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 Terms 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 RHUL credits (7.5 ECTS) and starts in either Term 1 (September) or Term 2 (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 options 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 code	Module name	Credit value	Term 1, Term 2 or Full Year	Module syllabus Link and any pre-requisites
CS2800	Software Engineering	15:00	Term 1[1]	Syllabus information
CS2850	Operating Systems	15:00	Term 1[1]	Syllabus Information
CS2855	Databases	15:00	Term 1[1]	Syllabus Information
CS2860	Algorithms and Complexity	15:00	Term 2	Syllabus Information
CS2900	Multi-dimensional Data Processing	15:00	Term 2	Syllabus Information
CS2910	Artificial Intelligence	15:00	Term 2	Syllabus Information
IY2760	Introduction to Information Security	15:00	Term 1[1]	Syllabus Information
IY2840	Computer and Network Security	15:00	Term 2	Syllabus Information

Module code	Module name	Credit value	Term 1, Term 2 or Full Year	Module syllabus Link and any pre-requisites
CS3003	IT Project Management	15:00	Term 1[1]	Syllabus Information
CS3450	Software Verification	15:00	Term 2	Syllabus Information
CS3470	Compilers and Code Generation	15:00	Term 1[1]	Syllabus Information
CS3480	Software Language Engineering	15:00	Term 2	Syllabus Information
CS3490	Computational Optimisation	15:00	Term 2	Syllabus Information
CS3510	Functional Programming and Applications	15:00	Term 2	Syllabus Information
CS3600	Quantum Computation	15:00	Term 1[1]	Syllabus Information

Module code	Module name	Credit value	Term 1, Term 2 or Full Year	Module syllabus Link and any pre-requisites
CS3870	**Advanced Algorithms and Complexity**	15:00	Term 2	**Syllabus Information**
CS3920	**Machine Learning**	15:00	Term 1[1]	**Syllabus Information**
CS3930	**Computational Finance**	15:00	Term 2	**Syllabus Information**
CS3940	**Intelligent Agents & MA System**	15:00	Term 1[1]	**Syllabus Information**
CS3950	**Deep Learning**	15:00	Term 2	**Syllabus Information**
IY3501	**Security Management**	15:00	Term 1	**Syllabus Information**