Drug Design MRes /

This programme is offered by the UCL Division of Medicine and the Wolfson Institute for Biomedical Research and is designed for the more research-oriented student, complementing the Drug Design MSc. Conducting cutting-edge research within the drug industries and UCL’s academic group, it offers opportunities for networking and future career development.

Degree summary

This programme teaches students the latest methodologies and approaches and covers all aspects of drug design: drug discovery, computational and structural biology, screening, assay development, medicinal chemistry, and most importantly the industrial practices involved in modern drug design technology.

The division hosts research groups in the areas of medicine, pharmaceutical research, cell cycle, neurobiology, mitochondrial function, stem cells and cancer. Underpinning the translational aspects of the biomedical research, we have a medicinal chemistry group which conducts research where chemistry and biology intersect, using the latest techniques and developing new ones for the study of biological systems.

The division collaborates extensively within industry and academia to develop biological tools and therapeutic agents. There are plenty of opportunities to conduct translational research that has an impact on drug discovery.

Pharmaceutical and biotech companies, well established in the West, have been transferring their research and development to the East. Given these substantial developments, particularly in China and India, the programme will have a broad international appeal.

The programme is delivered through a combination of lectures, seminars, tutorials and problem classes, critical journal clubs and a research project. Assessment is through coursework, practicals, laboratory work, examination, dissertation and oral presentation.

Degree structure

Mode: Full-time: 1 year
Location: London, Bloomsbury
1 year full time on-site

Students undertake modules to the value of 180 credits. The programme consists of two core modules (30 credits), three optional modules (45 credits) and a dissertation/report (105 credits).

Core modules
- Investigating Research
- Researcher Professional Development
- Plus two taught transferable skills modules delivered by CALT (UCL Centre for the Advancement of Learning and Teaching)

Optional modules
- Students select three of the following.
  - Bioinformatics and Structural Biology as applied to Drug Design
  - Target Identification and High Throughput Screening
  - Cheminformatics and Computer Drug Design
  - Biological Molecules as Therapeutics - Antibodies, siRNA, and Stem Cells
  - Biophysical Screening Methods, Protein NMR and Phenotypic Screening
  - Fragment-based Drug Design
  - Target Selection - Commercial and Intellectual Property Aspects
  - Target Selection - Scientific Grounds

Dissertation/Report
- All students undertake an independent research project which culminates in a dissertation of 15,000 to 20,000 words.
Your career

We expect students graduating from this programme to take leading roles in drug discovery and development worldwide or to undertake further PhD-level research. Drug Design MRes graduates have found jobs in the pharmaceutical industry as well as PhD studentships in leading universities.

Employability

The advanced knowledge and skill set acquired by taking this programme will enable students to find employment in the pharmaceutical and biotech industries in a global market.
Entry requirements

An upper second-class UK Bachelor’s degree in a relevant subject (for example, life sciences, medicine, chemistry) or an overseas qualification of an equivalent standard, or an appropriate professional qualification, or a minimum of three years’ relevant work experience.

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 Drug Design at graduate level
// why you want to study Drug Design at UCL
// what particularly attracts you to the chosen programme
// how your personal, 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.

FEES AND FUNDING 2018/19 ENTRY

// UK: £13,060 (FT), £N/A (PT)
// EU: £13,060 (FT), £N/A (PT)
// Overseas: £24,860 (FT), £N/A (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.

Two bursaries of £2500 are available for Home/Eu students to reduce tuition fees.

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

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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/eu-referendum