Since its emergence as a discipline, biochemistry has worked to illuminate many of the problems that have fascinated and perplexed molecular bioscientists for generations. The Biochemistry BSc aims to equip students with the essential knowledge of biochemistry and molecular biology that is at the heart of much of modern life sciences research. As such, it is a valuable entry point to a range of different careers.

**Key information**

**Programme starts**
September 2019

**Location**
London, Bloomsbury

**Degree benefits**

- UCL is one of the world’s largest academic centres for research in biochemistry, with three major research units based here: the Institute of Structural and Molecular Biology, the Laboratory for Molecular Cell Biology and the interdisciplinary Advanced Centre for Biochemical Engineering.

- Our strong links with the bioscience community in London (including the Francis Crick Institute, the Sainsbury Wellcome Centre, the UCL Cancer Institute and Cancer Research UK) enhance the range of research opportunities available to our students.

- You will have the opportunity to take out a one-year placement in industry before your final year of study (working in a suitable industrial or research laboratory), or to transfer to the research intensive MSci programme.

- Our excellent resources include the Darwin Research Facility, which provides state of the art centrifugation, cell culture, imaging and biomolecular structural analysis facilities and a drug discovery facility.

**Degree structure**

In each year of your degree you will take a number of individual modules, normally valued at 15 or 30 credits, adding up to a total of 120 credits for the year. Modules are assessed in the academic year in which they are taken. The balance of compulsory and optional modules varies from programme to programme and year to year. A 30-credit module is considered equivalent to 15 credits in the European Credit Transfer System (ECTS).

In the first year of the programme you will take compulsory core modules that are similar to those taken in the first year of other biosciences programmes. In year two, you take a number of compulsory modules, but with some optional flexibility. This flexibility to select your own modules increases in year three.

You may also choose to transfer to Biotechnology BSc or the Molecular Biology BSc after your first year, which deals more specifically with the way genetic information is stored in nucleic acids and with the controlled expression of this information and its implications for health and disease.

You may elect to spend an additional year (after year two) gaining invaluable experience in an industrial or research laboratory. Or, after year two, you may transfer to the research intensive MSci programme for a degree programme totalling four years. The final year of the BSc will focus principally on areas of the molecular biosciences selected by you and include the opportunity to carry out an investigative data-analysis project.

### YEAR ONE

**Core or compulsory module(s)**

- Biochemistry and Molecular Biology
- Cells and Development
- Chemistry for Biologists
- Introduction to Genetics
- Introduction to Microbiology
- Principles and Practice of Experimental Biochemistry

**Optional modules**

- All first year modules are compulsory.

### YEAR TWO

**Core or compulsory module(s)**

- Biomolecular Structure and Function
- Metabolism and its Regulation
- Molecular Biology
- Physical Chemistry for Life Science Students
- Either The Principles of Cellular Control or The Chemistry of Biologically Important Molecules

**Optional modules**

- You will select 0.5 credits from a wide range of modules.

### FINAL YEAR

**Core or compulsory module(s)**

- An Advanced Research Techniques module to provide hands on experience of metagenomics, molecular biology, illumina sequencing and data analysis and a literature project where you will write a review of a specific area of interest.

**Optional modules**

- You will select modules from a wide range of options to suit your interest (3.0 credits).
Your learning

Biochemistry is a practical science. You can expect to spend a significant portion of your time either in wet laboratories, where you will handle chemicals and biological materials, or in dry laboratories, where computer simulations and exercises are carried out.

You will also take part in seminars, presentations, lectures and group tutorials. You will use an online virtual learning environment (Moodle) to support your studies.

Assessment

Your assessment will include a combination of examinations, coursework, practical work, tutorial work and presentations. Many modules have in-course tests (web-based or written) and most modules have an unseen final examination.

Your career

Throughout your degree you will acquire a range of specific and transferable key skills, including time management and planning, technical laboratory competencies such as manual dexterity and analysis of data, and skills in teamwork, negotiation and decision-making.

Our graduates have found themselves roles in diverse fields such as toxicology, clinical biochemistry, drug and food research, industrial biotechnology, virus research and agricultural research. Some students have used their degrees to become school science teachers; others have entered other fields such as science journalism, business management, accountancy and business computing.

First career destinations of recent graduates (2013-2015) of this programme include:

// MPhil Biochemistry, UCL
// MRes / PhD Biological Sciences, University of Cambridge
// PhD Structural, Computational and Chemical Biology, UCL

Your application

Application for admission should be made through UCAS (the Universities and Colleges Admissions Service). Applicants currently at school or college will be provided with advice on the process; however, applicants who have left school or who are based outside the United Kingdom may obtain information directly from UCAS.

We use your predicted or achieved academic qualifications, your personal statement and reference to decide whether to offer you a place. Evidence of sustained interest in science, such as involvement in a science debating society, and of activities that demonstrate your self-motivation and organisational skills, will be considered favourably.

If you live in the UK and we have made you an offer, you will be invited to attend an offer-holder open day. This will involve talks from staff about the programme and the department, a research presentation, tours of UCL and the department and a visit to a laboratory facility.
Entry requirements

A LEVELS
Standard Offer: AAA. Biology, Chemistry and Mathematics required.

Contextual Offer: ABB. Biology, Chemistry and Mathematics required with grade A in Chemistry.

GCSE
English Language and Mathematics at grade B or 6. For UK-based students, a grade C or 5 or equivalent in a foreign language (other than Ancient Greek, Biblical Hebrew or Latin) is required. UCL provides opportunities to meet the foreign language requirement following enrolment, further details at: www.ucl.ac.uk/ug-reqs

IB DIPLOMA
Standard Offer: 38. A total of 18 points in three higher level subjects to include Biology, Chemistry, and Mathematics, with no score below 5.

Contextual Offer: 34. A total of 16 points in three higher level subjects including Chemistry, Biology and Mathematics with a score of 6 in Chemistry and no score below 5.

CONTEXTUAL OFFERS – ACCESS UCL SCHEME
As part of our commitment to increasing participation from underrepresented groups, students may be eligible for a contextual offer as part of the Access UCL scheme. For more information see www.ucl.ac.uk/prospectus

OTHER QUALIFICATIONS
UCL considers a wide range of UK and international qualifications for entry into its undergraduate programmes. Full details are given at: www.ucl.ac.uk/otherquals

UNDERGRADUATE PREPARATORY CERTIFICATES (International foundation courses)
UCL Undergraduate Preparatory Certificates (UPCs) are intensive one-year foundation courses for international students of high academic potential who are aiming to gain access to undergraduate degree programmes at UCL and other top UK universities.

Typical UPC students will be high achievers in a 12-year school system which does not meet the standard required for direct entry to UCL.

For more information see: www.ucl.ac.uk/upc.

TUITION FEES
The fees indicated are for undergraduate entry in the 2018/19 academic year. The UK/EU fees shown are for the first year of the programme at UCL only. Fees for future years may be subject to an inflationary increase. The Overseas fees shown are the fees that will be charged to 2018/19 entrants for each year of study on the programme, unless otherwise indicated below.

- UK & EU: £9,250 (2018/19)
- Overseas: £24,040 (2018/19)

Overseas fees for the 2019/20 academic year are expected to be available in July 2018. Undergraduate UK/EU fees are capped by the UK Government and are expected to be available in October 2018. Full details of UCL’s tuition fees, tuition fee policy and potential increases to fees can be found on the UCL Students website.

Additional costs
If you are concerned by potential additional costs for books, equipment, etc. on this programme, please get in touch with the relevant departmental contact (details given on this page).

FUNDING
Various funding options are available, including student loans, scholarships and bursaries. UK students whose household income falls below a certain level may also be eligible for a non-repayable bursary or for certain scholarships. Please see the Fees and funding pages for more details.

CONTACT
Dr Chris Taylorson

Email: 

Telephone: 

Department: Division of Biosciences

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/ucl-and-europe

Disclaimer
This information is for guidance only. It should not be construed as advice nor relied upon and does not form part of any contract. For more information on UCL’s degree programmes please see the UCL Undergraduate Prospectus at www.ucl.ac.uk/prospectus