

## COURSE SPECIFICATION

Course Aim and Title	BSc (Hons) Computer Science (Web and Mobile Technologies)
Intermediate Awards Available	BSc Computer Science (Web and Mobile Technologies) DipHE Computer Science CertHE Computing
Teaching Institution(s)	UEL
Alternative Teaching Institutions (for local arrangements see the final section of this specification)	None
UEL Academic School	School of Architecture, Computing, and Engineering (ACE)
UCAS Code	1K45
Professional Body Accreditation	None
Relevant QAA Benchmark Statements	Computing (2019)
Additional Versions of this Course	BSc (Hons) Computer Science (Web and Mobile Technologies) with Foundation Year BSc (Hons) Computer Science (Web and Mobile Technologies) with Placement Year
Date Specification Last Updated	January 2022

### Course Aims and Learning Outcomes

This course is designed to give you the opportunity to:

- Gain an understanding of the underpinning theories of fundamental principles and technologies within the area of computer science
- Develop knowledge and understanding of the latest web and mobile application development techniques and principles.
- Gain technical expertise in the field of computer science, particularly focusing on web and mobile application development, which will enable you to excel in this fast-developing area.
- Study a variety of advanced topics in mobile and web application development,
- Gain an understanding of the interplay between computer science theory and practice
- Gain appropriate software development and programming skills.
- Be aware of the management, economic, legal, social, professional, and ethical issues relating to web and mobile applications.
- Learn and work both independently and within groups.
- Develop the necessary study skills and knowledge to pursue further study.

- Develop the professional skills necessary for a career in the IT industry

What you will learn:

#### Knowledge

- Underlying theories which are relevant to core Computer Science studies.
- Principles of computer programming and software development
- A variety of specialized topics such as networks, computer programming, and intelligent systems within the area of mobile and web application development
- An understanding of the professional and ethical issues relevant to the field of Computer Science.

#### Thinking skills

- Formulating approaches for problem-solving.
- Evaluation and critical analysis using a range of techniques.
- Self-appraisal and review of personal practice.
- Design and implement solutions for practical problems.

#### Subject-Based Practical skills

- Application of theories to the design of computer-based systems in general and web & mobile application in particular.
- Use of a range of specialized computer technology, such as programming languages, operating systems, networks, databases, software design and analysis tools.
- Preparation of reports, presentations, and practical solutions focusing on internet applications.
- Production of major self-directed projects.
- Implementation of a system based on a set of specifications.

#### Skills for life and work (general skills)

- Communication Skills, such as report writing and presentations
- Time management
- Learning and working both independently and in groups

## Learning and Teaching

#### Knowledge is developed through

- Online discussions and activities
- Participation in lectures, tutorials, and workshops with feedback
- Directed, guided, and general reading
- Primary and secondary research, e.g. using the Internet or Learning Resources Centre

#### Thinking skills are developed through

- Reflective activities with feedback
- Online discussions and activities

- Successful completion of set assessment tasks
- Self-appraisal and self-evaluation
- Critical evaluation of concepts, assumptions, arguments, and data

Practical skills are developed through

- Specialized IT applications such as software development tools and full-stack development.
- 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 specific projects, such as presentations
- Time Management to complete assignments by deadlines

## Assessment

Knowledge is assessed by

- reflective essays
- extended portfolios and practical assignments
- multiple choice tests

Thinking skills are assessed by

- managing time to meet deadlines
- self-appraisal tasks
- tasks based around the use of appropriate problem-solving skills

Practical skills are assessed by

- assessment tasks requiring use of general and specialised IT applications
- demonstrating your ability to use equipment in practicals and presentations

Skills for life and work (general skills) are assessed by

- group projects
- demonstrating your 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 assessments within the course.

## Work or Study Placements

The placement version of the course offers to the students the option to undertake a year-long industrial placement between level 5 & 6. This placement is normally paid, but note that securing a placement is a competitive process and cannot be guaranteed. The university has links with various employers who can provide UEL students with worthwhile work

experience. Students may be offered permanent employment by their placement organization when they graduate. In addition to enhancing employment prospects, the placement provides a valuable learning experience, the results of which feed into our students' final year of study.

It is ultimately your responsibility to secure a placement. If you are unable to secure a placement, you will be transferred back to the course without the placement component.

In addition to the optional, year-long placement, you will complete a work-based learning module in the second term of your second year of study. During this module, you will undertake 70 hours of work-based learning which will provide you with opportunities to apply many of the skills and the knowledge acquired during the first half of your degree course.

## 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:

<b>Level</b>	<b>Module Code</b>	<b>Module Title</b>	<b>Credit Weighting</b>	<b>Core/Option</b>	<b>Available by Distance Learning? Y/N</b>
4	CN4000	Information Systems Modelling & Design	20	Core	N

4	CN4001	Software Development	20	Core	N
4	CN4002	Computer Systems & Networks	20	Core	N
4	CN4003	Web Technologies	20	Core	N
4	CN4004	Maths for Computing	20	Core	N
4	CN4005	Mental Wealth; Professional Life 1 (IT Project Pitching)	20	Core	N
5	CN5000	Database Systems	20	Core	N
5	CN5002	Data Communications and Networks	20	Core	N
5	CN5005	Data Structures & Algorithms	20	Core	N
5	CN5006	Web and Mobile App Development	20	Core	N
5	CN5009	Mental Wealth; Professional Life 2 (Computing in Practice)	20	Core	N
5	CN5032	Native Mobile Application Development	20	Core	N
P	CN5007	Placement Module	120P	Optional	N

6	CN6000	Mental Wealth; Professional Life 3 (Project)	40	Core	N
6	CN6003	Computer and Network Security	20	Option	N
6	CN6005	Artificial Intelligence	20	Core	N
6	CN6035	Mobile and Distributed Systems	20	Core	N
6	CN6036	Advanced Topics in Mobile applications	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 that a student must have passed (i.e. been awarded credit) to achieve the relevant named award. The optional module CN5007 is a requirement of the four years placement version degree.

The overall credit rating of this course is 360 credits (480 credits for placement version degree). 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 for further details.

## Course Specific Regulations

N/A

## Typical Duration

It is possible to move from full-time to part-time study and vice-versa to accommodate any external factors such as financial constraints or domestic commitments. Many of our students make use of this flexibility and this may impact on the overall duration of their study period.

The expected duration of this course is three years full-time, four years for the placement version or four and a half years part-time.

A student cannot normally continue study on a course after 4 years of study in full-time mode unless exceptional circumstances apply and extenuation has been

granted. The limit for completion of a course in part-time mode is 7 years from the first enrolment.

## Further Information

More information about this course is available from:

- The UEL web site ([www.uel.ac.uk](http://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:

Students will have access to all equipment required to complete their course on-campus. However, we do recommend that students have access to personal computing equipment and reliable internet connection for working off-campus. A suitable PC or laptop for working off-campus can be purchased from around £300 upwards.

## Alternative Locations of Delivery

N/A