PHYSICS MSc / 2019/20 ENTRY

www.ucl.ac.uk/graduate/
This MSc provides students with the skills, knowledge and research ability for a career in physics. The programme is designed to satisfy the need, both nationally and internationally, for well-qualified postgraduates who will be able to respond to the challenges that arise from future developments in this field.

### Degree summary

Students develop insights into the techniques used in current projects, and gain in-depth experience of a particular specialised research area, through project work as a member of a research team. The programme provides the professional skills necessary to play a meaningful role in industrial or academic life.

- **UCL Physics & Astronomy is among the top departments in the UK for this subject area.**
- The department's participation in many international collaborations means we provide exceptional opportunities to work as part of an international team. Examples include work at the Large Hadron Collider in Geneva, and at the EISCAT radar instruments in Scandinavia for studying the Earth's upper atmosphere.
- For students whose interests tend towards the theoretical, the department is involved in many international projects, some aimed at the development of future quantum technologies, others at fundamental atomic and molecular physics. In some cases, opportunities exist for students to broaden their experience by spending part of their time overseas.

The programme is delivered through a combination of lectures, seminars, tutorials and practical, laboratory and computer-based classes. Student performance is assessed through coursework and written examination. The research project is assessed by literature survey, oral presentation and the dissertation.

### Degree structure

**Mode: Full-time: 1 year; Part-time: 2 years**

**Location: London, Bloomsbury**

One year programme which is also available part-time over two years. Students undertake modules to the value of 180 credits. The programme consists of a choice of three core modules (45 credits), three optional modules (45 credits), a research essay (30 credits) and a dissertation (60 credits).

Please note that the list of modules given here is indicative. This information is published a long time in advance of enrolment and module content and availability is subject to change.

#### COMPULSORY MODULES

- Advanced Quantum Theory
- Particle Physics
- Atom and Photon Physics
- Order and Excitations in Condensed Matter
- Mathematics for General Relativity
- Climate and Energy
- Molecular Physics

Please note: students choose three of the above.

#### OPTIONAL MODULES

Students choose three from the following:

- Astrophysics MSc Core Modules
- Space and Climate Science MSc Core Modules
- Medical Physics MSc Core Modules
- Intercollegiate fourth-year courses
- Physics and Astrophysics MSc fourth-year courses
- Selected Physics and Astrophysics MSc third-year courses
- Plastic and Molecular (Opto)electronics
- Biophysics MSc Core Modules

#### DISSERTATION/REPORT

All students submit a critical research essay and MSc students undertake an independent research project which culminates in a substantial dissertation and oral presentation.
Your career

Physics-based careers embrace a broad range of areas e.g. information technology, engineering, finance, research and development, medicine, nanotechnology and photonics.

Employability

A Master’s degree in Physics is highly regarded by employers. Students gain a deep understanding of both basic phenomena underpinning a range of technologies with huge potential for future development, e.g. quantum information, as well as direct knowledge of cutting-edge technologies likely to play a major role in short to medium term industrial development while addressing key societal challenges such as energy supply or water sanitisation.
Entry requirements

A minimum of an upper second-class Bachelor's degree in physics or electrical engineering from a UK university or an overseas qualification of an equivalent standard.

English language proficiency level

If your education has not been conducted in the English language, you will be expected to demonstrate evidence of an adequate level of English proficiency.

The level of English language proficiency for this programme is: Standard.

Information about the evidence required, acceptable qualifications and test providers is provided at: www.ucl.ac.uk/graduate/english-requirements

Your application

Students are advised to apply as early as possible due to competition for places. Those applying for scholarship funding (particularly overseas applicants) should take note of application deadlines.

When we assess your application we would like to learn:

- why you want to study Physics at graduate level
- why you want to study Physics at UCL
- what particularly attracts you to the chosen programme
- how your academic and professional background meets the demands of this challenging programme
- where you would like to go professionally with your degree

Together with essential academic requirements, the personal statement is your opportunity to illustrate whether your reasons for applying to this programme match what the programme will deliver.

There is an application processing fee for this programme of £75 for online applications and £100 for paper applications. Further information can be found at: www.ucl.ac.uk/prospective-students/graduate/taught/application.

FEES AND FUNDING 2019/20 ENTRY

// UK: £11,060 (FT), £5,500 (PT)
// EU: £11,060 (FT), £5,500 (PT)
// Overseas: £27,040 (FT), £13,750 (PT)

The tuition fees shown are for the year indicated above. Fees for subsequent years may increase or otherwise vary. Further information on fee status, fee increases and the fee schedule can be viewed on the UCL Students website.

Candidates may be eligible for a Santander scholarship.

Full details of funding opportunities can be found on the UCL Scholarships website: www.ucl.ac.uk/scholarships

APPLICATION DEADLINE

All applicants: 26 July 2019

Details on how to apply are available on the website at: www.ucl.ac.uk/graduate/apply

CONTACT

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EU referendum

For up-to-date information relating to specific key questions following the UK’s decision to leave the EU, please refer to www.ucl.ac.uk/brexit