

**MSci Theoretical Physics (F321)**  
**September 2016 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:

<b>Year 1</b>						
	Methods of teaching		Methods of assessment			
Course unit name	Contact hours	Self-study hours	Written exam	Practical Exam	Course-work	Credits
Mathematics for Scientists 1	67.5	82.5	80%	0	20%	15
Mathematics for Scientists 2	67.5	82.5	80%	0	20%	15
Scientific Skills 1	120	30	0	6%	94%	15
Scientific Skills 2	144	6	0	19%	81%	15
Classical Mechanics	34.5	115.5	80%	0	20%	15
Fields and Waves	34.5	115.5	80%	0	20%	15
Classical Matter	34.5	115.5	80%	0	20%	15
Physics of the Universe	34.5	115.5	80%	0	20%	15
<b>Year 2</b>						
	Methods of teaching		Methods of assessment			
Course unit name	Contact hours	Self-study hours	Written exam	Practical Exam	Course-work	Credits
Mathematical Methods	57	93	80%	0	20%	15
Scientific Computing Skills	82.5	67.5	0	0	100%	15
Quantum Mechanics	34.5	115.5	90%	0	10%	15
Optics	48	102	70%	0	30%	15
Electromagnetism	52.5	97.5	80%	0	20%	15
Atomic and Nuclear Physics	48	102	70%	0	30%	15
Classical and Statistical Thermodynamics	40.5	109.5	60%	0	40%	15
The Solid State	52.5	97.5	70%	0	30%	15
<b>Year 3</b>						
	Methods of teaching		Methods of assessment			
Course unit name	Contact hours	Self-study hours	Written exam	Practical Exam	Course-work	Credits
Scientific Skills for MSci	88.5	61.5	0	15%	85%	15

Further Mathematical Methods	34.5	115.5	90%	0	10%	15
Quantum Theory	28.5	121.5	90%	0	10%	15
General Relativity and Cosmology	28.5	121.5	90%	0	10%	15
<b>Year 4</b>						
	Methods of teaching		Methods of assessment			
Course unit name	Contact hours	Self-study hours	Written exam	Practical	Course-work	Credits
Major Project	201	99	0	20%	80%	30
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 selection 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 4
None	None	Particle Physics	Statistical Mechanics
		Metals and Semiconductors	Advanced Quantum Field Theory
		Stellar Astrophysics	Particle Physics
		Particle Detectors and Accelerators	Atom and Photon Physics

As part of your degree programme you may be required to complete a course to develop your study skills, for example a course in academic writing skills. Courses such as these often do not carry credit but passing the course may be a requirement to progress to the next year of study.

## Section 2 – degree programme costs

H/EU tuition fee 2016/17*	£9,000
Overseas tuition fee 2016/17**	£15,200
Other essential costs***	£55

\*Royal Holloway reserves the right to increase UG HEU tuition fees in future years should this be permitted by the UK Government.

\*\* Overseas tuition fees are likely to rise annually in line with inflation but no more than 5% per year. For further information 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.

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

### Section 4 – contact information

If you have any further questions, you can contact the Admissions team by email at [study@royalholloway.ac.uk](mailto:study@royalholloway.ac.uk).

Please note that this information is final at the time of publication 01/10/2015 and supersedes any previous information provided in publications or on Royal Holloway's website.