Process engineering often involves close collaboration between engineers and scientists from a variety of disciplines. The Chemical Process Engineering MSc at UCL is specifically designed to facilitate this collaboration and provides graduates from a variety of engineering and science disciplines with the advanced training necessary to enter the chemical or biochemical industries.

**Degree summary**

The programme covers core chemical engineering subjects alongside a wide range of options. Students choose either a research or an advanced design project. The advanced design project option is aimed at students who have not undertaken a design project during their undergraduate degree and eventually seek to become Chartered Engineers.

- UCL Chemical Engineering, situated in the heart of London, is one of the top-rated departments in the UK, being internationally renowned for its outstanding research.
- The programme is the first of its kind in the UK and is accredited by the Institution of Chemical Engineers (IChemE) as meeting IChemE’s requirements for Further Learning to Master’s Level. This recognition will fulfil an important academic qualification for MSc graduates with suitable first degrees in eventually becoming Corporate Members of IChemE.

The programme is delivered through a combination of lectures, tutorials, and individual and group activities. Invited lectures delivered by industrialists provide a professional and social context. Assessment is through written papers, coursework, a report on the research or design project and an oral examination.

**Accreditation**

The programme is fully accredited by the Institution of Chemical Engineers (IChemE) as meeting IChemE’s requirements for Further Learning to Master’s Level.

**Degree structure**

**Mode:** Full-time: 1 year  
**Location:** London, Bloomsbury

Students undertake modules to the value of 180 credits. Disclaimer: modules are subject to availability. Due to timetable clashes, not all module combinations are possible. Each student takes a total of seven modules, comprising a project (90 credits) and six optional modules (90 credits). Of these six modules, a minimum of four must be selected from ‘Optional modules 1’ (minimum 60 credits in total). Students may select a maximum of two from ‘Optional modules 2’ (maximum 30 credits in total).

### OPTIONAL MODULES 1 (15 CREDITS EACH)

- Students must select a minimum of four modules from the list below (minimum 60 credits).
- Those modules marked with an asterisk (*) are strongly recommended for students without a chemical engineering first degree.
- The module marked with a double asterisk (**) is strongly recommended for students with an accredited chemical engineering first degree.

- Advanced Process Engineering
- Advanced Safety and Loss Prevention*
- Chemical Reaction Engineering*
- Electrochemical Engineering and Power Sources
- Energy Systems and Sustainability
- Fluid-Particle Systems
- Molecular Thermodynamics
- Nature Inspired Chemical Engineering

### OPTIONAL MODULES 2 (15 CREDITS EACH)

- Students select a maximum of two modules from the list below (maximum 30 credits).
- The modules Mastering Entrepreneurship and Project Management cannot be taken together.

- Advanced Bioreactor Engineering
- Environmental Systems
- Mastering Entrepreneurship
- Project Management
- Water and Wastewater Treatment

### RESEARCH PROJECT/DESIGN PROJECT

- All MSc students undertake either a Research Project (90 credits) or an Advanced Design Project (90 credits) that culminates in a project report and oral examination. Students who have already passed a Design Project module in their first degree cannot select the Advanced Design Project module.
Your career

Upon completion, our graduates can expect to play a major role in developing the technologies that make available most of the things that we use in everyday life and provide the expertise and technology to enhance our health and standard of living. These activities may involve the development of new materials, food processing, water treatment, pharmaceuticals, transport and energy resources as well as being at the forefront, addressing present environmental issues such as climate change.

Typical destinations of recent graduates include: Amec Process and Energy, British Petroleum, Royal Dutch Shell, National Grid, Health & Safety Executive. Career profiles of some of our recent MSc graduates are available on our website.

Employability

Students gain in-depth knowledge of core chemical engineering subjects and of the advanced use of computers in process design, operation and management. They receive thorough training in hazard identification, quantification and mitigation, as well as in risk management and loss prevention, and also learn how to design advanced energy systems, with emphasis on sustainability, energy efficiency and the use of renewable energy sources. Students learn how to make decisions under uncertain scenarios and with limited available data and receive training on how to plan, conduct and manage a complex (design or research) project.
Entry requirements

Normally a minimum of an upper second-class Bachelor’s degree in a relevant discipline from a UK university 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 Chemical Process Engineering at graduate level
// why you want to study Chemical Process Engineering at UCL
// what particularly attracts you to this programme
// how your academic, professional and personal background meets the demands of this 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.

FEES AND FUNDING 2017/18 ENTRY

// UK: £11,800 (FT)
// EU: £11,800 (FT)
// Overseas: £25,130 (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 Current Students website.

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

APPLICATION DEADLINE

All applicants: 28 July 2017

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/eu-referendum