



SCHOOL OF ENGINEERING, PHYSICAL AND
MATHEMATICAL SCIENCES

DEPARTMENT OF MATHEMATICS

**SUPPLEMENTARY
HANDBOOK FOR
UNDERGRADUATE
MATHEMATICAL STUDIES
STUDENTS**

2022/2023

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* Please note, the term 'department' is used to refer to 'departments', 'Centres and 'Schools'. Students on joint or combined degree programmes will receive two departmental handbooks.

1 Introduction to this handbook

1.1 This is not your only handbook

This booklet contains important information for undergraduates registered for G150 BSc Mathematical Studies; please read it carefully. You will find an electronic copy of it at <https://intranet.royalholloway.ac.uk/mathematics/documents/pdf/ug/bluebookmathematicalstudies.pdf>, where there is also detailed information about the teaching programmes, courses, and people within the Mathematics Department. Please also read the more general Mathematics Student Handbook: this supplementary booklet is an appendix of relevance only to Mathematical Studies students, amplifying points in the Student Handbook, and not repeating those that apply to all students taking Mathematics programmes.

The Department complies with the College Regulations, Student Charter and Codes of Practice. The Codes of Practice cover Academic Welfare, Freedom of Speech, Student Union Affairs, Personal Harassment, and Health and Safety. No interpretation of the information presented here should conflict with these regulations or a Code of Practice. In the case of any apparent difference, the College regulations will prevail.

1.2 Unique programme contact for Mathematical Studies students

A full list of points of contact is given in the main Student Handbook.

As a G150 student, your most important point of contact is the Programme Director for BSc Mathematical Studies, **Prof Jens Bolte**, jens.bolte@rhul.ac.uk. If you are wanting to discuss course choices, course availability, or have any matters of concern, then he is your first port of call. The Programme Director acts as your Personal Tutor, and if you receive any correspondence that refers to “your personal tutor”, then you should interpret this as “the Programme Director” if you are a G150 student.

You **must** meet with the Mathematical Studies Programme Director at the start of each year to discuss course options, and routinely at the beginning and end of each term to review progress and discuss any concerns.

If you wish to discuss transferring degrees, then again you should see the Programme Director in the first instance.

2 Programme Structure

The programme structure for G150 Mathematical Studies is unusual in its flexibility. It should be stressed at the outset that module choices cannot be guaranteed, and are subject to timetabling constraints and staff availability.

Modules in later years often have prerequisites. For our Mathematics modules, Dr Kay's module choices webpage is a useful tool: <http://www.ma.rhul.ac.uk/akay/teaching/>

The following table indicates the general structure for G150:

	Year 1	Year 2	Year 3
Term 1	MT1300 MT1710 MT1810 One other 15 credit module	MT2500 Two other 15 credit MT modules One other 15 credit module	MT3050 30 credits of MT modules One other 15 credit module
Term 2	MT1720 MT1820 Either MT1210 or MT1940 One other 15 credit module	MT2320 MT2800 One other 15 credit MT module One other 15 credit module	45 credits of MT module One other 15 credit module

In each term of each year, the "one other 15 credit module" could be another MT 15 credit module, or a 15 credit module from another department. The two "other 15 credit module" in any given year could be filled with a 30 credit module in another department that runs over both terms.

In Year 2, the "other 15 credit module" in each term could be a Year 1 module. In Year 3, the "other 15 credit module" in each term could be a Year 2 module. In such cases the Programme Director will give careful advice about the College rules for progression and the award of degrees. In particular, it is important to note that to be awarded a BSc degree it is required to pass at least 90 credits of modules that are validated for "Stage 6" (normally third-year modules).

In choosing which "other 15 credit module" accompanies the mathematics in each term of each year, the Programme Director will advise on possibilities that make coherent sense. It may be common to take just mathematics modules in Year 3, as modules in all departments in later years often have prerequisites (and even without formal prerequisites one needs to consider if it is sensible to dive into a fresh area late in your degree).

If the “15 credit modules” are all from department X, then the degree title would be Mathematical Studies with X, rather than just Mathematical Studies. The Programme Director can advise on the consequences that certain options would have on the ultimate degree title.

If you are taking a module that is taught within the Arts and Social Sciences Faculty, then you also need to take the Writing Skills Quiz module.

This year, the available course modules, subject to timetabling and staffing constraints and prerequisite A-levels where appropriate, are (those in bold are compulsory):

Mathematics

MT1300 Statistical Methods I (term 1)

MT1710 Calculus I (term 1)

MT1810 Introduction to Pure Mathematics (term 1)

MT1100 Introduction to Geometry (term 1)

MT1720 Calculus II (term 2)

MT1820 Linear Algebra I (term 2)

MT1210 Introduction to Applied Mathematics (term 2)

MT1940 Real Analysis I (term 2)

The following are modules one could choose that are taught within other Departments. The list is meant to be indicative only, and by no means restrictive.

Computer Science

CS1801 Object Oriented Programming (1 unit, both terms)

Philosophy

PY1001 Fundamental Questions in Philosophy (1 unit, both terms)

Sociology

CR1014 Introduction to Sociology (1 unit, both terms)

Physics

PH1320 Mechanics and Relativity (term 1)

PH1620 Classical Matter (term 1)

PH1920 Physics of the Universe (term 2)

PH1140 Scientific Skills 1 (term 2)

It should be stressed again that module choices cannot be guaranteed, and are subject to timetabling constraints and staff availability. When discussing options with the Programme Director, it therefore makes sense to draw up a list of alternatives: ideally I would like to do A, but if that is not possible then B or C (if possible).

3 Degree Structure

3.1 Changing your degree programme

See the main Student Handbook for general rules and guidance on how to proceed if you wish to change degree programme. For G150 students, one option which may be of interest is to change into G100 BSc Mathematics: the latest time at which this is possible is the start of Year 2.

If you pass all your modules in year 1 with an average of at least 50% in the mathematics courses, and have had no formal or informal warnings for poor attendance or workrate, then you would normally be allowed to change to G100 BSc Mathematics at the start of Year 2. (If you did not take MT1940 in Year 1, then you would need to take MT1940 in Year 2.)

3.2 Course Registration – beginning of the academic year

Students taking the **BSc Mathematical Studies** must see the **programme director** at the start of each academic year to discuss an appropriate choice of modules.

Some important deadlines are copied here from the main Student Handbook:

- In the first two weeks of each term you are welcome to sample all optional modules you are interested in, by attending all the lectures.
- You need to make a firm commitment to your optional modules by the end of these two weeks – no change will be allowed after the first two weeks of each term.
- In the second term each year, you will be asked to pre-register for the next year's modules. This pre-registration is not binding, but helps us ensure that your chosen combination of modules will be available without timetable clashes. It also allows us to reserve appropriately sized lecture rooms. You should see the Programme Director to discuss your pre-registration choices.