University College Dublin
Ireland's Global University

Course code: T218

MEngSc Chemical Engineering

One Year Full Time (September start)

Introduction

The Chemical Engineering industry in Ireland is one of its strongest exporting sectors and is representative of the chemical process industries worldwide. Opportunities for employment exist in a broad range of areas including: the pharmaceutical industry, the petrochemical and energy industries, the ICT industries including medical devices, and the heavy chemicals industries. The MEngSc in Chemical Engineering offers advanced level education for students with bachelor degrees in chemical engineering/ technology programmes. On this programme you will improve your conceptual and practical skills in both the fundamental and applied principles of chemical engineering practice. The programme covers advanced topics in chemical engineering and includes extensive project work in both design (featuring both individual and team elements/efforts) and in an individualised research project.

Course Highlight

This programme is delivered by a highly research-intensive School holding 151-200 in the QS World Subject Rankings for Chemical Engineering and Top 6 in Ireland/UK Employer's and Research rankings and awarded €9.56 million in research funding between 2014-19.

Course Content and Structure

- 90 credit taught masters
- 60 credits taught modules
- 30 credits dissertation

The programme's teaching methods are highly interactive and varied with contributions from a combination of industrial practitioners and leading researchers in their fields.

Modules include:

- Advanced Experimental Design
- Advanced Heat Transfer and Fluid Mechanics
- Advanced Process Design
- Advanced Separation Processes
- Chemical & Bioprocess Engineering Design
- Chemical & Bioprocess Reaction Engineering
- Chemical Processes of Sustainable & Renewable Energy
- Environmental Engineering Process Instrumentation & Control
- Advanced Characterisation Techniques
- Bioreactor Modelling and Control

Why study at UCD?

Graduate education

12,800 graduate students; 17% graduate research students; structured PhDs

Global community

9,500 international students and a 300,000 alumni network across 165 countries

Global Profile

UCD is ranked in the top 1% of higher education institutions worldwide

Global careers

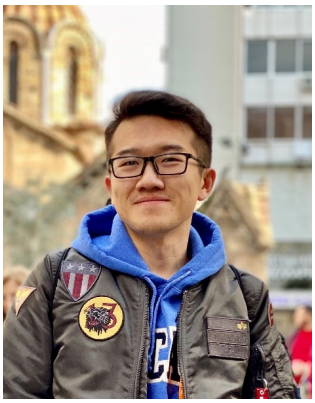
Dedicated careers support; 2-year stayback visa to work in Ireland

Career Opportunities

Your career opportunities upon graduation from this programme are exemplary. It is anticipated that the graduates will play an important role in the development, design and operation of chemical processes in industry at international level in the coming years. Graduates can enter a wide selection of possible industries including fine chemicals (e.g., Proctor and Gamble), heavy chemicals (e.g., CRH), pharmaceuticals (e.g., Lilly, Merck, Pfizer), oil and gas (e.g., Chevron, Conoco Philips, Exxon, Shell), as well as consulting and business.

Graduate Profile

Chenxi Qi



I chose to study for my masters in UCD as it is the top place to study for chemical engineering in Ireland, according to the QS World University Rankings by subject. In addition, lots of chemical and pharmaceutical companies are based in Ireland, which provide a wide range of career opportunities. During my time of study at UCD, the courses used innovative ways of teaching. Some specialists in the chemical industries were invited to give lectures and guide my group projects. Even with COVID-19, the courses made the complete transition to online teaching quite well. Also, administrative staff were extremely friendly and helpful, such as keeping students updated of new career opportunities. Moreover, the university had a lot of social activities which help students to relax after classes. So, I believe UCD is certainly the best university to enjoy both study and social life.

Applicant Profile

- Applicants must hold a bachelor's degree with a minimum upper second class honours (NFQ level 8) or international equivalent in a chemical engineering programme.
- Applicants whose first language is not English must also demonstrate English language proficiency of IELTS 6.5 (no band less than 6.0 in each element), or equivalent.
- Students who do not meet the IELTS requirement may wish to consider taking the Pre-Sessional or Pre-Masters Pathway. Full details https://www.ucd.ie/alc/programmes/pathways/

International Fees and Scholarships

Tuition fee information is available on www.ucd.ie/fees. Please note that UCD offers a number of graduate scholarships for full-time, self-funding international students, holding an offer of a place on a UCD masters programme. Please see www.ucd.ie/global/scholarships/ for further information.

Related Masters Programmes of Interest

- MEngSc Biopharmaceutical Engineering
- MSc Biotechnology
- ProfCert Manufacturing of Cell & Gene Therapies & Vaccines

CONTACT US

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This programme receives significant interest so please apply early online at **www.ucd.ie/apply**