Department of Mathematics

About the department

The Mathematics Department at Royal Holloway is a lively and friendly place with an international reputation for the quality of its teaching and research. Academic staff are active in pioneering research which is making an impressive impact on the world stage. This strong research culture influences our curriculum, helping students to keep in touch with the latest developments in the field.

Mathematics modules at Royal Holloway cover a diverse spectrum from abstract pure mathematics to applications in information security, theoretical physics, finance and statistics.

Entry requirements

The modules listed below are open to all Study Abroad, International and European Exchange students, subject to any required previous knowledge or qualifications, as stated in the module outlines below.

Each module is 15 UK credits (7.5 ECTS) and starts in either Term 1 (September) or Term 2 (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.

Level 1 courses

Module number	Module title	Run time	UK Credits	Link to syllabus
MT1100	Introduction to Geometry	Term 1	15.00	MT1100 Syllabus Information
MT1300	Statistical Methods	Term 1	15.00	MT1300 Syllabus Information
MT1710	Calculus I	Term 1	15.00	MT1710 Syllabus Information
MT1810	Introduction to Pure Mathematics	Term 1	15.00	MT1810 Syllabus Information
MT1210	Introduction to Applied Mathematics	Term 2	15.00	MT1210 Syllabus Information
MT1720	Calculus II	Term 2	15.00	MT1720 Syllabus Information
MT1820	Linear Algebra I	Term 2	15.00	MT1820 Syllabus Information
MT1940	Real Analysis I	Term 2	15.00	MT1940 Syllabus Information

Level 2 courses

Module number	Module title	Run time	UK Credits	Link to syllabus
MT2320	**Probability Theory**	**Term 1**	15.00	MT2320 Syllabus Information
MT2500	**Scientific Programming**	**Term 1**	15.00	MT2500 Syllabus Information
MT2720	**Ordinary Differential Equations and Fourier Analysis**	**Term 1**	15.00	MT2720 Syllabus Information
MT2900	**Complex Analysis**	**Term 1**	15.00	MT2900 Syllabus Information
MT2220	**Vector Calculus**	**Term 2**	15.00	MT2220 Syllabus Information
MT2300	**Statistical Methods II**	**Term 2**	15.00	MT2300 Syllabus Information
MT2800	**Linear Algebra II**	**Term 2**	15.00	MT2800 Syllabus Information
MT2830	**Ring Theory**	**Term 2**	15.00	MT2830 Syllabus Information

Level 3 courses

Module number	Module title	Run time	UK Credits	Link to syllabus
MT3050	**Advanced skills**	**Term 1**	15.00	MT3050 Syllabus Information
MT3360	**Markov Chains and Applications**	**Term 1**	15.00	MT3360 Syllabus Information
MT3470	**Financial Mathematics I**	**Term 1**	15.00	MT3470 Syllabus Information
MT3450	**Quantum Information Theory**	**Term 1**	15.00	MT3450 Syllabus Information
MT3910	**Topology**	**Term 1**	15.00	MT3910 Syllabus Information
MT3540	**Combinatorics**	**Term 2**	15.00	MT3540 Syllabus Information
MT3260	**Quantum Theory I**	**Term 2**	15.00	MT3260 Syllabus Information
MT3690	**Game Theory**	**Term 2**	15.00	MT3690 Syllabus Information
MT3320	**Statistical Inference**	**Term 2**	15.00	MT3320 Syllabus Information
MT3480	**Financial Mathematics II**	**Term 2**	15.00	MT3480 Syllabus Information