

Chemical Engineering with Business Management with Industrial Study BEng

Details

This four-year course has been designed to be relevant to the needs of modern industry and to produce graduates who have the personal and intellectual qualities to be successful in their chosen careers. By the end of the course, you will be equipped to play leading roles in a professional capacity in both industry and academia, and thus able to deal with issues at the forefront of the discipline. Once fully qualified you will:

- have a systematic and diverse knowledge of modern Chemical Engineering, which embeds biochemical engineering, sustainable processing and environmental impact
- work effectively as a Chemical Engineer in a professional capacity
- understand novel developments and problems at the forefront of the discipline
- evaluate current research critically, and be original in the application of your knowledge
- be self-motivated and work autonomously
- apply your technical knowledge and intellect to solve Chemical Engineering problems
- make sound engineering judgements in the absence of complete information
- use transferable skills to communicate effectively and work as part of a team
- take responsibility for your continuing personal and professional development
- have the fundamental grounding required to take you to the next part of your journey to becoming a professional chemical engineer.

Course structure

The course offers a modular programme of study, which normally leads to the award of Bachelor of Engineering (BEng) in four years.

First year

Here you are introduced to the fundamentals of chemical and energy engineering and the chance to learn about other engineering disciplines. Here, also, you will begin to develop the transferable skills that will carry you through your course, and beyond, into your life as a professional engineer. One major, optional, opportunity to hone these skills and put many of them into practice, is attendance on our residential course at the University's own outward bound centre in the Lake District. IT skills will be taught in our purpose-built computing facility.

Second year

Themes begun in the first year are developed to the standard you need as a professional engineer. You study advanced heat and mass transfer, reactors and catalysis and unit operations. Financial decision making, international business, marketing and human resource management are studied in the business part of the course.

Third year - Year in Industry

You have the option to spend a year in industry at the end of your second year. We have strong links with a large number of key companies to assist you, including Procter & Gamble, Unilever, BP, EDF, Conoco Philips, Pepsi Co, Jaguar/Land Rover, Exxon Mobil, Cadbury, Astra Zeneca, Johnson Matthey and Glaxo Smith Kline as well as with smaller to medium enterprises. Typically you will have to pass the interview process run by the company with which you are seeking a placement. The industrial placement gives you experience of working in the chemical engineering field which will enhance your CV and allow you to acquire further knowledge and employability skills. Our industrial liaison tutor will be able to advise you about the application procedures.

Fourth year

The third year develops the chemical engineering fundamentals further, to graduate level. All students undertake an industry-linked design project which enables them to put into practice all of the skills they have gained. Business is focused on supply chain management and corporate finance.

Generic skills-training, focusing on transferable skills and employability, is embedded throughout the course from the outset, and will ensure that you are equipped with the ICT, presentation, team-working and problem solving skills which will enhance your employability on graduation.

Related links

- [Undergraduate degree courses - School of Chemical Engineering \(/schools/chemical-engineering/undergraduate/degree-courses.aspx\)](#)
- [Scholarships and prizes \(/schools/chemical-engineering/undergraduate/scholarships-prizes.aspx\)](#)

Why study this course

At Birmingham, we provide diverse, yet balanced, courses, enabling our graduates to gain employment in a wide range of industries. Teaching is provided by lecturers who are global experts in their field, with multi-million pound investment providing leading-edge teaching facilities and laboratories.

We produce graduates who can function in today's fast-changing marketplace, and your career prospects will be excellent. Your Birmingham degree is evidence of your ability to succeed in a demanding academic environment.

Employers target Birmingham students for their drive, diversity, communication and problem-solving skills, their team-working abilities and cultural awareness, and our graduate employment statistics have continued to climb at a rate well above national trends.

Modules

The modules will be the same indicated in the link below with the addition of an industrial year in the third year.

- [Summary of modules for this programme \(pdf\) \(/Documents/college-eps/chemical/courses/H8ND-chemical-engineering-beng-business.pdf\)](#)

Fees and funding

(/undergraduate/fees/loans.aspx) Scholarships

- Please view [scholarships and prizes for Chemical Engineering undergraduates](/schools/chemical-engineering/undergraduate/scholarships-prizes.aspx) (</schools/chemical-engineering/undergraduate/scholarships-prizes.aspx>) for further information
- Also see the [University of Birmingham' scholarships and awards](/undergraduate/fees/funding/index.aspx) (</undergraduate/fees/funding/index.aspx>) page.

Entry requirements

Number of A levels required: 3

Typical offer: AAA*

Required subjects and grades: Mathematics (note: statistics modules are not preferred) and Chemistry are required at A level. If Statistics is offered, applicants should also offer AS level Physics.

General Studies: not accepted

Additional information:

Other qualifications are considered – learn more about [entry requirements](#) (<http://www.birmingham.ac.uk/students/ug/requirements>)

International students:

International Baccalaureate Diploma: >35 points including Mathematics and Chemistry at HL grade 6. We will consider SL Mathematics grade 7.

Standard English language requirements apply.

Learn more about [international entry requirements](#) (<http://www.birmingham.ac.uk/students/ug/requirements/international>).

Depending on your chosen course of study, you may also be interested in the Birmingham Foundation Academy, a specially structured programme for international students whose qualifications are not accepted for direct entry to UK universities. Further details can be found on the [foundation academy web pages](#) (<http://www.birmingham.ac.uk/students/foundation-academy/Pathways/index.aspx>).

How to apply

Apply through UCAS at www.ucas.com (<http://www.ucas.com>).

Learn more about [applying](#) (<http://www.birmingham.ac.uk/students/ug/courses/apply>).

Key Information Set (KIS)

Key Information Sets (KIS) are comparable sets of information about full- or part-time undergraduate courses and are designed to meet the information needs of prospective students.

All KIS information has been published on the Unistats website and can also be accessed via the small advert, or 'widget', below. On the [Unistats website](#) (<http://unistats.direct.gov.uk>) you are able to compare all the KIS data for each course with data for other courses.

The development of Key Information Sets (KIS) formed part of HEFCE's work to enhance the information that is available about higher education. They give you access to reliable and comparable information in order to help you make informed decisions about what and where to study.

The KIS contains information which prospective students have identified as useful, such as student satisfaction, graduate outcomes, learning and teaching activities, assessment methods, tuition fees and student finance, accommodation and professional accreditation.

Related links

[Undergraduate degree courses - School of Chemical Engineering](/schools/chemical-engineering/undergraduate/degree-courses.aspx) (</schools/chemical-engineering/undergraduate/degree-courses.aspx>)

[Scholarships and prizes for Chemical Engineering undergraduates](/schools/chemical-engineering/undergraduate/scholarships-prizes.aspx) (</schools/chemical-engineering/undergraduate/scholarships-prizes.aspx>)