UNIVERSITY OF EAST LONDON
COURSE SPECIFICATION

Course Aim and Title	MSc Computer Science MSc Computer Science with Industrial Placement
Additional Versions of this	
Intermediate Awards Available	PGCert, PGDip.
Teaching Institution(s)	UEL on campus
Alternative Teaching Institutions (for local arrangements see final section of this specification)	N/A
UEL Academic School	Architecture, Computing and Engineering
UCAS Code	
Professional Body Accreditation	
Relevant QAA Benchmark Statements	Computing
Date Specification Last Updated	30/06/2021

Course Aims and Learning Outcomes

This is designed to give you the opportunity to:

- Design & develop large-scale service-oriented software systems from requirements to testing and management of its entire development lifecycle;
- Develop knowledge and research skills in artificial intelligence, computer vision and data analytics to empower you as a professional;
- Gain advanced theoretical and specialist practical knowledge of progressive and emerging topics;
- Tackle a cutting-edge problem from emerging areas in computer science, including its legal, social, ethical & professional context, resulting in a high-quality research output through dissertation.
- Develop the professional skills necessary for a senior career in the IT industry.
- Gain hand-on experience of working in an industrial setting offered through the industrial placement scheme.

What you will learn:

Knowledge
- Demonstrate comprehensive and critical understanding of all the concepts and activities for large-scale software development.
- Demonstrate expertise in artificial intelligence, computer vision and data analytics and their business and research applications.

- Have a critical understanding of complex computing application areas and apply skills in advanced topics to find resolution through your dissertation.

Thinking skills

- Critical thinking and evidential reasoning.
- Exercise appropriate engineering judgement in decision-making process.
- Systematically analyse problems and implement effective solutions.
- Reflect on your professional and research practice.

Subject-Based Practical skills
- Design & develop large-scale software systems by managing its entire Software Development Lifecycle.
- Use diverse artificial intelligence, computer vision and data analytics resources and advanced tools and techniques to solve a defined problem.
- Identify, critically analyse and execute a solution for a cutting-edge research/industrial computing problem.
- Industrial placements, as appropriate.

Skills for life and work (general skills)
- Demonstrate an ability to study independently and effectively; and to be able to present and convey complex technical information to other professionals and the public.
- Develop interpersonal skills and be able to contribute and work effectively in a team
- Integrate research, and articulate research results into professional practice

In addition, the industrial placement will provide opportunities to apply key technical knowledge and skills learn in the taught modules, enhance their communication and interpersonal skills and improve their employment potential.

Learning and Teaching

Various teaching methods are employed on the , including lectures, tutorials, seminars and laboratory work. In the lecture, a member of the academic staff or a visiting lecturer presents ideas or information to the students. In a seminar, ideas are discussed by a group of students. The discussion is led by a member of the staff or a nominated student and moderated by one or more members of staff. In a tutorial, the students solve problems under the guidance of a member of staff with whom they can also discuss information presented in a previous lecture.

To enable students to derive maximum benefit from their period of attendance, lectures are designed to cover only essential subject matter, this being complemented by lecture notes. Considerable importance is attached to home assignments and a commitment to private study.

Students are recommended to plan their work in advance, benefiting from the notes, reading references and tutorial sheets of each module. Regular formative assessments of the

students' work are undertaken and feedback provided in order to monitor progress and identify problem areas.

In addition, the industrial placement will provide you with the opportunity to apply the key technical knowledge and skills that you have learnt in your taught modules, and will enable you to gain a better understanding of your own abilities, aptitudes, attitudes and employment potential.

Assessment

Modules are allocated a mark out of 100%. The pass mark for each module is based on an aggregate mark of 50%. The aggregate mark comprises marks from components whose threshold is 40%. Assessment may incorporate one, two or three components.

The module specifications specify the mode of assessment for each module.

Assessment methods include formal examinations, work, project work and group exercises.

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

Work or Study Placements

Students on the placement version of the course will undertake a placement within a partner organisation (or by means of alternative arrangements such as projects led by industry and carried out on campus) to complete a 120 P-credit Industrial Placement Module. The module is graded at either Pass or Fail, assessed by the partner industrial organisation and the University and grades reflected on the students' academic transcripts.

The industrial placement component is for a duration of an academic year, ie, normally 30 weeks including minimum 24 weeks of delivery time. It starts after students have completed the 1st year of study, ie, all the taught modules and the dissertation component of the MSc course which together form 180 credits.

Students on the two-year MSc with placement courses must pass all taught modules of their respective course plus dissertation, ie, 180 credits, before they become eligible to progress to the next stage and undertake industrial placement.

Students on the MSc course with placement will also normally be required to fulfil the 80% attendance requirement (on all modules) to be eligible to progress to the industrial placement module.

Students unable to meet the above requirements and progress successfully will normally be moved to the one-year full-time version of the course and their student visa, if any, will be curtailed accordingly.

The structure of the extended version of the MSc courses that includes the industrial placement is summarised in the following table:

For September intake:	
Term 1 (Y1: Sep – Jan)	Taught modules
Term 2 (Y1: Jan – May)	Taught modules
Term 3 (Y1: May – Sep)	Dissertation
End of July Y1	Deadline for confirming placement
Term 1 and 2 (Y2: Sep – May)	Industrial placement
For January intake:	
Term 2 (Y1: Jan – May)	Taught modules
Term 1 (Y1: Sep – Jan)	Taught modules
Term 2 (Y1: Jan – May)	Dissertation
End of March	Deadline for confirming placement
Term 3 and 1 (Y2: May – Jan)	Industrial placement

Students must check the Academic Calendar for start and end of term dates.

It is ultimately the student's responsibility to secure their placement. The University will offer guidance and support; and recommend students to our industrial partners who are interested in participating in the course. But the onus to find and secure the placement is on the students. If they are unable to secure a placement at the end of taught modules, they will be transferred back to the full time taught course without the placement component and your student visa, if applicable, will be curtailed accordingly by UKVI.

Students undertaking the Placement Module will also normally need to meet the following requirements:

- 80% attendance at the 12 week employability module workshops and classes.
- Registration on the UEL Employment Hub with CV and Covering Letter uploaded.
- Details of placement provided to the Placement Officer by 31st July (Sept starters) and 31st March (January starters).
- Placement Agreement form signed by the student and partner organisation at least 3 weeks before the placement start date.

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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 .

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

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

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

7   Equivalent in standard to a Masters degree.

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

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Level	Module Code	Module Title	Credit Weighting	Core/Option	Available by Distance Learning? Y/N
7	CN7021	Advanced Software Engineering	30	Core	N
7	CN7031	Big Data Analytics	30	Core	N
7	CN7023	Artificial Intelligence & Machine Vision	30	Core	N
7	CN7016	Computer Security	30	Optional	N
7	CN7026	Cloud Computing	30	Optional	N
7	CN7000	Mental Wealth; Professional Life (Dissertation)	60	Core	N
7	EG7021	Industrial Placement	120P	Core for MSc with Industrial Placement	N

Please note: Optional modules might not run every year, the 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 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 is a module selected from a range of modules available on the course.

The overall credit-rating of this (not including the industrial placement) is 180 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.

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Typical Duration

Course without industrial placement

The full-time duration of this is 12 months for the September intake and 17 months for the January intake:

For September intake:	
Term 1 (Y1: Sep – Jan)	Taught modules
Term 2 (Y1: Jan – May)	Taught modules
Term 3 (Y1: May – Sep)	Dissertation
For January intake:	
Term 2 (Y1: Jan – May)	Taught modules
Term 1 (Y1: Sep – Jan)	Taught modules
Term 2 (Y2: Jan – May)	Dissertation

For those not on a student visa, 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.

Course with industrial placement

The course with industrial placement is offered in full-time mode only. The duration of this is two academic years (including the industrial placement element). See "Work or Study Placements" section for more detail

The time limit for completion of a course is four years after first enrolment on the course.

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 (http://www.uel.ac.uk/ace)

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

Additional costs:

None

Alternative Locations of

N/A