Chemical engineering course guide

Chemical, biochemical and process engineering undergraduate degree programmes in the UK and Ireland

Please check the accreditation status of individual programmes with the relevant university or with Engineering Council at www.engc.org.uk/acad
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University of Aberdeen

Aberdeen is at the heart of the energy industry in Europe and of international importance as a centre of excellence in exploration and production of oil and gas. The combination of these factors makes it possible to offer a curriculum that is both influenced by the cutting-edge research of our academics and highly relevant to the needs of employers. Our MEng/BEng Chemical Engineering Degree Programmes deliver the learning outcomes required of any general Chemical Engineering degree programme giving our graduates the opportunity to find employment across the broad spectrum of Chemical Engineering employers. Our location in Aberdeen, the energy capital of Europe, and our engagement with local industry means that our students have the opportunity to engage with the local upstream oil and gas industry from the moment they embark on their studies. The lectures, tutorials, workshops and laboratories within which the programmes are delivered are supported by site visits and contributions from collaborators in industry.

Programmes

Chemical Engineering
- BEng(Hons): 4 years full-time
- MEng: 5 years full-time

Entry requirements

An SQA Higher or GCE A-Level or equivalent qualification in chemistry is required for entry to Year 1.

BEng
- 4 SQA Highers at ABBB. AB in maths and in physics and/or technological studies at B
- 3 GCE A-Levels at BBB. B in maths and in physics/design and technology/engineering
- Standard Grade at levels 1, 2, or 3 in English/ GCSE in English at C.

MEng
- 4 SQA Highers at AABB. AB in maths and in physics and/or technological studies at B
- GCE A-Levels at BBB. B in maths and physics/design and technology/engineering
- Standard Grade at levels 1, 2, or 3 in English/ GCSE in English at C.

Please note that achieving the minimum entrance requirement will not guarantee an offer of admission. We have many more applicants than places, and most meet our minimum entrance requirements.

For comprehensive information on entry requirements visit:
www.abdn.ac.uk/study/undergraduate/find-a-degree.php#engineering

Admissions tutor: Dr Andrew Starkey
Prospectus: www.abdn.ac.uk/prospectus/ugrad
Website: www.abdn.ac.uk/engineering
Aston University, Birmingham

Our modern, purpose-designed labs and teaching facilities include excellent IT facilities and a well-equipped pilot plant area. Tailored computing courses and self-tuition packages ensure the development of IT and word processing skills required by the modern chemical engineer or chemist. All computer workstations are linked by the University’s Local Area Network, which in turn connects to worldwide networks.

Programmes

Chemical Engineering

- BEng(Hons) 3 years full-time
- BEng(Hons) 4 years sandwich
- MEng(Hons) 4 years full-time
- MEng(Hons) 5 years sandwich

Entry requirements

- three A-levels to include chemistry, preferably maths, and one other
- typical offer BEng: BBB-ABB, MEng: AAB-AAA
- physics or other relevant A-levels are acceptable as the third subject. Two AS-levels may replace one A-level.

Programme Director: Dr Zoran Visak
Email: z.visak@aston.ac.uk / engineering@aston.ac.uk
Website: www.aston.ac.uk
The University of Bath provides a modern industry-focused curriculum using state-of-the-art facilities, in the exceptional location that is the World Heritage City of Bath. The degrees are focused on strong fundamentals in science and engineering applied to industrial practice. Bath provides students with a challenging and exciting environment to develop their problem-solving skills that are characteristic of good chemical engineers. The programmes are innovative, flexible, and have very strong chemical and biochemical engineering design components in every year of study. Bath has excellent industrial links that contribute to the learning experience throughout the course. A consequence of our industrial links is that a large proportion of students (around 70%) go on a salaried placement year in industry, and a high percentage of these are offered graduate jobs by the placement company. The Department has a close-knit student community coupled with friendly, enthusiastic and approachable staff. All these factors contribute to our degree programmes successfully preparing students for the most highly sought-after graduate jobs.

Programmes

Chemical Engineering
- BEng(Hons) 3 years full-time
- BEng(Hons) 4 years sandwich
- MEng(Hons) 4 years full-time
- MEng(Hons) 5 years sandwich

Entry requirements
- three subjects at A-level including maths and chemistry
- usual grades required: A* (either in maths or chemistry) AA for MEng and BEng
- other qualifications such as International or European Baccalaureate, Irish and Scottish Highers, Foundation Year are also eligible – please enquire. We do not accept general studies or second language courses studied in the first language.

Admissions tutor: Dr Ana Lanham
Email: admissions@bath.ac.uk
Website: www.bath.ac.uk/chem-eng
University of Birmingham

Our School of Chemical Engineering is home to one of the largest concentrations of chemical engineering expertise in the UK. It has a history of excellent community spirit and we are very proud of its welcoming and friendly atmosphere. The school’s prestigious reputation is reflected in our top 5 rating in the last Research Assessment Exercise (2014) and achieves consistently high rankings in league tables; the school is currently fifth in the Complete University Guide.

At Birmingham we are dedicated to delivering exciting and innovative degree programmes led by academics who are global experts in their fields. High quality teaching combined with excellent facilities, including our state-of-the-art e-learning suite and access to Birmingham’s new £40 million Collaborative Teaching Laboratory, ensures our undergraduate students receive a first-class learning experience. The courses are delivered as lectures, small group workshops, enquiry-based learning activities, computer sessions, laboratories and tutorials. A strong emphasis is placed on project work (design and research projects) in years three and four.

As a Birmingham graduate, you will have the knowledge and expertise to work in a number of sectors ranging from oil and gas to pharmaceuticals, from energy to finance. Due to the outstanding reputation of Birmingham, your degree will be valued both nationally and internationally and open up a host of opportunities to help you succeed in your chosen career path. With an impressive 91% graduate employability score*, graduates of our school have gone on to have exciting careers at a wide range of companies, including: BP, ExxonMobil, Unilever, GSK, AstraZeneca and Procter and Gamble.

*The Guardian, University league tables 2020

Programmes

1. Chemical Engineering
   - BEng 3 years full-time
   - MEng 4 years full-time

2. Chemical Engineering (International Study)
   - MEng 4 years full-time

3. Chemical Engineering with Industrial Study
   - BEng 4 years full-time
   - MEng 5 years full-time

4. Chemical Engineering with International and Industrial Study
   - MEng 5 years full-time

5. Chemical Engineering Foundation Year
   - 1 year full-time

Entry requirements

- A-levels: AAA*/AAAA for MEng and BEng courses to include maths and chemistry. A-level Physics is advantageous but not required. AS Physics required if mechanics module is not taken with
maths A-level. You must also pass the practical element of any reformed science A-levels which include biology, chemistry and physics taught from 2015

- general studies, critical thinking and ‘use of maths’ A-levels are not accepted
- International Baccalaureate (IB): >32 points with 7,6,6 at Higher Level to include maths and chemistry at higher Level grade 6
- other alternatives such as Scottish Highers, Cambridge Pre-U and the European Baccalaureate are considered. Please see the website for further details
- Foundation Year course is provided by the School for those candidates who do not possess relevant qualifications for 1st year entry, if sufficient grades are achieved. Entry requirements are BBB (does not include maths and chemistry in combination) at A-level, with grade A at GCSE maths and double science or 30 points overall with HL 5,5,5 in the IB
- in courses listed as numbers 2 and 4 above, a language option is available in French, German, Spanish, Japanese or Russian (other languages may also be offered)
- please visit the department’s website for more information on selection of course codes and entry criteria: [www.birmingham.ac.uk/schools/chemical-engineering/index.aspx](http://www.birmingham.ac.uk/schools/chemical-engineering/index.aspx)

**Admissions tutor:** Dr Anita Ghag

**Email:** ug-admis-chem-eng@bham.ac.uk

**Website:** [www.birmingham.ac.uk/schools/chemical-engineering](http://www.birmingham.ac.uk/schools/chemical-engineering)
University of Bradford

The Bradford Faculty of Engineering & Informatics is research and industry led, offering accredited undergraduate, postgraduate and research degrees.

The University of Bradford proudly boasts a Chemical Engineering department that has over the years become recognised in the UK for its innovative engineering research, multidisciplinary approach to teaching, strong industry links and excellent graduate employability. At Bradford, we keep our programmes relevant to the ongoing needs being met by industry and society whilst also teaching traditional disciplines of chemical engineering; oil, gas and petrochemical production. The courses also build on areas of advanced materials engineering, food & pharmaceutical engineering, desalination, polymer engineering and powder technology; all based on the excellent research taking place at the University.

Your studies at Bradford will be a foundation for life aimed at developing a deep understanding of fundamental and advanced technical principles, analytical tools, and competence in their application together with a wide range of management, personal and professional skills.

Programmes

1. Chemical Engineering
   - BEng(Hons) 3 years full-time
   - BEng(Hons) 4 years full-time with Industrial Placement
   - MEng 4 years full-time
   - MEng 5 years full-time with Industrial Placement

2. Engineering Foundation Year- leading to Chemical Engineering
   - BEng(Hons) 1 + 3 years full-time

Entry requirements

- typical offer (UCAS tariff points): 112
- to include A-level maths and chemistry
- GCSE English and maths minimum grade C. Minimum IELTS at 6.0 or the equivalent
- for Engineering Foundation Year entry students require 72 UCAS tariff points, GCSE maths grade B/grade 6 & GCSE English grade D/grade 3 or equivalent.

Enquiries: enquiries@bradford.ac.uk
Email: r.patel@bradford.ac.uk
Website: www.brad.ac.uk/ei/engineering
By studying a Chemical Engineering degree, you’ll use a combination of science, mathematics and engineering to develop new technologies, processes and products.

Making the most of our resources is of the utmost importance for environmental and societal health, and the popularity of recyclable and sustainable products are on the rise. You’ll be part of this movement by learning to recover valuable materials and energy from waste products to improve the quality of life.

With over 20 years of experience in industry, our academic staff are passionate in developing your chemical engineering skills and will teach you using their own real-world examples. Their experience in industrial research focuses on energy, water, and biomaterial processing to give you the most up-to-date engineering knowledge.

Our Chemical Engineering courses are designed to give you the knowledge and transferable skills to pursue a challenging and successful future career. Innovative features of the programme include multidisciplinary study and team-based learning together with phased assessments to largely avoid end of year exams.

Programmes

Chemical Engineering
- BEng 3 years full-time
- BEng 4 years full-time with placement
- MEng 4 years full-time
- MEng 5 years full-time with placement

Entry requirements

BEng
- BBB (A-level)
- D*DD (BTEC)
- 30 (International Baccalaureate)

MEng
- ABB (A-level)
- D*DD (BTEC)
- 31 (International Baccalaureate)

Email: enquiries@brunel.ac.uk
Website: www.brunel.ac.uk/chemical-engineering
The Cambridge Chemical Engineering course is designed to produce graduates that meet the needs of modern industry, both in terms of technical competence and in terms of personal and transferable skills. It is supported by a consortium of 10 industrial companies who play an important role in course design and assist with some aspects of the teaching.

In the first year of the course students choose to study either General Science or General Engineering. Students then specialise in Chemical Engineering for years 2, 3 and 4. The main Design Project takes place at the end of year 3. The 4th year includes a Research Project together with many optional topics.

Programmes

Chemical Engineering
- BA 3 years full-time
- MEng 4 years full-time

Entry requirements

- the normal offer is A*A*A at A-level (or equivalent qualification), though other offers are made depending on the individual circumstances of the applicant
- maths and chemistry at A-level are essential for chemical engineering regardless of first year course chosen. Physics at A-level is also essential for chemical engineering applicants via the engineering route
- admission is via application to one of the Cambridge Colleges, or via an open application. The University Prospectus may be viewed online at www.undergraduate.study.cam.ac.uk
- the Admissions Officer of the Department will gladly answer enquiries. Open days for prospective applicants are organised by the departments and also by each college – details can be found in the prospectus or on the Department website: www.ceb.cam.ac.uk

Admissions tutor: Dr Patrick Barrie
Email: admissions@ceb.cam.ac.uk
Website: www.ceb.cam.ac.uk
Canterbury Christ Church University

Our Chemical Engineering degree will enable you to take benchtop experimental procedures and processes into larger, commercial scale operations. This innovative course has been designed in collaboration with industry and you’ll have the excellent opportunity to solve work related problems typically sourced from a range of employers.

We offer a truly immersive learning opportunity and are one of only a handful of universities in the UK to offer the pioneering CDIO (Conceive, Design, Implement and Operate) international engineering education model developed by MIT that allows you to learn in a practical, hands-on way to tackle real industrial problems.

Programmes

Chemical Engineering
- BEng(Hons) 3 years full-time/6 years part-time
- MEng(Hons) 4 years full-time/8 years part-time

Note: BEng Chemical Engineering with Foundation Year is available for those who do not meet the entry requirements.

Entry requirements

- BEng: CCD-BBC (88-112 UCAS points) / MEng: BBC-BBB (112-120 UCAS points)
- including A-level or equivalent in maths or physics or applied science
- plus 5 GCSEs grade C/4 or above (including maths, English, science) or level 3 chemistry or applied science

Email: admissions@canterbury.ac.uk
Website: www.canterbury.ac.uk
University of Chester

The Department of Chemical Engineering is located on Thornton Science Park, a centre for state-of-the-art teaching and research offering a unique blend of industry and academia. Previously home to a Shell UK research centre, the site’s takeover by the University allows academic and industrial researchers to continue the tradition of world-class innovation and research on a site at the heart of the North West chemical industries.

Students benefit from outstanding laboratories furbished with modern equipment, as well as our close links with a wide range of industrial and commercial partners, both on-site and nearby. Our goal is to provide our students with professional skills and a unique educational experience on a site where cutting-edge industrial research is taking place. We offer a friendly and supportive atmosphere to help students develop the potential to become leaders in their areas. All students have the opportunity to complete work placements during their degree.

Engineering library facilities are excellent, both on the Thornton engineering site and on the Chester Campus, where engineering students have their accommodation and recreational facilities. Transport to and from the Thornton site is provided free-of-charge by the University.

The University of Chester has a 175-year history of innovation and creativity in teaching, learning and research and we are committed to achieving excellence and employability for students registered on our undergraduate and postgraduate programmes.

Programmes

Chemical Engineering
- BEng(Hons) 3 years full-time
- MEng(Hons) 4 years full-time

Entry requirements
- BEng/MEng: 112/120 UCAS tariff points from A-level or equivalent
- A2 level (minimum grade C/B for BEng/MEng) chemistry and maths or equivalent
- other: Access to HE Diploma (maths at Level 3), International Baccalaureate (28 points incl 5 in maths).

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<tr>
<th>Admissions tutor:</th>
<th>Dr Steve Wilkinson</th>
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<tr>
<td>Email:</td>
<td><a href="mailto:s.j.wilkinson@chester.ac.uk">s.j.wilkinson@chester.ac.uk</a></td>
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<tr>
<td>Website:</td>
<td><a href="http://www.chester.ac.uk/undergraduate/chemical-engineering">www.chester.ac.uk/undergraduate/chemical-engineering</a></td>
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Cork Institute of Technology (CIT)

Our graduates hold engineering and management positions in major Irish based and international companies and many have progressed to senior positions in these organisations.

The degree course at CIT qualifies the graduate for many different career opportunities. These include process and equipment design for a wide range of industries. They also include management of the safe, environmentally acceptable, and efficient operation of production facilities for these industries.

Programmes

Chemical and Biopharmaceutical Engineering
- BEng(Hons) 4 years full-time

Entry requirements

- the official entry standards are a minimum of a Grade C3 in two higher-level subjects in the Irish Leaving Certificate Examination, one of which must be maths, and a minimum of a Grade D3 in four other subjects. One of these six subjects must be either Irish or English
- selection of students is by applying a points system to the results obtained by the student in six subjects in the Leaving Certificate Examination. In 2010 for example, our intake had an average of 440 points of a possible maximum of 600
- a modified points system can be applied to A-level results or Scottish Highers, with the proviso that maths and a science subject must be included with Grade C or above.

Admissions tutor: Dr Michael J. O’Mahony
Email: michael.jomahony@cit.ie
Email for prospectus: elaine.burke@cit.ie
Website: www.cit.ie
University College Cork (UCC)

University College Cork offers a five-year integrated Master of Engineering (ME) in Process and Chemical Engineering as well as an option of a four-year Bachelor of Engineering (BE) in Process and Chemical Engineering. Students enter a common engineering programme (CK600), before they can follow the Process & Chemical Engineering programme from year two. They then choose which pathway they wish to take (BE or ME) after third year, subject to meeting academic requirements.

The programmes provide graduates with an opportunity to develop a full set of skills required to help address the 21st Century challenges that confront both chemical engineering and society at large as indicated by IChemE’s ‘Chemical Engineering Matters’ policy roadmap for the profession. The programme was awarded the 2016 IChemE Sustainability Teaching Award in recognition of a programme ethos which promotes a sustainability-informed perspective as the context which contemporary chemical engineering is practiced.

As well as covering the core competencies of chemical engineering, and specialist elective modules in ‘pharmaceutical & biopharmaceutical’ and ‘energy & environmental’ areas, the programmes include modules on key topics such as professional ethics, sustainability, risk and safety, technical communication skills, innovation and creativity, food and bioprocessing and supply chain management. In addition, the ME offers a number of master’s level modules offering additional advanced and horizon content, as well as an extended eight-month industrial placement during year four.

Programmes

Process and Chemical Engineering
- BE(Hon) 4 year full-time
- ME 5 years full-time

Entry requirements

- the selection of students entering via the Irish Leaving Certificate route is administered by the Republic of Ireland’s Central Applications Office (CAO). Students are awarded points based on results obtained in six subjects in the Leaving Certificate Examination (see www.cao.ie)
- the minimum CAO entry standards require that at least six subjects are present, to include minimum grade H4 in one subject, minimum grade H5 in one subject and minimum grade O6/H7 in four other subjects. English and Irish are requirements for all programmes unless applicant is exempt from Irish. The following are considered lab science subjects: biology, chemistry, physics, physics with chemistry (joint) and agricultural science. Technology can be substituted for a lab science subject
- applicants will need to meet the following minimum entry requirements: English O6/H7; Irish O6/H7; maths H4*; lab science or technology O6/H7 (*if the H4 is in applied maths, a H6 in maths is also required)
- a modified points system can be applied to A-level results, with the proviso that maths and a science subject must be included with Grade C or above.

Admissions tutor: Professor Edmond Byrne
Email: processeng@ucc.ie
Website: www.ucc.ie/processeng
University College Dublin (UCD)

For more than 60 years, UCD has led the way in the design and delivery of innovative, internationally recognised programmes in chemical and bioprocess engineering. Our graduates are amongst the best-paid engineering professionals, sought after for employment in sectors from chemical to (bio)pharmaceutical and from energy to consultancy and design. UCD offers taught and research master’s and PhD opportunities, and our graduates also enter master’s and PhD programmes in leading international universities.

In addition to IChemE masters-accredited BE in Chemical & Bioprocess Engineering, UCD has recently introduced the first 5-year integrated master’s (ME) programme in Chemical & Bioprocess Engineering in Ireland, which includes 6 to 9 months of Professional Work Experience (PWE), extendable to 12 months. In addition, for those wishing to gain a greater specialisation in biochemical engineering, we are also offering a pathway for obtaining a minor in biochemical engineering. These developments have been designed to reflect the emerging skills needs of chemical and bioprocess engineers in global industries, including chemicals, pharmaceuticals, biotechnology, food, energy, advanced materials and ICT.

Our programmes will prepare graduates for careers in a wide range of industries, while also offering the opportunity to work alongside leading researchers in world-class laboratories. The School works closely with its industrial advisors and adjunct staff to ensure that our programmes meet the highest international standards in the teaching and training of Chemical & Bioprocess Engineers, including professional accreditation.

Programmes

1. Chemical and Bioprocess Engineering
   - 4 year BE programme
   - 5 year integrated ME programme (graduating with both BE and ME degrees)

2. Chemical Engineering with Biochemical Engineering Minor
   - 4 year BE programme
   - 5 year integrated ME programme (graduating with both a BE in Chemical Engineering with Biochemical Engineering Minor and ME in Chemical and Bioprocess Engineering)

Entry requirements

For comprehensive details of entry requirements, please go to www.myucd.ie and select ‘Applying to UCD’ from the main banner (top). The displayed page provides links to details of entry requirements for both national and international students for all courses in University College Dublin. Engineering has a common entry route into 1st Year (Stage 1) with CAO Course Code DN150.

Admissions tutor: Damian A Mooney
Email: damian.mooney@ucd.ie
Email for prospectus: chemical.eng@ucd.ie
Website: www.ucd.ie/chembioeng
Chemical engineering at Edinburgh is a medium sized department, well rated for its research and teaching. Teaching staff are active in a broad range of research areas and have extensive industrial links, directly benefiting undergraduate teaching. Students have the opportunity to either spend 6 months in industry or to work in a research group in the university as part of the MEng programme. Facilities include extensive computing resources and recently refurbished undergraduate laboratories. Visits to industry, visits from industrial engineers and industry sponsored design projects help to maintain our close links with potential employers.

Programmes

Chemical Engineering
- BEng(Hons) 4 years full-time
- MEng 5 years full-time

Entry requirements

All courses may be entered at the first or second year depending on the qualifications presented by the applicant.

For full details on Edinburgh’s entry requirements please visit: www.ed.ac.uk/studying/undergraduate/degrees/index.php?action=programme&code=H804

BTEC, European Baccalaureate, access courses and other qualifications are all welcome: enquire for details.

Please note that it is a University requirement that all entrants meet a minimum standard of written and spoken English. This requirement may be met by a pass in English at Standard Grade, GCSE or equivalent or achieving the University’s minimum requirements for English Language tests such as, for example, IELTS.

Email: ugenquiries@eng.ed.ac.uk
Website: www.eng.ed.ac.uk
As the pressing needs of the world gradually shift toward the sustainable supply of energy and raw materials, preservation of natural resources and the environment, and targeted delivery of services and products, new opportunities arise for chemical engineers.

These degree courses offer students a range of industrial chemical manufacturing and processing technologies with the inclusion of industrial planning, powder handling and storage, safety and social impact considerations. Process safety, risk and safety tools will be a theme that infuses the whole degree from start to finish. This course has been designed in collaboration with the IChemE and accreditation from this professional body will be sought at the earliest opportunity.

Academic and industry experts will cover a wide range of subject areas relevant to cutting-edge research, new technologies, and emerging growth areas in chemical engineering. Subject areas covered include: engineering science and fundamentals, separation, particle technology, batteries and reaction engineering, management, sustainability and process design, pharmaceutical discovery and development, food and beverage and biotechnology.

Programmes

1. Chemical Engineering
   - BEng(Hons) 3 years full-time
   - BEng(Hons) 4 years sandwich programme
   - BEng(Hons) 6 years part time
   - MEng 4 years full-time
   - MEng 5 years sandwich programme
   - MEng 8 years part time

2. Chemical Engineering (Extended)*
   - BEng(Hons) 4 years full-time
   - BEng(Hons) 5 years sandwich programme
   - BEng(Hons) 8 years part time

* The BEng(Hons) Extended programme is identical to the BEng(Hons) programme but also includes a foundation year.

Entry requirements

- **MEng**: 136 UCAS Points. 32 points should come from maths, a physical science or a numerate subject at A2 level
- **BEng(Hons)**: 120 UCAS points. 32 points should come from maths, a physical science or a numerate subject at A2 level
- **Extended BEng(Hons)**: 64 UCAS points. The points should come from maths, a physical science or a numerate subject at A2 level.

Alternative qualifications are also considered, including National Diploma. National Diploma applicants that have also successfully completed the additional, core maths modules and the extended project (Technical Baccalaureate) are specifically encouraged to apply.
Applications from mature students also welcomed.

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<th>Dr D I Armour- Chélu</th>
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<td><strong>Email:</strong></td>
<td>UK: <a href="mailto:courseinfo@gre.ac.uk">courseinfo@gre.ac.uk</a></td>
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<td>EU/International: <a href="mailto:international@gre.ac.uk">international@gre.ac.uk</a></td>
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<td><strong>Website:</strong></td>
<td><a href="http://www.gre.ac.uk/engsci">www.gre.ac.uk/engsci</a></td>
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The Department of Chemical Engineering is a unique environment, offering a range of educational programmes, research services and opportunities right across the spectrum of chemical engineering. The Department offers a lively learning environment for both undergraduate and postgraduate study; we operate in some of the finest purpose-built modern engineering premises, in one of the most vibrant and attractive cities in the UK.

Programmes

1. Chemical Engineering/with Diploma in Industrial Training (DIT)
   - BEng(Hons) 4 years full-time
   - BEng(Hons) 5 years with DIT

2. Chemical Engineering with Energy Engineering/with DIT
   - MEng 5 years full-time
   - MEng 6 years with DIT

4. Chemical Engineering with Oil and Gas Technology/with DIT
   - MEng 5 years full-time
   - MEng 6 years with DIT

Entry requirements

- First Year Entry minimum requirements: SQA Highers – AAAB, A-levels – BBC
- Second Year Entry minimum requirements: SQA Advanced Highers – AAB, A-levels – AAB

In all cases, the qualifications should include maths and chemistry.

Other qualifications considered include HNC/HND, BTEC Extended Diploma, and the International and Scottish Baccalaureate. Applicants may be considered with a range of alternative qualifications. Please contact the Admissions Tutor to discuss.

Admissions tutor: Dr Julian A. S. Goodwin
Email: chemeng@eps.hw.ac.uk
Email for prospectus: EPSSSO@hw.ac.uk
Website: www.hw.ac.uk/undergraduate/discipline/chemical-engineering
University of Huddersfield

Here at Huddersfield we have a long tradition of teaching and research in the chemical sciences and chemical engineering, dating back as far as the 1840s when the School was a centre for colour Chemistry, supporting the textile and dyeing industries in the area. The modern Department of Chemical Sciences has a vibrant teaching and research environment in the areas of chemical engineering, Chemistry, biotechnology and pharmaceutics.

We offer a range of chemical engineering degrees, including Chemical Engineering BEng(Hons) and Chemical Engineering MEng(Hons). These are complemented by our Chemistry degrees that have chemical engineering specialisms, including Chemistry with Chemical Engineering BSc(Hons) and Chemical Engineering and Chemistry BSc(Hons). All of our chemical engineering degree courses have a strong emphasis on Chemistry, bridging the gap between these two important disciplines, and on practical skills. Our teaching staff are educated to doctoral level in their respective subject areas and are research active. You’ll be taught in cutting-edge labs for you to gain hands-on experience using modern and high-tech equipment as used in industry and research.

Our courses also offer an optional placement year in industry. This allows you to see your subject in action in the real world and to gain valuable experience, which can help to enhance your employability after graduation. We aim to provide you with the key knowledge and transferable skills required to enable you to play a vital role in a range of industries where the areas of Chemistry and chemical engineering meet.

Programmes

1. Chemical Engineering
   - BEng(Hons): 3 years full-time/4 years inc. placement year
   - MEng: 4 years full-time/5 years inc. placement year

2. Chemical Engineering and Chemistry
   - BSc(Hons): 3 years full-time/4 years inc. placement year

3. Chemistry with Chemical Engineering
   - BSc(Hons): 3 years full-time/4 years inc. placement year

Entry requirements

BEng (Hons):
- A-levels: BBB including chemistry and maths
- UCAS points: 120 including a B in maths and B in chemistry or physics.

MEng:
- A-levels: AAB including at least a B in maths and B in chemistry or physics
- UCAS points: 136 including at least a B in maths and B in chemistry or physics.

BSc(Hons):
- A-levels: BBB with a minimum grade C in chemistry and maths
- UCAS points: 120 with a minimum grade C in chemistry and maths
- BTEC: DDM in applied science. Alternatively, a BTEC health and social care/medicinal science is acceptable but must be accompanied by an A Level in chemistry.

**All courses:**

We consider all applications individually. If you do not have the appropriate qualifications for direct entry to these degrees you can apply to our Science Extended Degree. Successful completion of this Year 0 course guarantees progression onto these courses and other degrees at the University of Huddersfield. Specific performance requirements for progression may be required.

<table>
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<tr>
<th>Admissions tutor:</th>
<th>Dr David Cooke</th>
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<tbody>
<tr>
<td>Email:</td>
<td><a href="mailto:Chemistry@hud.ac.uk">Chemistry@hud.ac.uk</a></td>
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<tr>
<td>Website:</td>
<td><a href="http://www.hud.ac.uk/courses/undergraduate">www.hud.ac.uk/courses/undergraduate</a></td>
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<tr>
<td>Open day info:</td>
<td><a href="http://www.hud.ac.uk/open-days">www.hud.ac.uk/open-days</a></td>
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University of Hull

The University of Hull is the region’s premier provider of full-time and part-time degree courses in engineering. Our campus is ideally situated in the heart of the Humber region’s thriving ‘Energy Estuary’, you benefit from studying close to more than 350 engineering and process giants – including Phillips66, Total, Novartis, BP Chemicals, Croda, Cristal, Smith & Nephew and RB (formerly Reckitt Benckiser).

In addition to support from the local chemical and process industry, we work closely with the industry- supported Centre for Assessment of Technical Competency (CATCH) enabling students to gain access to some of the best pilot and plant scale training facilities in the UK.

Employment prospects for our graduates continue to be particularly good. Hull has an excellent record for graduate employment, having held a high-ranking place among the higher education institutions for graduate employability in most years since comparative records were first published.

Programmes

1. Chemical Engineering
   - BEng(Hons) 3 years full-time
   - MEng(Hons) 4 years full-time
   - BEng(Hons) 4 years with a year in industry
   - MEng(Hons) 5 years with a year in industry
   - BEng(Hons) 4 years with a year abroad
   - MEng(Hons) 5 years with a year abroad

2. Chemical Engineering and Energy Engineering
   - MEng(Hons) 4 years full-time

3. Chemical Engineering with Foundation Year
   - BEng(Hons) 4 years full-time with Foundation Year

Entry requirements

- BEng: 112 UCAS points, MEng: 120 UCAS points. Points can be from any qualification on the UCAS tariff but must include at least 80 points from two A-levels, or a combination of appropriate Level 3 qualifications. Qualifications should include maths and chemistry, and preferably physics
- IB Diploma: BEng - 28 points including 5 in HL maths and chemistry
- BTEC L3 Extended Diploma: DMM in Engineering including merit in optional and core maths units
- Access to HE Diploma: Suitable for BEng route only with transfer to MEng subject to satisfactory progress. Entrance to BEng pathway: Pass Science or Engineering based Diploma with minimum of 45 credits at merit or higher, including 18 credits at merit in maths
- the foundation year is designed for applicants whose qualifications and experience do not allow direct entry to the undergraduate degree
- we expect applicants to demonstrate an experience of, or interest in, a related subject and an aptitude for academic work which may be determined by an essay and/or interview alongside the application
- for applicants with A-levels in subjects other than those key to the degree, we will usually require a minimum of 80 points from Level 3 qualifications.
We welcome applicants with a range of qualifications from the UK and worldwide which may not exactly match the combinations shown above. Please contact the University’s Admissions Service for individual guidance.

<table>
<thead>
<tr>
<th>Admissions tutor:</th>
<th>Dr Dipesh Patel</th>
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<tbody>
<tr>
<td>Email:</td>
<td><a href="mailto:engineering.admissions@hull.ac.uk">engineering.admissions@hull.ac.uk</a></td>
</tr>
<tr>
<td>Website:</td>
<td><a href="http://www.hull.ac.uk/chemicalengineering">www.hull.ac.uk/chemicalengineering</a></td>
</tr>
<tr>
<td>Prospectus:</td>
<td>www2.hull.ac.uk/pgmi2/ug/courses/2017/chemical-engineering</td>
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Imperial College, London

The Department of Chemical Engineering at Imperial College is one of the oldest chemical engineering departments in the country and, in 2010, it celebrated the 70th anniversary of the graduation of its first chemical engineering students.

Today we offer an integrated four year programme leading to the award of a MEng degree in Chemical Engineering. One stream of this course involves spending one year abroad, studying in a university in Australia, France, Germany, the Netherlands, Spain, Sweden, Switzerland, Singapore or the United States; another stream explores further nuclear engineering challenges.

In 2012, we inaugurated our state-of-the-art Carbon Capture Pilot plant giving undergraduates the chance to learn first-hand about carbon capture technology, which could be used in the future to reduce the UK’s greenhouse emission. We collaborate closely with other departments and with industry partners in the chemicals, energy (oil, gas and renewable), healthcare and processing industries. This ensures that all of our teaching and research is underpinned by the latest interdisciplinary thinking and real-world experience.

Programmes

1. Chemical Engineering
   - MEng 4 years full-time

2. Chemical Engineering with a year abroad (from the 3rd year)
   - MEng 4 years full-time

3. Chemical with Nuclear Engineering (from the 3rd year)
   - MEng 4 years full-time

Entry requirements

- a minimum of three A-levels are required in maths, chemistry and another relevant A-level subject including physics, biology, further maths or economics at grades A*A*A (to include maths and chemistry at A*). For the year abroad in Europe, an A grade at GSCE in the relevant language (German, French or Spanish) is also required.
- typical offers are A*A*A* for candidates offering 3 A-levels or A*A*AA for candidates offering 4 A-levels
- other accepted qualifications include Scottish Highers (with CSYS) and International, French and European baccalaureates, as well as several other international qualifications.

Admissions tutor: Dr Andreas Kogelbauer
Email: a.kogelbauer@imperial.ac.uk
Email for prospectus: ce-admissions@imperial.ac.uk
Website: www.imperial.ac.uk/chemicalengineering
Here in the Department of Engineering at Lancaster we focus on the quality of our students’ experience and high standard of teaching. Learning is led by academics who are experts in their field, and students studying here get to know them and the support staff personally. We believe this informal and collaborative atmosphere helps students both enjoy their time at Lancaster and achieve their full potential whilst here.

We’re one of only a handful of general engineering departments in the country. The first year is spent learning engineering principles and techniques from Mechanical and Electrical as well as Chemical Engineering. When students begin specialising in their chosen subject in the second year, they have already established the skills to interact and communicate with engineers in other major disciplines. Our approach gives our graduates the edge; employers require engineers who can apply their chosen subject as part of multidisciplinary teams and projects.

The employment figures of our graduates are some of the best in the country, which is evidence that this combination of close contact with staff and an initial broad engineering foundation is a highly effective formula for producing the Professional Chemical Engineers of the Future.

Our Chemical Engineering programmes are accredited towards Chartered Engineer (CEng) status by the Institution of Chemical Engineers (IChemE). There are options for taking a study abroad year, or an industrial placement year.

Programmes

1. Chemical Engineering
   - BEng(Hons) 3 years full-time
   - MEng(Hons) 4 years full-time

Entry requirements

GCSE:
- minimum of 5 GCSEs at grade B or 5 to include maths at grade B or 6, and GCSE English Language at grade C or 4.

A-levels:
- BEng: AAB including maths and chemistry/MEng: AAA including maths and chemistry.

International Baccalaureate:
- BEng: 35pts overall with 16pts from best 3 HL subjects to include maths and chemistry at HL
- MEng: 36pts points overall with 16pts from best 3 HL subjects to include maths and chemistry at HL
- IELTS level required is 6.5. Can be shown by GCSE grade C in English or 6 in Bacc SL English.

Admissions tutor: Dr Stephen Quayle
Email: s.quayle@lancaster.ac.uk
Email for prospectus: engineering@lancaster.ac.uk
Website: www.lancaster.ac.uk/engineering
University of Leeds

The University of Leeds has an international reputation for the high quality of its teaching and research and continues to attract the highest number of student applications in the UK. Leeds is also one of the fastest growing cities in the UK and has a dynamic atmosphere to match.

Programmes

1. Chemical Engineering
   - BEng(Hons) 3 years full-time
   - MEng 4 years full-time

2. Chemical and Energy Engineering
   - BEng(Hons) 3 years full-time
   - MEng 4 years full-time

3. Chemical and Materials Engineering
   - BEng(Hons) 3 years full-time
   - MEng 4 years full-time

4. Chemical and Nuclear Engineering
   - BEng(Hons) 3 years full-time
   - MEng 4 years full-time

Entry requirements

▪ three A-levels or equivalent, including maths and either physics or chemistry. The third A-level may be taken in any subject excluding general studies or critical thinking. Note that a European language to at least AS-level is advised for anyone contemplating the optional year in Europe
▪ usual grades required: A-level grades A*AA for MEng/BEng entry
▪ other qualifications considered include BTEC, ACCESS, GNVQ (Adv), European and International Baccalaureate, Scottish, Irish and overseas qualifications etc
▪ mature candidates are encouraged to apply.

Study abroad

▪ MEng students can take the third year of the course at an overseas Institution. At present, there are arrangements with a number of universities across Europe, North America and Asia.

Industry Year

▪ at the end of the second year or third year, students may opt for a year in industry to take up an industrial training placement.

Admissions tutor: Dr Darron Dixon-Hardy

Email: ugchemical@leeds.ac.uk

Website: www.engineering.leeds.ac.uk/chemical
This Chemical and Biochemical Engineering course provides an interesting, intellectually challenging, and educationally thorough degree programme that leads to a professionally recognised qualification and good employment prospects in any of a variety of stable, sustainable, well-paid careers. In introducing this new programme (in 2011), University of Limerick sought to build on over 25 years of teaching and research experience in chemical and biochemical process engineering.

Details of the programme can be found at: www.ul.ie/courses/ChemicalAndBiochemicalEngineering.php

The course is linked to research activity within the Synthesis and Solid State Pharmaceutical Cluster, the Dairy Processing Technology Centre, Biorefining and Bioenergy Technology Centre and the Bernal Institute within the University of Limerick involving the majority of the top ten Pharmaceutical Companies.

Programmes

Chemical & Biochemical Engineering
- BEng(Hons) 4 years full-time (includes a 9-month industrial placement during the spring and summer semesters of the third year)

Entry requirements

Leaving Certificate (or an approved equivalent) with a minimum of six subjects, and at least:
- two H5 (Higher Level) grades and Four O6 (Ordinary Level) grades, or
- four H7 (Higher Level) grades.

Subjects must include maths, Irish or another language, and English. In addition, applicants must hold:
- a minimum grade H4 in maths, and
- a minimum O6/H7 in one of the following: physics, chemistry, physics with chemistry, engineering, technology, design & communication graphics/technical drawing, biology, agricultural science, applied maths, construction studies.

Applications are welcome from transferees with NFQ (National Framework of Qualifications) Level 7 awards. Suitably qualified students may be offered exemptions from Year 1 and/or Year 2.

A special maths examination will be offered at UL following the Leaving Certificate results for those students who did not achieve the maths requirement.

Email: ces@ul.ie
Website: www.ul.ie/~ces
University College London (UCL)
Biochemical Engineering

As the first UK department to offer a dedicated Biochemical Engineering degree, UCL has pioneered research-led teaching in this increasingly important area. The course addresses chemical engineering fundamentals and shows how they can be applied to tackle global problems of health and sustainability. This leads to careers in the established chemical and pharmaceutical sectors, or emerging areas such as synthetic Biology or regenerative medicine. In recognition of our teaching excellence we have been awarded the Queen’s Anniversary Prize for our innovative approach to engineering education. In the latest UK Research Assessment Exercise 75% of academic staff were rated as ‘world leading’ or ‘internationally excellent’. The department hosts a state-of-the-art pilot plant facility, enabling undergraduates to gain practical process engineering experience.

Through UCL’s Integrated Engineering Programme (IEP), we put an emphasis on small group learning and immersive scenario-based activities. Interdisciplinary collaboration is at the heart of IEP, and UCL offers a diverse range of elective engineering Minor modules to allow students to tailor their degree towards their interests in areas such energy, policy or programming. Exposure to industry begins at undergraduate level, offering opportunities for networking and internships. Projects are designed to apply core material to real life challenges such as manufacture of biopharmaceuticals, production of biofuels or the design of process equipment. Situated in the heart of London, our students gain a global perspective as well as the technical and professional skills sought after by one of the fastest growing industries.

The MEng programme offers maximum flexibility for students to develop their independence by conducting a research project either within the department, during study abroad, or through a year in industry. Alternatively, MEng students can choose to specialise in management, or combine Biochemical with Chemical Engineering for the final year.

Programmes

Biochemical Engineering
- BEng(Hons) 3 years full-time
- MEng(Hons) 4 years full-time

Entry requirements

- A-levels A*A-A-AA. Maths required plus one from biology, chemistry and physics. For UK-based students, a pass in a further subject at AS level or equivalent is required
- IB Diploma: 38-39 points overall. A total of 18-19 points in three higher level subjects including maths, plus one from biology, chemistry or physics, with no score below 5
- equivalent international entry qualifications also welcomed.

Admissions tutor: Dr Brenda Parker
Email: biochemeng@ucl.ac.uk
Website: www.ucl.ac.uk/biochemeng
University College London (UCL)

Chemical Engineering

Situated in the heart of London on the main campus of UCL, consistently ranked in the top three multi-faculty UK universities, the departments of Chemical and Biochemical Engineering are top research and teaching departments in the UK, achieving world class standing.

For students, the Departments offer a range of first degree and postgraduate courses in chemical engineering and biochemical engineering. In the last two years, all our courses have been re-accredited with distinction by the Institution of Chemical Engineers and have received a high grading in the Teaching Quality Assessment exercise carried out by the Higher Education Funding Council for England (HEFCE).

Programmes

1. Chemical Engineering
   - BEng(Hons) 3 years full-time
   - BEng(Hons) 4 years sandwich
   - MEng 4 years full-time
   - MEng 5 years sandwich

2. Chemical Engineering with study abroad
   - MEng 4 years full-time
   - MEng 5 years sandwich

3. Chemical with Biochemical Engineering
   - MEng 4 years full-time
   - MEng 5 years sandwich

Entry requirements

- A-level grades AAA to include maths and chemistry
- IB Diploma: overall points 38 with a total of 18 points in three higher level subjects to include maths and chemistry, with no score lower than 5.

Admissions tutor: Dr Federico Galvanin
Email: f.galvanin@ucl.ac.uk
Website: www.ucl.ac.uk/chemeng
Prospectus: www.ucl.ac.uk/prospective-students/undergraduate/subject-areas/chemical-engineering
London South Bank University

London South Bank University has invested in new equipment provisions so that you will be exposed to industry-standard workshops and laboratories. You’ll learn through both group and individual projects providing you with knowledge and skills to meet the demands of the industry. Our BEng course in Chemical and Process Engineering, as well as our HND course in Chemical Engineering, are accredited by the Institution of Chemical Engineers (IChemE).

Programmes

1. Chemical and Process Engineering
   - BEng(Hons) 3 years full-time
   - BEng(Hons) 4 years sandwich
   - MEng (Hons) 4 years full-time
   - HND 2 years full time*

2. Petroleum Engineering
   - BEng(Hons) 3 years full-time
   - BEng (Hons) 4 years sandwich
   - MEng (Hons) 4 years full-time

*If successfully completed students could transfer to the second year of BEng courses

Entry requirements

BEng degree:
- 120-128 UCAS points
- A Level (BBB) to include at least two from maths, chemistry, physics and biology, or
- BTEC National Diploma DDM, or
- Access to HE qualifications with 24 Distinctions 21 Merits, or
- equivalent level 3 qualifications worth 128 UCAS points.

MEng degree:
- A Level AAB, or
- BTEC National Diploma DDD, or
- Access to HE qualifications with 39 Distinctions 6 Merits, or
- equivalent level 3 qualifications worth 144 UCAS points
- level 3 qualifications must include maths and science (chemistry preferred).

BTEC HND:
- 72-80 UCAS points
- A Level (DDD) to include at least one from chemistry, maths, physics or biology, or
- BTEC National Diploma MMP, or
- Access to HE qualifications with 24 Merits 21 Passes, or
- equivalent level 3 qualifications worth 80 UCAS points
- level 3 qualifications must include maths or science.
Applicants must hold 5 GCSEs A-C including maths and English or equivalent (reformed GCSEs grade 4 or above).

We welcome qualifications from around the world. English language qualifications for international students: IELTS score of 6.0 or Cambridge Proficiency or Advanced Grade C.

**Admissions tutor:** Anna Axelsson  
**Email:** a.k.axelsson@lsbu.ac.uk  
**Website:** www.lsbu.ac.uk/appliedsciences
The Department of Chemical Engineering at Loughborough University has become a key provider of chemical engineering education in the UK. We were one of the first departments to offer the option of a year in industry to our students and have continued this tradition for almost 70 years. Our teaching approach provides students with an excellent grasp of both the fundamental and practical aspects of the subject and aims primarily to prepare graduates for their careers in the process industries. We offer BEng and MEng programmes both with and without the option of a period in industry. MEng students also have an opportunity to study abroad at an overseas university for one semester.

We offer an exciting challenge to our undergraduate students and a promise to support their studies to the full. Loughborough has much to offer students, both academically and socially through its leisure and renowned sports facilities.

Programmes

Chemical Engineering
- BEng(Hons) 3 years full-time
- BEng(Hons) 4 years sandwich (DIS)*
- MEng(Hons) 4 years full-time
- MEng(Hons) 5 years sandwich (DIS)*

*DIS = Diploma in Industrial Studies (awarded for successful completion of ‘sandwich’ year)

Entry requirements

We recognise the increasingly wide variety of qualifications and subjects likely to be offered. Typical entry requirements are indicated below.

- for MEng and BEng: we require a minimum of 3 subjects at A-level including maths and at least one from chemistry or physics
- grades required: MEng A*AA, BEng AAB
- equivalent qualifications such as International or European Baccalaureate, Scottish Advanced Highers and CSYS, Irish Leaving Certificate and BTEC are also considered.

Admissions tutor: Dr Marijana Dragosavac
Email: chemical.ug@lboro.ac.uk
Website: www.lboro.ac.uk/departments/chemical
The University of Manchester

The discipline of chemical engineering was born at Manchester Technical School, one of The University of Manchester’s antecedent institutions, in 1887 when George E Davis delivered a series of lectures, which 14 years later were published as the first ever chemical engineering textbook. Today Chemical Engineering at Manchester has state of the art pilot-scale teaching and research facilities, housed in the modern James Chadwick Building and our undergraduates are taught by world-leading experts in key areas, such as sustainable chemical engineering, process integration, catalysis and biochemical engineering. Our fully integrated degree programmes offer a solid foundation in the fundamental principles of chemical engineering and offer flexibility that allows students to pursue areas of study that interest them. A highlight is our innovative Chemical Engineering with Industrial Experience programme, which incorporates a year-long industrial placement into a demanding 4-year MEng programme. Our excellent employability rate and the range of student awards and prizes available from companies such as BP, demonstrate that our chemical engineering graduates are highly regarded and sought after by industry.

Programmes

1. Chemical Engineering
   - BEng(Hons) 3 years full-time
   - MEng 4 years full-time

2. Chemical Engineering with Study in Europe
   - MEng 4 years full-time (third year in either France, Italy, Germany or Spain)

3. Chemical Engineering with Industrial Experience
   - MEng 4 years full-time (third year in industry)

4. Chemical Engineering with Energy and Environment
   - MEng 4 years full-time

Entry requirements

- A-level: A*A-AAB to include maths at grade A and either physics or chemistry. For Chemical Engineering with Study in Europe, an A-level in the language of choice is required (minimum grade B)
- IB: 37-35 points overall with 7,6,6, to 6,6,5 at Higher Level including maths at HL6 and either physics or chemistry
- European Baccalaureates, Irish Leaving Certificate and BTEC qualifications acceptable.

Admissions tutor: Dr Laurence Stamford

Email: laurence.stamford@manchester.ac.uk
Email for prospectus: ug-ceas@manchester.ac.uk

Website: www.ceas.manchester.ac.uk
Newcastle University

The School of Chemical Engineering & Advanced Materials is committed to providing a high-quality student learning experience. Our state-of-the-art laboratory facilities, which include our new £500,000 Millennium undergraduate teaching laboratory, our ExxonMobil Design Suite, and recently refurbished control, bioprocessing and pilot plant laboratories, allow our students to develop valuable practical skills at all stages of their programme. We also offer a unique opportunity for suitably qualified students to compete for a place on our IChemE-accredited Industry degree, with the chance to spend an assessed year in industry as part of a 4 year MEng Industry programme.

The University is dedicated to producing highly employable graduates. The NCL+ initiative focuses on helping students develop communication, organisational and planning skills, as well as offering work experience, volunteering experience and enterprise development. The University’s Robinson Library is the only one in the UK to be awarded the government’s Charter Mark five times in a row, in recognition of the high-quality learning environment available to our students. The Sports Centre offers first-class fitness facilities to all students on campus, and the Students’ Union building has reopened after undergoing an £8m refurbishment programme, with some outstanding new facilities in the heart of campus.

Newcastle was named the UK’s best university city for the third consecutive year in 2010 by the MSN travel website. Its nightlife certainly rivals that of much bigger cities.

Programmes

1. Chemical Engineering
   - BEng(Hons) 3 years full-time
   - MEng(Hons) 4 years full-time
   - MEng(Hons) 4 years via the industrial route
   - MEng(Hons) 4 years in Bioprocess Engineering
   - MEng(Hons) 4 years in Process Control
   - MEng(Hons) 4 years in Sustainable Engineering

2. Foundation year programme
   - BEng(Hons) 4 years full-time
   - MEng(Hons) 5 years full-time

Entry requirements

- usual grades required for BEng: AAA for entry into Stage 1 or Foundation Year
- usual grades required for MEng: AAA for entry into Stage 1 or Foundation Year
- A-Levels to include maths and chemistry (but excluding general studies and critical thinking). For biology, chemistry and physics A-Levels, we require a pass in the practical element. GCSE physics or dual award science (minimum grade B or 6) required if physics not offered at A-Level. A-Levels in any subject will be considered for the Foundation Year Programme, with GCSE maths and chemistry (minimum grade B) required if not offered at A or AS-Level
- BTEC Level 3 Extended Diploma and Irish Leaving Certificate will be considered for Foundation Year
- Scottish qualifications and the International Baccalaureate are also accepted, and applications are welcomed from mature students.
Admissions tutor: Dr Chris O’Malley
Email: ugceam@ncl.ac.uk
Website: www.ncl.ac.uk/ceam
The University of Nottingham is one of the most popular in the UK with a large 330-acre parkland campus and easy access to the vibrant city of Nottingham. The Department of Chemical and Environmental Engineering has a long history of collaboration with industry, and extensive links with global companies and organisations. Nottingham has pioneered a unique approach to teaching and learning to manage the transition between school and university, and produce engineers with the knowledge and skills that are in demand all over the world. The structure is flexible, so students can elect to switch between courses at the end of year 1 and between BEng and MEng streams at the end of year 2. All students have the opportunity to undertake an industrial placement, usually at the end of year 2 or year 3, and there are numerous options to study abroad as part of the course. Nottingham graduates are very highly regarded by employers and our former students can be found in a diverse range of roles and disciplines all over the world.

Programmes

1. Chemical Engineering
   - BEng(Hons) 3 years full-time
   - BEng(Hons) 4 years full-time including industrial placement
   - MEng 4 years full-time
   - MEng 5 years full-time including industrial placement

2. Chemical Engineering with Environmental Engineering
   - BEng(Hons) 3 years full-time
   - BEng(Hons) 4 years full-time including industrial placement
   - MEng 4 years full-time
   - MEng 5 years full-time including industrial placement

3. Environmental Engineering
   - BEng (Hons) 3 years full-time
   - BEng (Hons) 4 years full-time including industrial placement
   - MEng 4 years full-time
   - MEng 5 years full-time including industrial placement

Nottingham also offers a foundation year course for entrants without the traditional A-level subjects.

Entry requirements

- A-levels: AAA–A*AA to include maths and either chemistry or physics, plus third subject
- also considered are International or European baccalaureate, Irish Leaving Certificate, BTEC, Scottish Advanced Highers and equivalent qualifications
- the university welcomes applications from mature candidates

Admissions tutor: Mr John J. Turner
Email: john.turner@nottingham.ac.uk
Email for prospectus: eng-student-support@nottingham.ac.uk
Website: www.nottingham.ac.uk/chemenv
University of Oxford

The Department of Engineering Science is one of the largest unified engineering departments in the UK and one of the largest departments in the University. Its teaching and research cover the whole range of engineering disciplines for more than 650 undergraduates (over 20% of them women) and around 350 research students. There are over 100 established members of the academic staff and many others engaged in teaching, research and support.

Programmes

Engineering Science (Chemical Engineering)
- MEng 4 years full-time

Students must meet all the chemical engineering elective options and the chemical engineering design project to fully meet the requirements for accreditation.

Entry requirements

Undergraduate admission is the responsibility of the Colleges; the current edition of the University’s Undergraduate Prospectus must be consulted for detailed information:
www.ox.ac.uk/admissions/undergraduate_courses/index.html

▪ ability in maths and physics is essential for those wishing to study any engineering course. Good performance in single maths and physics at A-level (or equivalent qualification) is required. Inclusion of maths mechanics modules and study of further maths at A- or AS-level are strongly encouraged but are not required
▪ students taking Scottish Highers, International Baccalaureates or other equivalent examinations are encouraged to apply
▪ further entry information can be found at www.eng.ox.ac.uk/study/undergraduate/your-degree

Email: student.administration@eng.ox.ac.uk
Website: www.eng.ox.ac.uk
The new Chemical Engineering programme has been developed to reflect the School of Engineering and Materials Science’s existing strengths.

With long histories in mechanical engineering and materials science engineering, we are perfectly placed to provide an excellent education in chemical engineering. We are developing this programme due to our excellent teaching and research in this area and are also developing new teaching facilities dedicated to chemical engineering.

Chemical Engineers are in great demand and can have successful careers in a large number of industries. In order to be successful in these industries students must have the appropriate preparation at university. Our teaching is both practical and theoretical: you will be involved in lab practicals from the first term, and working on projects relevant to the chemical engineering industry.

Programmes

Chemical Engineering
- BEng(Hons) 3 years full-time
- BEng(Hons) 4 years full-time with industrial experience
- BEng(Hons) 4 years full-time with a year abroad
- MEng(Hons) 4 years full-time
- MEng(Hons) 5 years full-time with industrial experience
- MEng(Hons) 5 years full-time with a year abroad

Entry requirements

BEng:
- A-level: AAB to include maths, and physics or chemistry
- International Baccalaureate: minimum of 34 points overall including 6, 6, 5 from three Higher Level subjects to include maths and physics or chemistry.

MEng:
- A-level: AAA to include maths, and physics or chemistry
- International Baccalaureate: minimum of 36 points overall including 6, 6, 5 from three Higher Level subjects to include maths and physics or chemistry.

Other qualifications such as BTEC or Access HE accepted. See website for more info.

Admissions coordinator: Marian Langbridge
Email: sems-ugadmissions@qmul.ac.uk
Website: www.sems.qmul.ac.uk
Queen’s University, Belfast

Queen’s combines the best of tradition with a progressive outlook. It is an institution with a world-class academic reputation as reflected in the award of the Queen’s Anniversary Prize in 2006, the fourth time the University has been honoured this way.

As a member of the Russell Group of leading UK universities, Queen’s is building on its tradition of excellence to secure a future for its students – the leaders of tomorrow. They can look forward to being taught to the highest standards by academics who are both world-class teachers and researchers.

Programmes

Chemical Engineering
- BEng(Hons) 3 years full-time
- BEng(Hons) 4 years sandwich
- MEng 4 years full-time
- MEng 5 years sandwich

Entry requirements

- A-levels in maths, scientific subject (preferably chemistry) and one other
- Irish Leaving Certificate (to include maths and chemistry plus three/four other subjects)
- BTEC National Diploma with 10 Distinctions and 8 Merits for BEng; 18 Distinctions for MEng
- OU Courses looked at on merit

Admissions tutor: Dr Pamela Walsh/Dr Gary Sheldrake
Email: chemengqueries@qub.ac.uk
Email for prospectus: cance@qub.ac.uk
Website: www.ch.qub.ac.uk
University of Sheffield

The Department of Chemical and Biological Engineering at the University of Sheffield is ranked among the top five chemical engineering departments in the UK (REF 2014) and recently ranked 2nd in the Russell Group for student satisfaction in the recent National Student Survey (NSS) 2019. Sheffield prepares its students to be pioneering, 21st century engineers as the Department is a major contributor to tackling the key challenges of our times including - climate change, energy, affordable medicines, sustainable agriculture, water use, safety and green manufacturing.

At Sheffield students spend their first two years studying a range of modules which will equip them with the theoretical background and technical skills to become a chemical engineer. Students can remain on the main chemical engineering programme or they can choose to specialise after their first two years of study: Biological Engineering, Energy (encompassing both renewables and conventional oil/gas), Pharmaceutical Engineering, Nuclear Engineering, a Year in Industry or a Year in Australasia.

At Sheffield students will benefit from:

- fully integrated Pilot Plant featuring a world-leading continuous powder processing line - the first of its kind in any UK University
- exceptional links with industry, the Department’s advisory board consists of senior members of AstraZeneca, Shell, BOC, Process Systems Enterprise and MedImmune dedicated employment team that offer bespoke help with work placements and CV writing
- a truly international department with 45% of academic teaching staff from overseas, giving course content truly international relevance.

Programmes

1. Chemical Engineering
   - BEng(Hons) 3 years full-time
   - MEng 4 years full-time

2. Chemical Engineering with Energy
   - MEng 4 years full-time

3. Chemical Engineering with Biological Engineering
   - MEng 4 years full-time

4. Chemical Engineering with a Year in Australasia
   - MEng 4 years full-time, including one year of study abroad

5. Chemical Engineering with Nuclear Technology
   - MEng 4 years full-time

6. Chemical Engineering with a Year in Industry/Industrial Experience
   - BEng 4 years full-time, including a one-year industrial placement
   - MEng 5 years full-time, including a one-year industrial placement

8. Chemical Engineering with a Foundation Year
   - one-year precursor to either BEng or MEng degree
Entry requirements

AAA at A-level, to include maths and another science subject and excluding general studies and critical thinking. For further information on our undergraduate courses and entry requirements please visit our website at www.sheffield.ac.uk/cbe

Admissions tutor: Mark Ogden
Email: m.d.ogden@sheffield.ac.uk
Email for prospectus: louise.hall@sheffield.ac.uk
Website: www.sheffield.ac.uk/cbe
The Department of Engineering and Maths at Sheffield Hallam University is committed to providing a high-quality student learning experience and our chemical engineering programme has been rigorously designed according to the CEng route of IChemE.

The courses offer excellent chemical engineering practical experience through state–of-the-art laboratory facilities, pilot plants, computing laboratories, professional software, modern teaching facilities and our virtual learning environment (VLE). Students are able to obtain systematic theoretical knowledge in chemical engineering, develop valuable practical skills at all stages of their programme and acquire design skills in chemical engineering plant through team and individual work and various life skills through the university experience.

The University is dedicated to producing highly employable graduates. It focuses on helping students develop communication, organisational and planning skills, as well as offering workplace experience, industrial links, volunteering experience and enterprise development.

Our strong industry-university partnership creates opportunity for students to work on diverse research and industrial design projects and develop professional skills. We have developed a series of industrial lectures for our students and our programme is supplemented by expertise and industrial collaboration through our research centres such as the Materials and Engineering Research Institute (MER) which develops polymers and nanocomposites and a variety of materials and modelling and analysis, and the National Centre of Excellence for Food Engineering which works closely with the food sector to develop new packaging materials, improve process control, automation and energy efficiency.

Programmes

Chemical Engineering
- BEng(Hons) 3 years full-time
- BEng(Hons) 4 years sandwich
- MEng 4 years full-time
- MEng 5 years sandwich

Entry requirements

BEng
- normally five GCSEs at grade C or grade 4 (or above) including English language and maths, plus
- 112 UCAS points from at least two A-levels or equivalent BTEC National qualifications (to include maths and either physics or chemistry subjects.) We accept AS levels. We do not accept general studies.

MEng
- normally five GCSEs at grade C or grade 4 (or above) including English language and maths, plus
- 128 UCAS points including at least 64 points from two A-levels or equivalent BTEC National qualifications (to include maths and physics or chemistry.) We accept AS levels. We do not accept general studies.

Candidates who have other, non-standard qualifications will be considered on their individual merits
by the Course Leader and Admissions Tutor. The primary criteria will be that the candidate will have the ability and commitment to progress satisfactorily on the programme.

Students following a BEng course can transfer to the corresponding MEng course at any point up to the end of L6 providing they achieve an overall average for each year of at least 50% and have no failed modules on their record.

<table>
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<tr>
<th>Programme leader:</th>
<th>Dr Abhishek Asthana</th>
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<tr>
<td>Email:</td>
<td><a href="mailto:a.asthana@shu.ac.uk">a.asthana@shu.ac.uk</a></td>
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<tr>
<td>Admissions tutor:</td>
<td>Dr Mark Thompson</td>
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<td>Website:</td>
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University of Strathclyde, Glasgow

The chemical engineering degree courses at Strathclyde are the most popular in Scotland and amongst the most popular in the UK. The record of achievement by our students and graduates is excellent. Our courses are specifically tailored to meet the needs and requirements of industry and our teaching strengths include expertise in environmental protection, process design and safety. The department has strong links with many employers of chemical engineers.

Programmes

Chemical Engineering
- MEng
- BEng(Hons)

Entry requirements

Scotland
- entry after S5: Five Higher grades at AAAAB including maths at A, chemistry and physics at A or B
- Sixth Year: If you have marginally failed to meet the above requirements at the end of the fifth year then you may be admitted on the basis of excellent performance in the sixth year.

Rest of UK
- A-levels: Three passes at ABB, including maths plus physics or chemistry.

Admissions tutor: Paul Grassia
Email for prospectus: chemeng-ug-admissions@strath.ac.uk
Website: www.strath.ac.uk/engineering/chemicalprocessengineering
University of Surrey

The University of Surrey is one of the UK’s leading professional, scientific and technological universities with a world class reputation for excellence in teaching and research. Ground-breaking research at the University is bringing direct benefit to all spheres of life – helping industry to maintain its competitive edge and creating improvements in the areas of health, medicine, space science, the environment, communications, defence and social policy.

Chemical engineering qualifications have been granted by the institution for 110 years and we’ve recently spent £1.7M on a pilot scale chemical process for teaching use, and new undergraduate laboratories.

Programmes

1. Chemical Engineering
   - BEng(Hons) 3 years full-time
   - BEng(Hons) 4 years sandwich
   - MEng 4 years full-time
   - MEng 5 years sandwich

2. Chemical and Petroleum Engineering
   - BEng(Hons) 3 years full-time
   - BEng(Hons) 4 years sandwich
   - MEng 4 years full-time
   - MEng 5 years sandwich

All of the above courses are available with an integrated foundation year for entrants without the traditional entry qualifications.

Entry requirements

▪ academic A-levels: MEng entry: AAB/BEng entry: ABB
▪ maths and chemistry A-level are required
▪ GCSEs in English language AND maths at grade C/4 or above (or equivalent) are required
▪ candidates with good grades in Scottish Highers, Irish Leaving Certificate, International Baccalaureate or other equivalent qualifications are encouraged to apply
▪ candidates seeking direct entry to the second year of the programmes who have suitable qualifications to support such entry are also encouraged to apply.

Admissions tutor: Dr Colin Hare
Email: admissions@surrey.ac.uk
Website: www.surrey.ac.uk
Swansea University

Chemical engineers design, operate and optimise chemical and physical processes that turn raw materials into valuable products for human use. They also use their skills to ensure that natural resources are used sustainably, and the disposal of the by-products generated by these processes is done in a safe and environmentally-friendly manner.

You will be trained to meet the needs of modern process engineering and gain the ability to use analytical skills and tools to formulate and solve problems relevant to the application of engineering to industry. The course will also provide a foundation for you to aim for the prized Chartered Engineer status.

One of our major strengths is our close and extensive involvement with local, national and international engineering companies. The course involves industrial visits to various companies such as Valero, Avalon (AstraZeneca), Aberthaw Power Plant, First Milk, Tata Steel and Vale INCO Ltd. Modules build on established Chemical Engineering areas with application to energy, health, food, water and the environment.

Our Chemical Engineering degrees are accredited by the Institution of Chemical Engineers (IChemE).

Chemical Engineering at Swansea University is ranked 2nd in the UK for Graduate Prospects (The Guardian University League Table 2020).

Programmes

Chemical Engineering
- BEng(Hons) 3 years full-time
- BEng(Hons) 4 years full-time (with Year in Industry)
- BEng(Hons) 4 years full-time (with a Year Abroad)
- MEng(Hons) 4 years full-time
- MEng(Hons) 5 years full-time (with Year in Industry)
- MEng(Hons) 5 years full-time (with a Year Abroad)
- Chemical Engineering foundation year

Entry requirements

- BEng Chemical Engineering is ABB-BBB (including maths)
- MEng Chemical Engineering is AAA-ABB (including maths)
- we will also consider Scottish, Irish, BTEC, GNVQ, International and European Baccalaureates qualifications within the UCAS tariff points framework.

Please see our website for more details.

Email: engineering@swansea.ac.uk
Website: www.swansea.ac.uk/engineering
Teesside University

We are active in research in consultancy and enjoy close links with local and national businesses which take part in course development and delivery. They also provide a range of prizes, student awards, sandwich placements and sponsorship for academic posts.

Programmes

1. Chemical Engineering
   - BEng(Hons) 3 years full-time
   - BEng(Hons) 4 years full-time (extended) with an integrated foundation year
   - MEng 4 years full-time

These courses can also be studied part-time

2. Chemical Engineering with Industry
   - BEng(Hons) 4 years full-time with a year in industry
   - BEng(Hons) 5 years full-time (extended) with an integrated foundation year and a year in industry
   - MEng 5 years full-time with a year in industry

Entry requirements

Applicants are normally invited for an interview which enables them to see our excellent facilities and meet the staff and students. Each applicant will receive an individualised offer following an interview.

BEng:
- 96-112 UCAS tariff points from any combination of recognised Level 3 qualifications including maths
- The preferred second subject is chemistry, but alternatives can be considered.

MEng:
- 112-128 UCAS tariff points from any combination of recognised Level 3 qualifications including maths
- The preferred second subject is chemistry, but alternatives can be considered.

Foundation Year
- Most UCAS tariff-based offers are in the range of 32-88 tariff points. Non-tariff qualifications are also considered. The level of the tariff point offer depends on the subjects that you have studied.

Admissions tutor: Dr Paul Russell
Email: sse-admissions@tees.ac.uk
Website: www.tees.ac.uk/schools/sse
Chemical engineering is taught at the Paisley campus. All chemical engineering degrees can be taken part-time as well as full-time, with each academic year spread out into two consecutive academic years. Students may switch between full and part-time study. Many students take advantage of a year on placement – this may be taken between third and final year of study – in order to graduate with a sandwich degree.

Programmes

Chemical Engineering
- BEng(Hons) 4 years full-time
- BEng(Hons) 5 years full-time with a year in industry

Entry requirements

- year 1 SQA Highers: BBBB, including maths and chemistry, plus chemistry and English at S Grade
- A-level: BBC including maths, chemistry and another science subject, plus three GCSEs including chemistry and English
- for entry requirements from other qualifications such as Irish Leaving Certificate, European Baccalaureate etc, please contact the Admissions Tutor.

Admissions tutor: Dr Zaki El-Hassan
Email: zaki.el-hassan@uws.ac.uk
Website: www.uws.ac.uk/special_3_years/chemical_engineering
University of Wolverhampton

Our aim is for graduates to be ready for employment. In addition to a modern, innovative curriculum we provide many opportunities for students to gain employability skills, with employability workshops and awards as part of the course. We are constantly building and maintaining links between our students and regional, national and international employers and regularly have speakers from prominent industries and other academic partners. Indeed, several highly experienced industrial experts hold honorary and visiting positions with us; and regularly share their experience and knowledge with our students.

Wolverhampton offers a vibrant, up-to-date learning environment, which is supported by the community, the University and our dedicated and enthusiastic staff who want to see students succeed. This along with the latest polls of salary scales for petroleum and chemical engineering make Wolverhampton the place to be. To support lectures we have purpose-built laboratories, which have received over £500,000 worth of investment in the last two years to include a purpose-built Design Centre. This brand-new facility is exclusively for the use of our students and offers a dedicated space with industry standard facilitates for group work. Plus, because we believe in supporting our students, whilst they learn we offer:

- all core textbooks are available electronically and in the university learning centres
- software licences for industry standard software are available across the campus
- all Personal Protective Equipment provided free of charge
- free UK field trips

All of our courses are designed to and are accredited to meet the latest standards as defined by the Engineering Council and iChemE.

Programmes

1. Chemical Engineering
   - BEng(Hons) 3 years full-time
   - BEng(Hons) 4 years with a year in industry
   - BEng(Hons) 5-6 years part-time

2. Chemical Engineering with Chemistry
   - BSc(Hons) 3 years full-time

3. Chemical Engineering with Pharmaceutical Science
   - BSc(Hons) 3 years full-time

4. Chemistry with Chemical Engineering
   - BSc(Hons) 3 years full-time

5. Chemical Engineering Foundation Year
   - 4 years full-time leading to BEng or BSc

Entry requirements

- A-Level minimum of BBC. One A-Level must include maths at grade B or above. Chemistry should also be passed with grade B or C
- GCSE English and maths with grade B or C
- BTEC QCF Extended Diploma grade DDM, BTEC QCF Diploma grade DD
- courses 2-5 listed above have a reduced entry tariff and accept a wider range of A-level subjects but do not lead to accredited qualifications. Typically, CCC at A-level are accepted. Good performance in year one will allow students to transfer to the full BEng.

If you’ve got other qualifications or relevant experience, check out the UCAS tariff conversion table via UCAS: www.ucas.com.

International student language requirements and application guidance can be found at www.wlv.ac.uk/international/apply.

Those who do not meet the entry requirements may be offered an alternative course.

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<th>Director of Studies:</th>
<th>Prof. Phil Cox</th>
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