# Department of Computer Science

## About the department

Computer Science is a very exciting subject to study. The sheer variety of technologies that are available and that keep being invented, and the transformations that they are inducing in all sectors of activity and the well-being of societies, create huge opportunities for graduates. In the latest Research Assessment Exercise, we ranked 11th in the UK for the quality of our research output, with over a quarter of our publications recognised as world leading, and a further half internationally excellent.

You will be taught by world leaders in several areas of research such as Machine Learning (the science of systems that can learn from data), Algorithms, Bioinformatics, Software Language Engineering, Distributed Systems, and Information Security. This means that you will be exposed to the methods and techniques that cutting-edge companies are looking for, to become leaders in their sectors.

# **Entry requirements**

The modules listed below are open to Study Abroad, International Exchange and Erasmus students who study here for a <u>full year</u>, <u>or for Term 2&3 only</u>. Unfortunately, Computer Science modules <u>are not available to Term 1 only students</u> because the exams will take place in Term 3 (summer term).

Students must have sufficient evidence of previous experience and knowledge as stated in the individual course pre-requisites. Please note that these courses may be adjusted slightly over the coming months which may involve some changes to the course content, learning objectives and summative assessment.

Each course is either 15 or 30 UK credits (7.5 or 15 ECTS) and starts in either the Autumn Term (September) or the Spring Term (January).

The information contained in the module outlines on the following pages is correct at the time of publication but may be subject to change as part of our policy of continuous improvement and development.





#### Module options for visiting students

Module number	Module title	Run time	UK Credits	Link to syllabus
CS2800	Software Engineering	Term 1 (Autumn) <sup>1</sup>	15 UK credits	Syllabus Information
CS2850	Operating Systems	Term 1 (Autumn) <sup>1</sup>	15 UK credits	Syllabus Information
CS2855	Databases	Term 1 (Autumn) 1	15 UK credits	Syllabus Information
CS2860	Algorithms and Complexity	Term 2 (Spring)	15 UK credits	Syllabus Information
CS2900	Multi-dimensional Data Processing	Term 2 (Spring)	15 UK credits	Syllabus Information
CS2910	Artificial Intelligence	Term 2 (Spring)	15 UK credits	Syllabus Information
IY276o	Introduction to Information Security	Term 1 (Autumn) <sup>1</sup>	15 UK credits	Syllabus Information
IY2840	Computer and Network Security	Term 2 (Spring)	15 UK credits	Syllabus Information
CS3003	IT Project Management	Term 1 (Autumn) <sup>1</sup>	15 UK credits	Syllabus Information
CS3450	Software Verification	Term 2 (Spring)	15 UK credits	Syllabus Information
CS3470	Compilers and Code Generation	Term 1 (Autumn) <sup>1</sup>	15 UK credits	Syllabus Information



<sup>&</sup>lt;sup>1</sup> Term 1 Computer Science modules are **not** available to Term 1 only students.

### Module options for visiting students

Module number	Module title	Run time	UK Credits	Link to syllabus
CS3480	Software Language Engineering	Term 2 (Spring)	15 UK credits	Syllabus Information
CS3490	Computational Optimisation	Term 2 (Spring)	15 UK credits	Syllabus Information
CS3510	Functional Programming and Applications	Term 2 (Spring)	15 UK credits	Syllabus Information
CS3870	Advanced Algorithms and Complexity	Term 1 (Autumn) 1	15 UK credits	Syllabus Information
CS3920	Machine Learning	Term 1 (Autumn) <sup>1</sup>	15 UK credits	Syllabus Information

