object orientated programming	20
CMP5333	Operating systems	20
DIG5127	Databases and web application development	20
CMP5354	Cybersecurity	20
EDU5174	The Inclusive Teacher	20
EDU5177	Subject Studies	20
EDU5176	Professional Practice 2	0

Level 6:

In order to complete this course a student must successfully complete all the following CORE modules (totalling 120 credits):

Module Code	Module Name	Credit Value
CMP6202	AI and machine learning	20
CMP6213	Mobile and Wearable Application Development	20
CMP6214	User Experience Design	20
EDU6296	Professional Enquiry Education project	40
EDU6297	The Professional Teacher	20
EDU6298	Professional Practice 3	0

12b   Structure Diagram

Level 4

SEMESTER ONE	SEMESTER TWO
Core Computer programming (20 credits) Computer systems (20 credits) Website design and development (20 credits)	Core Network Fundamentals (20 credits)
EDU Contemporary issues in computer science education (20 credits)	
EDU The Emerging Teacher (20 credits)	
EDU Professional Practice 1 (0 credits)	

Level 5

SEMESTER ONE	SEMESTER TWO
Core Object oriented programming (20 credits) Operating systems (20 credits) Databases and web application development (20 credits)	Core Cybersecurity (20 credits)
EDU Subject Studies (20 credits)	
EDU The Inclusive Teacher (20 credits)	
EDU Professional Practice 2 (0 credits)	

Level 6

SEMESTER ONE	SEMESTER TWO
Core AI and machine learning (20 credits) User Experience Design (20 credits)	Core Mobile and Wearable Application Development (20 credits)
Professional Enquiry Education Project (40 credits)	
EDU The Professional Teacher (20 credits)	
EDU Professional Practice 3 (0 credits)	