Biomaterials and Tissue Engineering MSc /

This MSc will equip you with state-of-the-art knowledge of biomaterials, bioengineering, tissue engineering, medical engineering and related management topics. Delivered by experts from across UCL and eminent visiting lecturers from industry and medical charities, this interdisciplinary programme attracts physical sciences, engineering and life sciences graduates, including those with qualifications in medicine.

**Degree summary**

You will develop an advanced knowledge of topics in biomaterials and tissue engineering alongside an awareness of the context in which healthcare engineering operates, in terms of safety, environmental, social and economic aspects. You will also gain a wide range of intellectual, practical and transferable skills necessary for a career in this field.

- There are internationally renowned research groups in biomaterials and bioengineering in UCL Engineering and you will have access to a state-of-the-art research portfolio.
- In recent years, UCL Mechanical Engineering has seen unprecedented activity in refurbishing and re-equipping our laboratories. For example, six new biomaterials and bioengineering laboratories have been set up with funding from the Royal Society and Wolfson Foundation. A new biomaterials processing and forming laboratory is also available in the Materials Hub in the Engineering Building.
- The programme is also delivered by leading researchers across UCL's Division of Medicine, Eastman Dental Institute, the Institute of Biomedical Engineering and visiting experts from other UK organisations.

This dynamic programme is delivered through lectures, tutorials, individual and group projects, and practical laboratory work. Assessment is through written, oral and viva voce examinations, the dissertation and coursework (including the evaluation of laboratory reports, technical and project reports, problem-solving exercises, assessment of computational and modelling skills, and oral presentations).

**Degree structure**

Mode: Full-time: 1 year; Flexible: up to 5 years
Location: London, Bloomsbury

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

Please note that the list of modules given here is indicative. This information is published a long time in advance of enrolment and module content and availability is subject to change.

### CORE MODULES
- Biomaterials
- Tissue Engineering
- Biofluids and Medical Devices
- Biomechanics and Biostructures
- Applications of Biomedical Engineering
- Bioengineering
- Medical Imaging (ionising and non-ionising)
- Evaluation and Planning of Business Opportunities

### OPTIONAL MODULES

There are no optional modules for this programme.

### DISSERTATION/REPORT

Culminating in a substantial dissertation and oral presentation, the research project focuses your research interests and develops high-level presentation, critical thinking and problem-solving skills. The project can be based in any relevant UCL department.
Your career

There are many career opportunities and the programme is suitable for students wishing to become academics, researchers or professionals and for those pursuing senior management careers, in manufacturing or healthcare engineering.

Employability

Delivered by leading researchers from across UCL, as well as industrial experts, you will have plenty of opportunities to network and keep abreast of emerging ideas in biomaterials and tissue engineering. Collaborating with companies and bodies such as the NHS, JRI Orthopaedics and Orthopaedics Research (UK) is key to our success and you will be encouraged to develop networks through the programme itself and through the department’s careers programme which includes employer-led events and individual coaching. We equip our graduates with the skills and confidence needed to play a creative and leading role in the professional and research community.
Entry requirements

A minimum of a second-class Bachelor's degree from a UK university in a suitable engineering subject or appropriate medical qualification 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 Biomaterials and Tissue Engineering at graduate level
- why you want to study Biomaterials and Tissue Engineering at UCL
- what particularly attracts you to this programme
- how your academic and/or professional background meets the demands of a challenging 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.

There is an application processing fee for this programme of £75 for online applications and £100 for paper applications. Further information can be found at:
www.ucl.ac.uk/prospective-students/graduate/taught/application.

FEES AND FUNDING 2019/20 ENTRY

- UK: £12,750 (FT)
- EU: £12,750 (FT)
- Overseas: £26,660 (FT)

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 Students website.

Fees for flexible, modular study are charged pro-rata to the appropriate full-time Master's fee taken in an academic session.

Full details of funding opportunities can be found on the UCL Scholarships website: www.ucl.ac.uk/scholarships

APPLICATION DEADLINE

All applicants: 8 March 2019

Details on how to apply are available on the website at:
www.ucl.ac.uk/graduate/apply

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/brexit