Cancer Biomedicine BSc

Cancer poses a significant health and socio-economic burden to society. In this unique degree you will be taught by researchers working at the forefront of basic, translational and clinical cancer research. Knowledge of cancer is widely relevant to careers in biomedical research, health science, allied health professions and the pharmaceutical industry.

Key information

Programme starts
September 2019

Location
London, Bloomsbury

Degree benefits

// The focus of this degree programme is on cancer as a disease, its treatment, and the associated research and socio-economic impacts. It is a research-connected curriculum with teaching delivered by leading cancer scientists and clinicians.

// You will have the opportunity to undertake a unique research project working alongside world-class cancer researchers.

// The skills, training, and knowledge gained within this programme will be enhanced by the combination of basic science, clinical disease management and translational medicine. This collectively offers a unique skill set to graduates.

// There is a wide choice of optional modules for you to select from, including the human microbiome, stem cell therapies, drug design and delivery, and nanomedicine.

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).

Year one is demanding, covering the foundations of human biology and medicine. There are seven modules providing an understanding of human health and disease. Teaching of biochemistry, physiology and anatomy is integrated with an understanding of each organ system. One further module gives an introduction to cancer medicine in society and leads on to cancer-related modules in years two and three. You will be mostly based at UCL’s Royal Free campus in Hampstead, North London, and taught by world-leading scientists and clinicians.

Year two comprises five compulsory modules covering molecular biology, cancer biology and therapeutics, clinical cancer management and clinical trials. Two further modules are optional with a wide range of subjects to choose from.

Year three comprises four compulsory and three optional modules, with the compulsory modules examining how new cancer treatment strategies are designed and tested. You will also undertake a research project. The wide range of optional modules allows students to tailor-make a preferred route within biomedical sciences, guided by interest and intended career choice.

YEAR ONE

Core or compulsory module(s)

// Foundations in Health and Disease
Cardiovascular and Respiratory Function in Health and Disease
Kidneys, Hormonal Control of Human Physiology, Fluid Balance and Nutrition
Infection, Inflammation and Repair
Data Interpretation and Evaluation in Health and Disease
Musculoskeletal Biology
Cancer Medicine in Society

Optional modules

// There are no optional modules in year one.

YEAR TWO

Core or compulsory module(s)

// Molecular Basis of Disease
Techniques in Molecular Medicine—A Practical Approach
Cancer Biology and Therapeutics
Cancer Epidemiology, Diagnosis and treatment
Introduction to Clinical Trials

Optional modules

// Basics of Tissue Engineering and Regenerative Medicine
Statistical Methods for Biomedicine
// Other optional modules will also be available. If there is a particular module that a student is interested in offered elsewhere in UCL, it is possible to select this if approved by the Programme Director.
**FINAL YEAR**

Core or compulsory module(s)
- Precision Cancer Medicine
- Research Methods
- Cancer Clinical Trials
- Research Project

Optional modules
- Drug Design and Delivery
  - Human Microbiome in Health and Disease
  - Stem Cell Therapies
  - Nanomedicine
- Other optional modules will also be available. If there is a particular module that a student is interested in offered elsewhere in UCL, it is possible to select this if approved by the Programme Director.

**Your learning**

Teaching is delivered through formal lectures, small tutorials, group and independent work. Year two includes laboratory practicals, and in year three you will undertake a research project and produce a dissertation.

Lectures are both face-to-face and online, which gives you the opportunity to review topics at your own pace. There are also more intensive, creative sessions of tutorial-based problem-solving and learning which take place in small groups.

**Assessment**

Formative and summative assessment methods include: examinations (some of which are in multiple-choice or short-answer question format); coursework; poster presentations; practical skills assessment (OSPE); and online participation. There is a project dissertation which is produced as part of the research project in year three.

**Your career**

Graduates will be capable of critical thinking and complex problem-solving and becoming highly skilled scientists. They will have developed excellent verbal and written communication skills. These competencies and this acquired knowledge will equip our graduates to excel in laboratory or clinical research careers, or flourish in other professions where a keen understanding of science and clinical medicine is crucial.

We expect our graduates to be capable of working at the highest levels and have the ability to make a significant contribution within all fields of biomedical sciences, research and associated professions.

The first cohort of students admitted to Cancer Biomedicine BSc is due to graduate in 2021. Therefore, information about career destinations for students on this programme is not yet available.

**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 are looking for evidence of a firm interest in science as well as a motivation towards further knowledge, critical thinking and problem-solving skills. We expect our students to have a real curiosity and desire to contribute to society. We also expect them to be keen for the challenge of this innovative and research-connected programme.

We will use predicted or achieved academic qualifications, your personal statement and references to decide whether to offer you a place. There will be no interviews.
**Entry requirements**

**A LEVELS**

**Standard Offer:** AAB. Biology and Chemistry required.

**Contextual Offer:** BBB. Biology and Chemistry required.

**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:** 36. A total of 17 points in three higher level subjects including Biology and Chemistry, with no score below 5.

**Contextual Offer:** 32. A total of 15 points in three higher level subjects including Biology or Chemistry, 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.

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**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: £24,760 (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**

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