Drug Design MSc /

This MSc offers a comprehensive guide to all aspects of modern day drug design. It is taught by research scientists, clinicians and industry experts. Our graduates have progressed to undertake or obtain PhDs or medical studentships, or have found employment in both the private and public sector.

Degree summary

The programme covers all aspects of drug design, including genomics, bioinformatics, structural biology, cheminformatics, molecular modelling and fragment-based drug design, drug target selection, intellectual property and marketing. New therapies and research areas such as antibodies, siRNA, stem cells and high throughput screening are covered. Students will develop essential skills such as research methods and techniques of drug design.

UCL is ranked 7th in the QS World University Rankings 2018 and is located in the centre of one of the world’s finest cities. UCL is one of Europe’s best and largest centres for biomedical research.

At the Wolfson Institute for Biomedical Research, we have pioneered multidisciplinary research with a particular emphasis on translating that research into useful clinical benefit. Our research expertise includes: medicinal chemistry, computational drug design, neuronal development and signalling, cell cycle control, intensive care medicine, stem cells, mitochondrial biology and cancer.

The programme is delivered through a combination of lectures, tutorials, self study, practical sessions and discussion groups. The research project forms one third of the programme. Each of the taught modules is assessed by unseen written examination (50%) and coursework (50%). The research project is assessed by the dissertation and viva.

Degree structure

Mode: Full-time: 1 year; Flexible: up to 5 years
Location: London, Bloomsbury
Part-time is on-site for two years, while flexible study is distance learning only.

Students undertake modules to the value of 180 credits. The programme consists of eight core modules (120 credits) and a research project (60 credits).

A Postgraduate Diploma (120 credits) is also offered.
A Postgraduate Certificate (60 credits) is also offered

CORE MODULES

- Bioinformatics and Structural Biology
- 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 (FBDD)
- Target Selection - Scientific Grounds
- Target Selection - Commercial and Intellectual Property

OPTIONAL MODULES

- There are no optional modules for this programme.

DISSERTATION/REPORT

- All MSc students undertake an independent research project which can take the form of a wet lab or dry lab computational or modelling based project or an external project with an industrial sponsor.
Your career

The programme will provide a good background for students looking to establish a career in drug design/discovery and related industries (biotech, pharma, national research laboratories and NHS agencies), and for industry professionals seeking to gain a greater understanding of new methodology. The knowledge and transferable skills delivered will also be useful for those intent on further PhD or medical studies.

Recent career destinations* include:

- Clinical Research Assistant, King’s College London
- Laboratory Analyst, GSK (GlaxoSmithKline)
- Scientist, AstraZeneca
- PhD Biochemistry, University of Cambridge
- PhD Researcher (Molecular Biology), EMBL (European Molecular Biology Laboratory)

Employability

Graduates from this programme have progressed to PhD/medical studentships at different universities and research institutes around the world, including Oxford, UCL, Grenoble, EMBL, and in the USA and China. Many alumni have secured positions in research teaching and technical sales in the private and public sectors.

* 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 a lower second-class Bachelor's degree in a relevant subject 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 Drug Design at graduate level
  // why you want to study Drug Design at UCL
  // what particularly attracts you to this programme
  // how your academic and professional background meets the demands of this 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: £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.

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

Dr Edith Chan, Director
Email: edith.chan@ucl.ac.uk
Telephone: +44 (0)20 7679 6710

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

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