



THE UNIVERSITY of EDINBURGH  
School of Engineering

Postgraduate opportunities

# MSc in Advanced Chemical Engineering

Starting in Autumn 2016, the School of Engineering at the University of Edinburgh will be offering a master's degree in Advanced Chemical Engineering. The programme spans a wide variety of topics from the fundamentals on a molecular scale to applications and processes, and is advised by an Industrial Board of Experts.



## At the Frontiers of Chemical Engineering Science

From carbon capture to sustainable water resources, from alternative energy technologies to advanced pharmaceutical processes, chemical engineers address the frontiers of important global challenges. A one year programme at the University of Edinburgh will immerse you in the most current developments in these fields through a combination of taught modules, workshops, a research dissertation and a number of supporting activities, with a particular emphasis on multi-scale approaches to chemical engineering from nano-scale to process scale.

A unique feature of the programme is a strong involvement of the chemical engineering industry. The programme is advised by an Industrial Board, while summer research dissertation projects are formulated and co-advised by industrial partners, with topics ranging from computational fluid dynamics for medical applications to carbon capture and storage to continuous manufacturing for the pharmaceutical industry.

### Programme Structure\*

#### Taught component

##### Core courses

- Chemical Reaction Engineering
- Computational Fluid Dynamics
- Applied Numerical Methods Across Engineering Scales
- Chemical Engineering Study Projects
- Molecular Thermodynamics

#### Plus six courses selected from several options, including:

- Gas Separations Using Membranes
- Separation Processes for Carbon Capture
- Oil and Gas Systems Engineering
- Adsorption
- Modern Economics Issues in Industry
- Technology Innovation & Management

#### Dissertation

Following the taught component, students conduct a research project over three months under the joint supervision of an academic and an industrial partner.

\* Subject to final approval by the Board of Studies

**Scholarships**  
[www.ed.ac.uk/  
student-funding](http://www.ed.ac.uk/student-funding)

### Entry Requirements

You should have a UK 2:1 degree (or its international equivalent) in chemical engineering.

### Tuition Fee 2016/17\*

UK/EU Students: £9,650

International Students: £21,350

Additional programme costs: £250

\*Fees change annually. For the most up-to-date information about fees see: [www.ed.ac.uk/schools-departments/finance/students/fees](http://www.ed.ac.uk/schools-departments/finance/students/fees)

\*Fees are subject to the approval by the Board of Studies

### English Language Requirements

IELTS Academic module 6.5 (with 6.0 in each section), TOEFL iBT 92 (with 20 in each section). For more information about other qualifications we accept please go to [www.ed.ac.uk/international/english](http://www.ed.ac.uk/international/english)

### Virtual Information Sessions

October to December 2015

### Funding Available

Five prestigious Kenneth Denbigh scholarships available for top applicants

### Course Duration

One year full time

### Apply Online from January 2016

Register Your Interest  
to receive news and  
updates via email to:

Dr Lev Sarkisov  
[Lev.Sarkisov@ed.ac.uk](mailto:Lev.Sarkisov@ed.ac.uk)

The University of Edinburgh is ranked 17<sup>th</sup> on the  
QS World University Rankings for 2014/15.

QS World University ranking, 2014/15

