BIOPROCESSING OF NEW MEDICINES (BUSINESS AND MANAGEMENT) BSc / UCAS CODE: CN72 2019 ENTRY

www.ucl.ac.uk/prospectus
This programme is designed to give you a good grounding in both the science of bioprocessing and the management of new emerging technologies in healthcare. You will develop an understanding of the latest biomedical and diagnostic advances, together with the business skills necessary for health and clinical research management.

**Key information**

**Programme starts**
September 2019

**Location**
London, Bloomsbury

**Degree benefits**

- This BSc is a truly interdisciplinary programme. It draws on the knowledge of experts from across UCL in science, engineering, management and humanities.
- The department has among the most modern and comprehensive biochemical engineering facilities of any university in the world. Valued at over £35 million, our facilities attract leading industrial collaborators.
- Our teaching is designed to help you work at a detailed analytical level and also see the bigger picture in terms of addressing environmental and ethical issues.
- We have been pioneers in providing our undergraduates with training to help them understand the business environment in which the life science industries operate. This will prepare you better for your future career.

**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, you will study the basics of how a drug is created, made at scale and what the challenges of creating new medicines are. You will also study the prerequisite management principles involved in running an organisation and dealing with the accounts, as well as the fundamentals of data management.

In year two you will study the internal and external factors that govern pharmaceutical production, with emphasis on clinical needs and their constraints. A wide spectrum of knowledge is encompassed, from statistical analysis to legal and ethical concerns. You will also grow to understand the role of the Internet in globalisation and access to medicines.

The third year addresses a more in-depth understanding of global practices, business planning, and the feasibility and economics of creating therapeutics and vaccines in both developed as well as developing markets. You will also undertake an independent bioprocess research project.

**YEAR ONE**

**Core or compulsory module(s)**

- Accounting for Business
- Biochemistry and Molecular Biology
- Communication and Behaviour in Organisations
- Introduction to Biochemical Engineering
- Introduction to Biochemical Engineering Processing and Design
- Introductory Statistical Methods and Computing
- Understanding Management

**Optional modules**

- You will select 0.5 credits from a range of options

**YEAR TWO**

**Core or compulsory module(s)**

- Cell Production Growth
- Downstream Processing
- Evaluation and Planning of Business Opportunities in Bioprocessing and Life Sciences
- Law for Managers
- Manufacturing Regenerative Medicines: from Lab Bench to Industry
- Strategic Human Resource Management

**Optional modules**

- You will select two modules of 0.5 credits each from a range of options

**FINAL YEAR**

**Core or compulsory module(s)**

- Advanced Bioprocess Business Plan and Enterprise Implementation
- Bioprocess Design Study
- Bioprocess Research Project
- Business Planning in Bioprocessing and Life Sciences
- Project Management
- Vaccine Bioprocessing

**Optional modules**

- You will select 0.5 credits from a range of options.
Your learning

You will be taught through a combination of lectures, case studies, team-based projects and experiments. Leading industrialists and researchers regularly visit the department to provide guest lectures. Case studies are conducted in small teams, and your personal and departmental tutors are available to offer individual support.

Assessment

Written examinations, individual reports, coursework and oral presentations all contribute towards your assessment.

Your career

The core science, engineering, business and leadership skills that you acquire on the programme will provide you with excellent and diverse career prospects. In addition to your core subject knowledge, the programme will provide you with skills such as innovative thinking, team-working and computing.

The excitement of advances towards new medicines and greener sustainable processes is creating an ever-growing need for biochemical engineering graduates in the biotechnology, pharmaceutical, biofuels, chemical, environment and food industries.

First career destinations of recent graduates (2014-2015) of this programme include:

// Full-time student, MRes in Biomedicine at 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.

In addition to academic requirements, we will use your application to assess your motivation for studying bioprocessing. We will be seeking applicants committed to studying at the highest level, who are eager and able to rise to the challenges presented both by the programme and by a career in the discipline.

If we have made you an offer, you will be invited to an offer-holder’s open day. This provides an excellent opportunity for you to visit the departmental facilities and meet current students and staff before making a final decision.
Entry requirements

A LEVELS
Standard Offer: AAA. Biology, Chemistry or Physics required.

Contextual Offer: ABB. Biology, Chemistry or Physics required.

GCSE
English Language and Mathematics at grade C or 5. 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 including one of Biology, Chemistry or Physics, with no score below 5.

Contextual Offer: 34. A total of 16 points in three higher level subjects including one from Biology, Chemistry or Physics, with 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 2019/20 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 2019/20 entrants for each year of study on the programme, unless otherwise indicated below.

// UK & EU: £9,250 (2019/20)
// Overseas: £26,740 (2019/20)

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
Several major international companies have established a trust fund with the department. This fund provides five bursaries, each worth at least £1,500, which are open to all applicants of this programme.

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
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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/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