

**BSc Physics with Particle Physics (F370)**  
**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	Three 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						
Course unit name	Methods of teaching		Methods of assessment			Credits
	Contact hours	Self-study hours	Written exam	Practical exam	Coursework	
Mathematics for Scientists 1	69	81	80%	0	20%	15
Mathematics for Scientists 2	69	81	80%	0	20%	15
Scientific Skills 1	71	79	0	0	100%	15
Scientific Skills 2	72	78	0	0	100%	15
Classical Mechanics	39	111	80%	0	20%	15
Fields and Waves	39	111	80%	0	20%	15
Classical Matter	339	111	80%	0	20%	15
Physics of the Universe	39	111	80%	0	20%	15
Year 2						
Course unit name	Methods of teaching		Methods of assessment			Credits
	Contact hours	Self-study hours	Written exam	Practical exam	Coursework	
Mathematical Methods	61	89	80%	0	20%	15
Scientific Computing Skills	82	68	0	0	100%	15
Quantum Mechanics	50	100	90%	0	10%	15
Electromagnetism	47	103	80%	0	20%	15
Atomic and Nuclear Physics	56	94	70%	0	30%	15

Particle Detectors and Accelerators	47	103	70%	0	30%	15
Classical and Statistical Thermodynamics	46	104	60%	0	40%	15
The Solid State	55	95	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	Coursework	Credits
Experimental or Theoretical Project	93	57	0	15%	85%	15
Optics	56	94	70%	0	30%	15
Quantum Theory	29	121	90%	0	10%	15
Particle Physics	35	115	90%	0	10%	15
Particle Astrophysics	29	121	90%	0	10%	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Please note that although the College will keep changes to a minimum, new units may be offered or existing units may be withdrawn, for example, in response to a change in staff.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
None	None	Planetary Geology & Geophysics
		Non-Linear Dynamical Systems
		Astronomy
		C++ and Object Oriented Programming
		General Relativity and Cosmology

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.

## Section 2 – degree programme costs

H/EU tuition fee 2017/18*	£9,250
Overseas tuition fee 2017/18**	£15,600
Other essential costs***	£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.

\*\* 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.

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.

*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 (05/05/2017) and supersedes any previous information provided in publications or on Royal Holloway's website.