FACULTY OF LIFE SCIENCES

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UCL’s Grant Museum of Zoology is home to the Micrarium, a beautiful back-lit cave displaying 20,000 microscope slides and 2,323 of the tiniest specimens in the collection, all in just 2.52 square metres.
Biochemistry and Biotechnology /
www.ucl.ac.uk/prospectus/biochemtech

Examining cells at a molecular level, biochemistry develops our understanding of the chemistry of life, revealing the complex processes in operation in living systems. Biotechnology harnesses these advances of understanding for beneficial use in industry, medicine and agriculture.

Biochemistry MSci
UCAS: CC70 • 4 years

A levels: AAA, Chemistry required plus one from Biology, Mathematics or Physics. Standard GCSE offer (see page 31), except English Language and Mathematics at grade B.

IB Diploma: 38 points. A total of 18 points in three higher level subjects including Chemistry at grade 6, and one subject from Biology, Mathematics or Physics, with no score below 5.

Other qualifications: see www.ucl.ac.uk/otherquals

Biochemical research underpins much of what is core in life sciences and biomedical research and has helped illuminate many of the problems that have fascinated and perplexed molecular bioscientists. The Biochemistry MSci provides an invaluable research-based foundation for postgraduate research study or an exciting career.

Core modules in molecular biosciences over years one and two provide an introduction to the subject and form a foundation for later studies. After year two, upon satisfaction of certain academic criteria, you will continue into a third year which provides a more research intensive experience involving advanced techniques modules, optional advanced molecular biosciences modules and a compulsory data-analysis investigative study. This will prepare you for year four which provides an extended intensive research project alongside a research techniques programme and a health and disease-based dissertation.
Biochemistry BSc
UCAS: C700 • 3 years

A levels: AAA. Chemistry required plus one from Biology, Mathematics or Physics. Standard GCSE offer (see page 31), except English Language and Mathematics at grade B.

IB Diploma: 38 points. A total of 18 points in three higher level subjects including Chemistry at grade 6, and one subject from Biology, Mathematics or Physics, with no score below 5.

Other qualifications: see www.ucl.ac.uk/otherquals

Since its emergence as a discipline, biochemistry has illuminated many of the problems that have fascinated and perplexed molecular bioscientists for generations. Biochemistry and molecular biology have become core subjects for much of modern life sciences research and as such the Biochemistry BSc is a valuable beginning to a range of different careers.

In years one and two, core modules in molecular biosciences provide an introduction to the subject and form a foundation for later studies. After year one you may, if you wish, transfer to a Molecular Biology or Biotechnology BSc. After year two, upon satisfaction of certain academic criteria, you may choose to transfer to the four-year Biochemistry MSci programme or spend an additional year in an industrial or research laboratory. The final year focuses on individual module choices including an investigative data-analysis research project.

Biotechnology BSc
UCAS: C560 • 3 years

A levels: AAA. Chemistry required plus one from Biology, Mathematics or Physics. Standard GCSE offer (see page 31), except English Language and Mathematics at grade B.

IB Diploma: 38 points. A total of 18 points in three higher level subjects including Chemistry at grade 6, and one subject from Biology, Mathematics or Physics, with no score below 5.

Other qualifications: see www.ucl.ac.uk/otherquals

The Biotechnology BSc provides a sound base of chemistry, biochemistry, molecular biotechnology and biochemical engineering alongside experience of the experimental skills essential for future research, equipping you for a career in this exciting discipline, which has grown out of some of the most dramatic scientific discoveries of the last 30 years.

In years one and two, core modules in molecular biosciences provide an introduction to the subject and form a foundation for later studies. After year one you may, if you wish, transfer to a Molecular Biology or Biotechnology BSc. After year two, upon satisfaction of certain academic criteria, you may choose to transfer to the four-year Biochemistry MSci programme or spend an additional year in an industrial or research laboratory. The final year focuses on individual module choices including an investigative data-analysis research project.
Study of the biological sciences spans a vast and exciting range of topics, from cellular structure to genetics to ecosystems. The discoveries biologists continue to make about life processes are vital to our efforts to tackle challenging problems in human welfare and environmental protection.

### Biological Sciences MSci

UCAS: C901 • 4 years

**A levels:** AAA. Biology required plus one from Chemistry, Mathematics or Physics. Standard GCSE offer (see page 31), except English Language and Mathematics at grade B.

**IB Diploma:** 38 points. A total of 18 points in three higher level subjects including Biology at grade 6 and one from Chemistry, Mathematics or Physics, with no score below 5.

**Other qualifications:** see www.ucl.ac.uk/otherquals

This four-year MSci offers an additional year on top of the Biological Sciences BSc, which includes a research project, providing extra depth and knowledge which will particularly benefit those interested in further research. Year three may be spent abroad at a university in Asia, Australia, Europe or the USA.

Years one and two follow the same structure as the BSc, and you have the same choices regarding specialisation at the end of year one. In year three you may take optional modules from a wide range offered across UCL, or you may apply to spend this year abroad studying at a partner university. In year four you will focus on a research project and choose further advanced optional modules from a wide range. Students are advised to apply for the MSci initially as this offers more flexibility.
Genetics has a practical connection with policing through forensic science. When UCL’s Jill Dando Institute of Crime Science was launched in 2001 I was determined to return one day as a student.

Oli Burbage-Hall • Sergeant, Met Police Service, London
Biomedical sciences graduates apply their advanced skills in the dynamic and exciting field of biomedical research to improve understanding of human health around the globe. Biomedical discoveries in the mechanisms of disease are enabling advancements in diagnosis, the development of new and improved treatments, and the prevention of illness.

Subject overview

Total intake: 137 (2017 entry)
Applications per place: 8 (2015 entry)

Research Excellence Framework (REF)
Interdisciplinary programme: see contributing departments

First career destinations (2012–2014)
• Editorial Assistant, Royal Pharmaceutical Society (RPS)
• Research Assistant, University of Nottingham
• Pharmacy Regulator, Teva UK
• Full-time student, MBBS in Medicine at UCL
• Full-time student, MRes in Brain Sciences at UCL

Contact details
Dr Pam Houston (Admissions Tutor)
Ms Marcella Baterip (Admissions Administrator)
e: biosciences-admissions@ucl.ac.uk
+44 (0)20 7679 7169

For more information, including programme structure visit: www.ucl.ac.uk/prospectus/biomedsci
The interdisciplinary approach of human sciences enables advanced discoveries in human biological function to be studied in combination with the behavioural insights provided by social science. The contrasting perspectives and methodologies covered illuminate and expand our understanding of humankind.
Human Sciences BSc

UCAS: BCL0 • 3 years

A levels: AAA. Science subject required, preferably Biology. Standard GCSE offer (see page 31), except English Language and Mathematics at grade B.

IB Diploma: 38 points. A total of 18 points in three higher level subjects including science (preferably Biology at grade 6), with no score below 5.

Other qualifications: see www.ucl.ac.uk/otherquals

UCL is one of the few universities in the UK to offer a Human Sciences programme. This interdisciplinary degree draws on teaching from a range of departments, and offers enormous flexibility and opportunity for you to develop your own areas of interest and specialisation in the study of humankind.

Year one is primarily composed of core modules, providing you with a broad foundation in biochemistry, biological anthropology, genetics, human anatomy, mammalian physiology, and psychology. In year two you will take two core modules, the Human Sciences in Society, and Statistical Methods, and select optional modules from a wide range offered across UCL. In year three you will write an interdisciplinary dissertation, and choose further optional advanced modules from a wide range.

Human Sciences / www.ucl.ac.uk/prospectus/humansci
The brain is the most complex structure we know. It interprets our sensations, stores our memories and regulates our body functions. Neuroscientists aim to understand how some 100 billion nerve cells co-operate to do these tasks, and how they malfunction in devastating disorders such as epilepsy and Alzheimer’s disease.
Pharmacology MSci

UCAS: B211 • 4 years

A levels: AAA-AAB. Chemistry required plus one from Biology, Mathematics or Physics. Standard GCSE offer (see page 31), except English Language and Mathematics at grade B.

IB Diploma: 36-38 points. A total of 17-18 points in three higher level subjects including Chemistry and one subject from Biology, Mathematics or Physics, with no score below 5.

Other qualifications: see www.ucl.ac.uk/otherquals

This programme is intended for students who want to pursue careers or further study in pharmacology or related disciplines. It offers an additional year on top of the Pharmacology BSc in which to undertake your own major, cutting-edge research project, alongside advanced modules.

In years one and two most modules are compulsory. They provide a solid introduction to the subject of pharmacology and lay the groundwork for later study, covering essential knowledge in physiology, neuroscience, chemistry, genetics, and statistics. In years three and four you will have the freedom to select optional modules from a wide range, alongside compulsory project work. You may also apply for a 'sandwich' year taken between years two and three, spent in the pharmaceutical industry or another pharmacology-related area.
Pharmacology BSc

UCAS: B210 • 3 years

A levels: AAA-AAB. Chemistry required plus one from Biology, Mathematics or Physics. Standard GCSE offer (see page 31), except English Language and Mathematics at grade B.

IB Diploma: 36-38 points. A total of 17-18 points in three higher level subjects including Chemistry and one subject from Biology, Mathematics or Physics, with no score below 5.

Other qualifications: see www.ucl.ac.uk/otherquals

The subject of pharmacology is immensely broad and covers areas of physiology, chemistry, neuroscience, biochemistry, and genetics. This flexible three-year programme offers a thorough scientific training in the subject, and students have the option of transferring to the MSc at the end of year two.

In years one and two most modules are compulsory. They provide a solid introduction to the subject of pharmacology and lay the groundwork for later study by covering essential knowledge in physiology, neuroscience, genetics, chemistry and statistics. In your final year you will have the freedom to select optional modules from a wide range, alongside a compulsory laboratory or literature project. You may also apply for a ‘sandwich’ year taken between years two and three, spent in the pharmaceutical industry or another pharmacology-related area.
Pharmacists are concerned with the science of medicines – how they work, how they are made and how they are used to prevent and treat disease. You will study the function of the human body in health and disease and how drugs are discovered, formulated and used therapeutically, in the context of professional pharmacy practice.

Pharmacy MPharm

UCAS: B230 • 4 years

A levels: AAA-AAB. Chemistry and either Biology, Mathematics or Physics required. Standard GCSE offer (see page 31), except English Language and Mathematics at grade B.

IB Diploma: 36-38 points. A total of 17-18 points in three higher level subjects including Chemistry and one subject from Biology, Mathematics or Physics, with no score below 5.

Other qualifications: see www.ucl.ac.uk/otherquals

Pharmacists are healthcare professionals who are experts in medicines, with a detailed understanding of the scientific basis of therapy. The MPharm programme integrates pharmaceutical science into the practice of clinical pharmacy. We offer you the opportunity to become a confident and competent healthcare professional with patient safety and wellbeing as your primary concern.

Years one and two focus on the scientific basis of pharmacy and the translation of medicines from laboratory to patient. In year three you may choose from a wide range of advanced specialist optional modules, and in year four you will undertake a research project which may be carried out within UCL, or in another institution in the UK or abroad. Contact with patients in NHS trusts and Green Light community pharmacy is embedded throughout your degree. The programme is accredited by the General Pharmaceutical Council (GPhC).