

Study with us

About your course

Course(s) covered

Code	Title
ECWCSM	Modular Masters Programme in Computer Science (online/tutored e-learning) – Advanced Computer Science

You can find full details of your course, module information and entry requirements in the *Programme Specification*.

Key facts

Start dates:

Semester A intake: 27 September 2021

Semester B intake: 24 January 2022

Credits:

PGCert level: 60 credits (as the exit award only)

PGDip level: 120 credits (as the exit award only)

Master level: 180 credits

How long it takes:

Full-time master level:

1 year for semester A intake or 16 months for semester B intake

Part-time master level: 2-5 years (depending on individual study pace)

Academic Year

2021-2022

The University's academic year is made up of 3 semesters.

- Semester A runs from Monday 27 September 2021 to Friday 21 January 2022
- Semester B runs from Monday 24 January 2022 to Friday 13 May 2022
- Semester C runs from Monday 16 May 2022 to Friday 09 September 2022

Important points

The MSc Advanced Computer Science targets at students who have a good Honours degree in Computer Science or a very closely related discipline, and who wish to update, extend, and deepen their knowledge with a view to enhancing their career prospects or preparing for a programme of research. Those studying for this award will be expected to complete a major project in the computer science subject area.

The programme aims to provide students with the opportunities to:

- build upon existing degree-level knowledge and practical experience;
- undertake a substantial programme of individual project work at postgraduate level;
- evaluate and further develop their skills in research, independent study and self-management, and prepare themselves for lifelong learning;

- develop an understanding of the social, legal and ethical context within which a computing professional is expected to operate, and of the standards that will be expected of them when they graduate;
- acquire the necessary skills to undertake further study or research at postgraduate level, and to secure employment in their chosen career.
- develop awareness of current research and practice in computer science;
- develop an understanding of a variety of paradigms within which programmed systems may be developed, and how the choice of paradigm affects the approach to solving problems and the nature of the solutions obtained;
- extend their knowledge and understanding of, and their practical skills in, a range of advanced computer science topics.

IT Skills required:

Basic IT skills are a requirement for anyone wishing to study online. For example, you will need to be confident using an internet browser, communicating via email and using Microsoft Office tools (e.g. Word, Excel) or equivalent. An ability to learn and adapt to new technologies is also important, for example, you may be asked to participate in a virtual classroom session, contribute to a discussion forum or complete an online assessment/test

Outline Programme Structure

The tables below are for guidance only. They provide the examples of the modules that students may choose to study for a full-time option (i.e. 60 credits per semester) for two semester entrants, respectively. The expectation for part-time study is up to 30 credits per semester.

Please note that Modules may not run every year and running semester might vary from year to year. You will receive an email prior to each semester to confirm the module availabilities and will be asked to complete a Module choice form.

Semester A entry

Semester A (September to January)	Semester B (January to May)	Semester C (May to September)
Core <ul style="list-style-type: none"> • Advanced Algorithms and Paradigms (30 credits) • Responsible Technology (30 credits) 	Electives (choose 60 credits) <ul style="list-style-type: none"> • Big Data Analytics (15 credits) • Cyber Operations (15 credits) • Data Mining (15 credits) • Foundations of Data Science (30 credits) • Penetration Testing (30 credits) • Software Engineering Practice (30 credits) • Theory and Practice of Artificial Intelligence (30 credits) 	Core <ul style="list-style-type: none"> • Advanced Computer Science Masters Project (60 credits)

Semester B entry

Semester B (January to May)	Semester C (May to September)	Semester A (September to January)	Semester B (January to May)
Core <ul style="list-style-type: none"> • Responsible Technology (30 credits) Electives (choose 30 credits) <ul style="list-style-type: none"> • Big Data Analytics (15 credits) 	Study Break	Core <ul style="list-style-type: none"> • Advanced Algorithms and Paradigms (30 credits) Electives (choose 30 credits)	Core <ul style="list-style-type: none"> • Advanced Computer Science Masters Project (60 credits)

<ul style="list-style-type: none"> • Cyber Operations (15 credits) • Data Mining (15 credits) • Foundations of Data Science (30 credits) • Penetration Testing (30 credits) • Software Engineering Practice (30 credits) • Theory and Practice of Artificial Intelligence (30 credits) 		<ul style="list-style-type: none"> • Artificial Intelligence Programming (30 credits) • Digital Forensics (15 credits) • Distributed Systems Security (15 credits) • Foundations of Data Science (30 credits) • Information Security Management and Compliance (30 credits) • Machine Learning (30 credits) • Measures and Models for Software Engineering (30 credits) 	
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Course delivery

This course is delivered 100% online via the University's virtual learning environment StudyNet. It can be studied flexibly, which allows you to fit your studies around your work and life commitments. However, there will be specific deadlines to submit or take assessments.

You will find full details on your assessment schedule in the relevant Module Guide, which will be published at the start of the module.

Number of study hours will vary depending on your prior knowledge and experience with the subject. The expectation for a 15-credit module is 150 hours (equivalent to around 12 hours per week over 12 weeks).

Method of assessment

Modules are assessed by combination of coursework (including essay, design, development of software artifact, technical report, academic report, live presentation, peer review, team work, video log, live demonstration, viva) and online timed tests. The dates of assignment submission and online tests are fixed. The online tests are available for a fixed period of time, usually 24-hours, to ensure all students can find a convenient opportunity to complete them within that period.

If you cannot meet the assignment deadlines or test dates, you must inform the Module Leader in advance of the deadlines to get appropriate advice.

Assessments – remote invigilation

Our courses are specifically designed to make attending the University unnecessary, including attendance for the completion of tests. Some of our online tests may make use of third-party remote invigilation providers, also known as 'remote proctors'. These services allow us to check your identity and invigilate online tests at a distance. Typically, there are no assessment costs for students, apart from circumstances where a student has not completed the booking process within the required notice period. In such circumstances **costs can vary between £5 and £15 (GBP)**.

Additional expenses

You can find full details of your course tuition fees in the *Fees and Finance Policy*.

Courses materials (i.e. e-books, software or support materials) are usually included in your tuition fees, unless specified otherwise.

Postgraduate study requires extensive reading and access to reference works. Recommended texts are typically available in the University's online library as eBooks. Students may wish or may be required to purchase their own copies of textbooks. The average cost of a recommended text is estimated at £50 - £100. We currently estimate that the cost of expenditure on mandatory textbooks is between £200 and £400 per year, dependent on the pattern of modules students choose to study.

As part of your MSc project you may choose to purchase hardware or software.

System requirements:

To study Online, you will need access to a suitable computer (including webcam) and a good reliable Internet connection. Most modern PCs and Macs (less than five years old) should be fine.

Full system requirements details can be found on the Online Distance Learning website:

<https://www.herts.ac.uk/study/online-distance-learning/how-online-study-works/system-requirements-for-study>

Attendance to the UK Award Ceremony:

On completion of your programme of studies, you will have the opportunity to attend our UK Award Ceremony. When registering for the Ceremony you will receive 1 free graduate ticket for yourself.

Attendance to the UK Award Ceremony may incur additional costs i.e. guest tickets, travel and accommodation. The exact value of these costs will depend on when you will graduate and where you are travelling from.

Details regarding attendance to the Award Ceremony can be found on the website

<http://www.herts.ac.uk/ceremonies>