

MSci Mathematics and Physics (GFC₃) September 2017 intake

The purpose of this information sheet is to provide prospective students and applicants with further information about the nature of this degree, in order to help you decide if it is the right choice for you. Should you have any further questions, contact information is provided at the end of the flyer.

Section 1 – degree programme structure

| Awarding institution | Royal Holloway, University of London |
|-------------------------------------|--------------------------------------|
| Accreditation(s) (where applicable) | Institute of Physics (IOP) |
| Standard length of degree | Four years |

The following table summarises the compulsory modules, which Royal Holloway refers to as mandatory course units, offered on this degree programme each year:

| Year 1 | | | | | | |
|---|---------------------|---------------------|-----------------------|----------------|------------|---------|
| | Methods of teaching | | Methods of assessment | | | |
| Course unit name | Contact hours | Self-study hours | Written exam | Practical exam | Coursework | Credits |
| Mathematics: Calculus | 46.5 | 103.5 | 90% | 0 | 10% | 15 |
| Mathematics: Functions Of Several Variables | 43.5 | 106.5 | 90% | 0 | 10% | 15 |
| Mathematics: Number Systems | 43.5 | 106.5 | 90% | 0 | 10% | 15 |
| Mathematics: Matrix Algebra | 43.5 | 106.5 | 90% | 0 | 10% | 15 |
| Physics :Scientific Skills 1 | 60 | 90 | 0 | 6% | 94% | 15 |
| Physics: Classical Mechanics | 34.5 | 115.5 | 80% | 0 | 20% | 15 |
| Physics: Classical Matter | 34.5 | 115.5 | 80% | 0 | 20% | 15 |
| Physics: Physics of the Universe | 34.5 | 115.5 | 80% | 0 | 20% | 15 |
| Year 2 | | | | | | |
| Methods of teaching | | | Methods of assessment | | | |
| Course unit name | Contact hours | Self-study hours | Written exam | Practical exam | Coursework | Credits |
| Mathematics: Vector Analysis And Fluids | 33 | 117 | 100% | 0 | 0 | 15 |
| Mathematics: Differential equation Fourier Analysis | 33 | 117 | 100% | 0 | 0 | 15 |

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| Physics: Scientific Computing Skills | 82.5 | 67.5 | 0 | 0 | 100% | 15 |
|---|---------------------|---------------------|-----------------------|----------------|------------|---------|
| Physics: Quantum Mechanics | 34.5 | 115.5 | 90% | 0 | 10% | 15 |
| Physics: Classical and Statistical. Thermodynamic | 40.5 | 109.5 | 60% | 0 | 40% | 15 |
| Physics: The Solid State | 52.5 | 97.5 | 70% | 0 | 30% | 15 |
| Year 3 | | | | | | |
| | Methods of teaching | | Methods of assessment | | | |
| Course unit name | Contact hours | Self-study hours | Written exam | Practical exam | Coursework | Credits |
| Physics: Optics | 50.5 | 99.5 | 70% | 0 | 30% | 15 |
| Physics: Atomic and Nuclear Physics | 48 | 102 | 70% | 0 | 30% | 15 |
| Physics: Scientific Skills For MSci | 68 | 82 | 0 | 15% | 85% | 15 |
| Physics: Electromagnetic Theory | 34.5 | 115.5 | 80% | 0 | 20% | 15 |
| Year 4 | | | | | | |
| | Methods of | teaching | Methods | of assessme | nt | |
| Course unit name | Contact hours | Self-study hours | Written exam | Practical exam | Coursework | Credits |
| Physics: Research Review | 13.5 | 136.5 | 0 | 20% | 80% | 15 |

In addition to these mandatory course units, there will be a number of optional course units available during the course of your degree. The following table lists a number of optional course units that are likely to be available. Please note that although the College will keep changes to a minimum, new units may be offered or existing units may be withdrawn, for example, in response to a change in staff. You will be informed if any significant changes need to be made.

| Year 1 | Year 2 | Year 3 | Year 5 |
|--------|---|---|---|
| None | Mathematics: Further Linear Algebra and Mods | Mathematics: Further Linear Algebra and Modulus | Physics: Mathematical Biology |
| | Mathematics: Real Analysis | Mathematics: Topology | Physics: Elements of Statistical Learning |
| | | Mathematics: Non-Linear Phenomena and Chaos | Mathematics: Computational Number Theory |
| | | | Mathematics: Complexity Theory |

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As part of your degree programme you will be required to attend weekly tutorials in the first and second year as well as the courses listed on this document.

In the fourth year you will benefit from a wide choice of modules, including those offered by other University of London Colleges (King's College, Queen Mary and University College).

Section 2 — degree programme costs

| H/EU tuition fee 2017/18* | £9,250 |
|--------------------------------|-------------|
| Overseas tuition fee 2017/18** | £15,600 |
| Other essential costs | Physics-£55 |

^{*}Tuition fees for UK and EU nationals starting a degree in the academic year 2017/18 will be £9,250 for that year. This amount is subject to the UK Parliament approving a change to fee and loan regulations that has been proposed by the UK Government. In the future, should the proposed changes to fee and loan regulations allow it, Royal Holloway reserves the right to increase tuition fees for UK and EU nationals annually. If relevant UK legislation continues to permit it, Royal Holloway will maintain parity between the tuition fees charged to UK and EU students for the duration of their degree studies

For further information on tuition fees please see Royal Holloway's Terms & Conditions .

***These estimated costs relate to studying this particular degree programme at Royal Holloway. Costs, such as accommodation, food, books and other learning materials and printing etc., have not been included, and further information regarding these can be found on our website.

Section 3 – useful vocabulary

We understand some of the terminology used in this document may be new to you, and may differ from that used by other universities. To help with this, we have provided a brief description for some of the most important terminology:

Degree programme – Also referred to as 'degree course' or simply 'course', these terms refer to the qualification you will be awarded upon successful completion of your studies.

Course unit – Also referred to as 'module', this refers to the individual units you will study each year to complete your degree programme. Undergraduate degrees at Royal Holloway comprise four full units, or a combination of full and half units, to the value of 120 credits per year. Mandatory course units must be taken by every student on the relevant degree programme. Some of these mandatory course units must be passed for progression or a particular degree title. On some degree programmes a certain number of optional course units must be passed for a particular degree title. H/EU – Different categories of students pay different levels of tuition fees. H/EU stands for students with Home or European Union fee status.

Overseαs – Non-EU students are liable to pay the overseas rate of tuition fees, and are sometimes also referred to as international students.

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^{**} Royal Holloway reserves the right to increase tuition fees for overseas fee paying students annually. Tuition fees are unlikely to rise more than 5% each year.



Section 4 – contact information

If you have any further questions, you can contact the Admissions team by email at study@royalholloway.ac.uk.

Please note that this information is final at the time of publication (09/05/2017) and supersedes any previous information provided in publications or on Royal Holloway's website.

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