UNIVERSITY OF EAST LONDON
COURSE SPECIFICATION

Course Aim and Title	BSc Computer Science with Education and Qualified Teacher Status (Secondary Phase)
Intermediate Awards Available	Cert. H. E., Dip H. E., BSC Computer Science with Education
Teaching Institution(s)	University of East London
Alternative Teaching Institutions (for local arrangements see final section of this specification)	N/A
UEL Academic School	School of Architecture, Computing and Engineering
UCAS Code	H2RB
Professional Body Accreditation	Qualifies Teacher Status (QTS)
Relevant QAA Benchmark Statements	*Computing, Education Studies*
Additional Versions of this Course	
Date Specification Last Updated	March 2019

Course Aims and Learning Outcomes

This course is designed to give you the opportunity to develop:
- An understanding of concepts and techniques drawn from software development, computer systems, networking, database development, web development, computational thinking and programming.
- An ability to solve applied problems using methods drawn from the above.
- An ability to reason computationally.
- Familiarity with computing software.
- The knowledge, understanding and skills required to teach computing at key stages three and computing/computer science at key stages four and five.

What you will learn:

At the end of this course students will be able to:

Knowledge
- Demonstrate familiarity with the essential ideas and fundamental concepts of computer science.
- Demonstrate the knowledge required to teach computer science at key stages three, four and five.

Thinking skills
- Formulate proofs and structure computational arguments.
- Apply computer science concepts and principles to solve problems.

Subject-Based Practical skills
- Communicate computer science knowledge and understanding accurately and effectively, using a form, structure and style that suits the purpose.
- Use and apply computing software and information technology.
- Demonstrate understanding and skills required to teach computer science at key stages three, four and five.

Skills for life and work (general skills)
- Demonstrate familiarity with current issues in computer science education.
- Demonstrate familiarity with different theories relating to the teaching and learning of computer science.
- Articulate personal strengths and weaknesses in teaching and learning computer science.
- Engage in practical and theoretical enquiry as a key element in developing as a teacher of computer science.
- Critically review, using a range of research and scholastic skills, a systematic and coherent body of knowledge related to education and computer science pedagogy.
- Evaluate critically new information, concepts and evidence from a range of sources.
- Exercise appropriate judgment, by applying appropriate diagnostic and creative skills, in a range of teaching and learning situations.
- Accept accountability for determining and achieving personal and/or group outcomes by reflecting on and taking responsibility for your own professional development as a computer science teacher.

Learning and Teaching

Knowledge is developed through
- Participation in lectures, tutorials and workshops
- Directed and general reading
- Primary and secondary research, e.g. using the Internet or Learning Resources Centre

Thinking skills are developed through
- Successful completion of set assessment tasks
- Self-appraisal and self-evaluation
- Critical evaluation of concepts, assumptions, arguments and data

Practical skills are developed through
- Use of general IT applications such as word processors and spreadsheets
- Use of specialised IT applications such as software development tools and environments and CASE tools
- Research skills-based activities with feedback

Skills for life and work (general skills) are developed through
- Planning activities with feedback
- Project work

- Working in groups to complete work set, such as presentations
- Managing time to complete assessments by deadlines

Assessment

Knowledge is assessed by
- examinations, both unseen and based on previously supplied case studies
- extended essays and reports
- multiple choice tests

Thinking skills are assessed by
- all assessment tasks set, particularly those requiring critical evaluation
- self-appraisal of performance
- use of appropriate problem solving skills

Practical skills are assessed by
- assessment tasks requiring use of general and specialised IT applications
- use of equipment in practicals and presentations

Skills for life and work (general skills) are assessed by
- evidence of group and team working
- completion of teaching placements throughout the year
- ability to work to time constraints

Students with disabilities and/or particular learning needs should discuss assessments with the Course Leader to ensure they are able to fully engage with all assessment within the course.

Work or Study Placements

Students will be required to participate in a series of placements within Secondary Schools, which is a key requirement of the Qualified Teacher Status.

Three placement opportunities (totalling 24 weeks) in local east London schools allowing learning to be gained in the context of study and work experience that will wholly enhance employability prospects within the teaching profession

Course Structure

All courses are credit-rated to help you to understand the amount and level of study that is needed.

One credit is equal to 10 hours of directed study time (this includes everything you do e.g. lecture, seminar and private study).

Credits are assigned to one of 5 levels:

3   Equivalent in standard to GCE 'A' level and is intended to prepare students for year one of an undergraduate degree course.

4   Equivalent in standard to the first year of a full-time undergraduate degree course.

5   Equivalent in standard to the second year of a full-time undergraduate degree course.

6   Equivalent in standard to the third year of a full-time undergraduate degree course.

7   Equivalent in standard to a Masters degree.

Courses are made up of modules that are each credit weighted.

The module structure of this course:

Level	Module Code	Module Title	Credit Weighting	Core/Option	Available by Distance Learning? Y/N
4	CN4001	Software Development	20	Core	N
4	CN4002	Computer Systems and Networks	20	Core	N
4	CN4003	Web Technologies	20	Core	N
4	CN4004	Maths for Computing	20	Core	N
4	ED4076	Computer Science Teaching and Learning	20	Core	N
4	ED4077	School Based Training 1: Reflections on Practice	20	Core	N
5	CN5000	Database Systems	20	Core	N
5	CN5006	Web and Mobile App Development	20	Core	N

5	CN5004	Advanced Programming	20	Core	N
5	CN5002	Data Communications and Networks	20	Core	N
5	ED5090	School Based Learning 2: Reflections on Practice	20	Core	N
5	ED5089	Researching Computer Science Learning	20	Core	N
6	CN6000	Mental Wealth Professional Life 3 (Project)	40	Core	N
6	CN6005.	Artificial Intelligence	20	Core	N
6	CN6008	Advanced Topics in Computer Science	20	Core	N
6	t.b.c.	Active Inquiry	20	Core	N
6	t.b.c.	School Based Training 3: Reflection on Practice	20	Core	N

Please note: Optional modules might not run every year, the course team will decide on an annual basis which options will be running, based on student demand and academic factors, in order to create the best learning experience.

Additional detail about the course module structure:

A core module for a course is a module which a student must have passed (i.e. been awarded credit) in order to achieve the relevant named award. An optional module for a course is a module selected from a range of modules available on the course.

The overall credit-rating of this course is 360 credits. If for some reason you are unable to achieve this credit you may be entitled to an intermediate award, the level

of the award will depend on the amount of credit you have accumulated. You can read the University Student Policies and Regulations on the UEL website.

A requirement for Qualified Teaching Status (QTS) is that all 360 credits have to be passed

Course Specific Regulations

In order to gain an <u>Honours</u> degree you will need to obtain 360 credits including:
- A minimum of 120 credits at level four or higher
- A minimum of 120 credits at level five or higher
- A minimum of 120 credits at level six or higher

In order to gain an <u>Ordinary degree</u> you will need to obtain a minimum of 300 credits including:
- A minimum of 120 credits at level four or higher
- A minimum of 120 credits at level five or higher
- A minimum of 60 credits at level six or higher

In order to gain a <u>Diploma of Higher Education</u> you will need to obtain at least 240 credits including a minimum of 120 credits at level four or higher and 120 credits at level five or higher.
In order to gain a <u>Certificate of Higher Education</u> you will need to obtain 120 credits at level four or higher.

Typical Duration

The expected duration of this course is 3 years full-time.

The teaching year begins in September and ends in June

A typical student, in full-time attendance mode of study, will register for 120 credits in an academic year.

Further Information

More information about this course is available from:
- The UEL web site (www.uel.ac.uk)
- The course handbook
- Module study guides
- UEL Manual of General Regulations (available on the UEL website)
- UEL Quality Manual (available on the UEL website)
- School web pages

All UEL courses are subject to thorough course approval procedures before we allow them to commence. We also constantly monitor, review and enhance our courses by listening to student and employer views and the views of external examiners and advisors.

Additional Costs

N/A