Physics (Euromasters); (Taught); (MSc); 2441
September 2018 intake

The purpose of this information sheet is to provide prospective students and applicants with further information about the nature of the 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)	None
Standard length of degree	2 years full-time
Available part-time	No

The following table summarises the compulsory modules, which are referred to by Royal Holloway as mandatory course units, offered on this degree programme as well as 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Please note that although the College will keep changes to a minimum, new units may be offered or existing units may be withdrawn, for example, in response to a change in staff.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. This programme requires a minimum of 6 students to enable the College to run the course. Should this number not be reached and we are unable to run the programme we will offer an alternative or refund any deposit paid.

Course unit name	Credits	Mandatory	Optional
(PH5100) Project	15 (ECTS)	Yes	
(PH5211) Statistical Mechanics	7.5 (ECTS)		Yes
(PH5226) Advanced Quantum Theory	7.5 (ECTS)		Yes
(PH5421) Atom and Photon Physics	7.5 (ECTS)		Yes
(PH5601) Cosmology	7.5 (ECTS)		Yes
(PH5602) Relativity and Gravitation	7.5 (ECTS)		Yes
(PH5431) Molecular Physics	7.5 (ECTS)		Yes
(PH5201) Math Methods for Theoretical Physics	7.5 (ECTS)		Yes
(PH5205) Lie Groups and Lie Algebras	7.5 (ECTS)		Yes
(PH5242) Relativistic Waves and Quantum Fields	7.5 (ECTS)		Yes
(PH5245) Advanced Quantum Field Theory	7.5 (ECTS)		Yes
(PH5261) Electromagnetic Theory	7.5 (ECTS)		Yes
(PH5427) Quantum Computation and Communication	7.5 (ECTS)		Yes
(PH5442) Particle Physics	7.5 (ECTS)		Yes
(PH5450) Particle Accelerator Physics	7.5 (ECTS)		Yes
(PH5472) Order and Excitations in Condensed Matter	7.5 (ECTS)		Yes
(PH5473) Theoretical Treatments of Nano-systems	7.5 (ECTS)		Yes
(PH5475) Physics at Nanoscale	7.5 (ECTS)		Yes
(PH5478) Superfluids, Condensates and Superconductors	7.5 (ECTS)		Yes
(PH5501) Standard Model Physics and Beyond	7.5 (ECTS)		Yes
(PH5512) Nuclear Magnetic Resonance	7.5 (ECTS)		Yes

(PH5534) String Theory and Branes	7.5 (ECTS)		Yes
(PH5541) Supersymmetry	7.5 (ECTS)		Yes
(PH5600) Stellar Structure and Evolution	7.5 (ECTS)		Yes
(PH5630) Planetary Atmospheres	7.5 (ECTS)		Yes
(PH5640) Solar Physics	7.5 (ECTS)		Yes
(PH5650) Solar System	7.5 (ECTS)		Yes
(PH5660) The Galaxy	7.5 (ECTS)		Yes
(PH5680) Space Plasma and Magnetospheric Physics	7.5 (ECTS)		Yes
(PH5690) Extrasolar Planets and Astrophysical Discs	7.5 (ECTS)		Yes
(PH5670) Astrophysical Plasmas	7.5 (ECTS)		Yes
(PH5800) Molecular Biophysics	7.5 (ECTS)		Yes
(PH5810) Theory of Complex Networks	7.5 (ECTS)		Yes
(PH5820) Equilibrium Analysis of Complex Systems	7.5 (ECTS)		Yes
(PH5830) Dynamical Analysis of Complex Systems	7.5 (ECTS)		Yes
(PH5840) Mathematical Biology	7.5 (ECTS)		Yes
(PH5850) Elements of Statistical Learning	7.5 (ECTS)		Yes
(PH5215) Phase Transitions	7.5 (ECTS)		Yes
(PH5228) Advanced Topics in Statistical Mechanics	7.5 (ECTS)		Yes
(PH5246) Functional Methods in Quantum Field Theory	7.5 (ECTS)		Yes
(PH5247) Advanced Topics in Classical Field Theory	7.5 (ECTS)		Yes
(PH5319) Galaxy Dynamics, Formation and Evolution	7.5 (ECTS)		Yes
(PH5336) Advanced Physical Cosmology	7.5 (ECTS)		Yes
(PH5425) Advanced Photonics	7.5 (ECTS)		Yes
(PH5471) Modelling Quantum Many-Body Systems	7.5 (ECTS)		Yes
(PH5476) Electronic Structure Methods	7.5 (ECTS)		Yes
(PH5515) Statistical Data Analysis	7.5 (ECTS)		Yes
(PH5604) General Relativity and Cosmology	7.5 (ECTS)		Yes
(PH5605) Astroparticle Cosmology	7.5 (ECTS)		Yes
(PH5616) Electromagnetic Radiation in Astrophysics	7.5 (ECTS)		Yes
(PH5702) Environmental Remote Sensing	7.5 (ECTS)		Yes

Section 2 – degree programme costs

H/EU tuition fee 2018/19*	£7,200
Overseas tuition fee 2018/19*	£14,900
Other essential costs**	None

*The tuition fees given above apply to students enrolled on a full-time basis. Students studying part-time are charged a pro-rata tuition fee and information is available from Student-Fees@royalholloway.ac.uk. All fees are likely to rise annually in line with inflation but no more than 5% per year. The UK Government has announced that EU students starting an undergraduate or postgraduate taught degree in 2018/19 will pay the same level of fee as a UK student for the duration of their degree.
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. Masters programmes consist of a number of taught course units – some mandatory and some optional - plus a dissertation/ project to the value of 180 UK credits in total. On completion of a minimum of 120 UK credits a student may be awarded a Postgraduate Diploma, while on completion of a minimum of 60 credits a student may be awarded a Postgraduate Certificate. Some Masters programmes may have progression requirements (where they are offered over more than one year of study) or pass requirements for degree title if they are accredited by a professional body.
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.

This information is final at the time of publication (12/09/2017) and supersedes any previous information provided in publications or on Royal Holloway's website.