

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 European Exchange students who study here for a full year, or for Term 2&3 only. Unfortunately, Computer Science modules are not available to students who are here for the Autumn Term only as 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 15 UK credits (7.5 ECTS) and starts in either the Autumn Term (September) or the Spring Term (January).

Important Note:

¹ We cannot offer these modules to Term 1 students, due to all assessments taking place in the summer term.

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.



royalholloway.ac.uk/Computer Science



ROYAL
HOLLOWAY
UNIVERSITY
OF LONDON

Module options for visiting students

Module number	Module title	Run time	UK Credits	Link to syllabus
CS2800	<i>Software Engineering</i>	Term 1 (Autumn) ¹	15 UK credits	Syllabus Information
CS2850	<i>Operating Systems</i>	Term 1 (Autumn) ¹	15 UK credits	Syllabus Information
CS2855	<i>Databases</i>	Term 1 (Autumn) ¹	15 UK credits	Syllabus Information
CS2860	<i>Algorithms and Complexity</i>	Term 2 (Spring)	15 UK credits	Syllabus Information
CS2900	<i>Multi-dimensional Data Processing</i>	Term 2 (Spring)	15 UK credits	Syllabus Information
CS2910	<i>Artificial Intelligence</i>	Term 2 (Spring)	15 UK credits	Syllabus Information
IY2760	<i>Introduction to Information Security</i>	Term 1 (Autumn) ¹	15 UK credits	Syllabus Information
IY2840	<i>Computer and Network Security</i>	Term 2 (Spring)	15 UK credits	Syllabus Information
CS3003	<i>IT Project Management</i>	Term 1 (Autumn) ¹	15 UK credits	Syllabus Information
CS3450	<i>Software Verification</i>	Term 2 (Spring)	15 UK credits	Syllabus Information
CS3470	<i>Compilers and Code Generation</i>	Term 1 (Autumn) ¹	15 UK credits	Syllabus Information



[royalholloway.ac.uk/Computer Science](http://royalholloway.ac.uk/ComputerScience)



ROYAL
HOLLOWAY
UNIVERSITY
OF LONDON

¹ Term 1 Computer Science modules are **not** available to Term 1 only students. To take Term 1 modules students need to be here for Term 2 as well.

Module options for visiting students

CS3480	<i>Software Language Engineering</i>	Term 2 (Spring)	15 UK credits	Syllabus Information
CS3490	<i>Computational Optimisation</i>	Term 2 (Spring)	15 UK credits	Syllabus Information
CS3510	<i>Functional Programming and Applications</i>	Term 2 (Spring)	15 UK credits	Syllabus Information
CS3600	<i>Quantum Computation</i>	Term 1 (Autumn) ¹	15 UK credits	Syllabus Information
CS3870	<i>Advanced Algorithms and Complexity</i>	Term 2 (Spring)	15 UK credits	Syllabus Information
CS3920	<i>Machine Learning</i>	Term 1 (Autumn) ¹	15 UK credits	Syllabus Information
CS3930	<i>Computational Finance</i>	Term 2 (Spring)	15 UK credits	Syllabus Information
CS3940	<i>Intelligent Agents & MA System</i>	Term 1 (Autumn) ¹	15 UK credits	Syllabus Information
CS3950	<i>Deep Learning</i>	Term 2 (Spring)	15 UK credits	Syllabus Information



royalholloway.ac.uk/Computer Science



ROYAL
HOLLOWAY
UNIVERSITY
OF LONDON