Planetary Science MSc /

This interdisciplinary MSc offers a wide programme of study related to the physics of planetary and space environments, including planetary interiors, atmospheres and magnetospheres; the impact of the space environment on human physiology; and research project work which provides potential opportunity to work with established planetary researchers at UCL and Birkbeck, some of whom are involved in active or planned space missions.

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 leading departments in the UK for this subject area. The curriculum of the Planetary Science MSc draws on a variety of other academic departments within UCL including Space & Climate Physics (Mullard Space Science Laboratory), Earth Sciences, Cell & Developmental Biology and Birkbeck’s Department of Earth and Planetary Sciences. The programme thus has a strong interdisciplinary flavour, in line with the ethos of the Centre for Planetary Sciences at UCL/Birkbeck.

The combination of taught modules, tutorials and project work allows prospective students to study a wide variety of topics related to planetary and space environments, such as: planetary interiors, atmospheres and magnetospheres; the impact of the space environment on human physiology and life; and the application of current knowledge to investigations of extrasolar planets, i.e. worlds in other stellar systems.

The programme is delivered through a combination of lectures, practical classes, computer-based teaching, fieldwork, and tutorials. 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

Students undertake modules to the value of 180 credits. The programme consists of a choice of six optional modules (90 credits), a research essay (30 credits) and a dissertation (60 credits).

A Postgraduate Diploma consisting of six optional modules (90 credits) and a research essay (30 credits); full-time nine months is offered.

OPTIONAL MODULES 1 (15 CREDITS EACH)

- Students choose three from:
  - Deep Earth and Planetary Modelling
  - Earth and Planetary Materials
  - Planetary Atmospheres
  - Space Plasma and Magnetospheric Physics
  - Remote Sensing and Planetary Surfaces
  - Physics of Exoplanets

OPTIONAL MODULES 2 (15 CREDITS EACH)

- Students choose three from the following:
  - Earth and Planetary System Science
  - Melting and Volcanism
  - Solar Physics
  - Astronomical Spectroscopy
  - Physics of the Earth
  - Comets, Asteroids and Meteorites
  - Advanced Topics in Planetary Science

Alternatively students may also choose a fourth module from the Optional modules 1 list and two from the Optional modules 2 list above.

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 band of areas, e.g. information technology, engineering, finance, research and development, medicine, nanotechnology and photonics. Graduates of MSc programmes at UCL go on to a variety of careers as research associates, postdoctoral fellows, consultants, and systems test engineers.

Recent career destinations* include:

- PhD in Physics & Astronomy, University of Leicester
- PhD in Planetary Science, The Open University (OU)
- Chartered Surveyor, Dunphys

**Employability**

An MSc qualification from UCL is highly regarded by employers. Students engage in a variety of learning activities, including undertaking their own research projects, which encourages the development of problem-solving skills, technical and quantitative analysis, independent critical thinking and good scientific practice. In addition, teamwork, vision and enthusiasm make physics graduates highly desirable members in all dynamic companies.

* Careers data is taken from the ‘Destinations of Leavers from Higher Education’ survey undertaken by HESA looking at the destinations of UK and EU students in the 2013-2015 graduating cohorts six months after graduation.
Entry requirements

A minimum of an upper second-class Bachelor’s degree in a relevant discipline, preferably with substantial physics content, 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 Planetary Science at graduate level
- why you want to study Planetary Science 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.

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

FEES AND FUNDING 2018/19 ENTRY

- UK: £10,140 (FT), £5,120 (PT)
- EU: £10,140 (FT), £5,120 (PT)
- Overseas: £25,880 (FT), £13,350 (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 Current 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: 27 July 2018

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

CONTACT

Ms Sital Thanki, Teaching Administrator

Email: physast_teaching@ucl.ac.uk

Telephone: +44 (0)20 7679 7144

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/eu-referendum