OVER 93% GRADUATE EMPLOYABILITY
DHLE 2016/17

CHEMICAL ENGINEERING

WWW.BIRMINGHAM.AC.UK/Chemical-Engineering
<table>
<thead>
<tr>
<th>OUR PROGRAMMES</th>
<th>UCAS CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEng Chemical Engineering</td>
<td>H800</td>
</tr>
<tr>
<td>MEng Chemical Engineering</td>
<td>H810</td>
</tr>
<tr>
<td>BEng Chemical Engineering with Industrial Study</td>
<td>HV10</td>
</tr>
<tr>
<td>MEng Chemical Engineering with Industrial Study</td>
<td>H802</td>
</tr>
<tr>
<td>MEng Chemical Engineering with International Study</td>
<td>H801</td>
</tr>
<tr>
<td>MEng Chemical Engineering with International and Industrial Study</td>
<td>HW10</td>
</tr>
<tr>
<td>BEng/MEng Chemical Engineering with Foundation Year</td>
<td>H892</td>
</tr>
</tbody>
</table>
At the University of Birmingham, we are excited to be developing the next generation of chemical engineers. We are home to one of the largest concentrations of chemical engineering expertise in the UK, made up of world-leading academics at the forefront of groundbreaking research. As a Birmingham student, you will learn how this pioneering knowledge is applied in today’s world; to the manufacture of micro-structured products, in the development of new materials for energy storage and to the design of new technologies used in healthcare and regenerative medicines.

WHY STUDY CHEMICAL ENGINEERING AT BIRMINGHAM?

- A world-renowned department with over 100 members of staff and over £10 million per annum in research income. You will be taught by experts in the field.
- Excellent industrial links with companies such as BP, ExxonMobil, Unilever, GSK and AstraZeneca who regularly come into the Department to give guest lectures and provide careers advice.
- World-class teaching and laboratory facilities, including the £40 million Collaborative Teaching Laboratory (CTL) where we are using the latest educational technologies to reinvent practical classes.
- A student-centred approach where the needs of our students are put first. We act upon feedback through weekly Student Voice meetings and termly staff-student liaison meetings. You say, we do!
- Regular departmental events to promote inclusion and to break down barriers, including: Welcome Dinner, coffee mornings, Summer BBQ, staff-student night out, Industrial Dinner and a teambuilding course in the Lake District.
- A dedicated industrial tutor who helps our students with sourcing placements, CV writing and interview preparation. Our tutor also works closely with industry to strengthen our links and build new relationships.

ACADEMIC PROFILE

Professor
Mark Simmons
Head of School

'As Head of School, I am very proud of the fact that our students find their time at Birmingham fulfilling, from both an academic and social perspective, and graduate with the skills necessary to succeed. Our graduates are highly sought after for their ability to solve problems and work well with others, often from other disciplines, as well as their overall subject knowledge and ability to think on their feet. This is evidenced by the number of our students offered top jobs and summer placements by reputable global companies such as: ExxonMobil, BP, Rolls-Royce, Procter & Gamble and Unilever, to name but a few. My own personal research focuses on the nature of multiphase flows and mixing, forming particles, droplets, bubbles and waves, and is directed towards the manufacturability of catalysts, spray-dried particles and home and personal care products. We would be delighted to welcome you to the School and the University, and I look forward to meeting you during your visit!'
WHERE COULD CHEMICAL ENGINEERING TAKE YOU?

93% of our students enter graduate-level employment or further study six months after graduation (DHLE 2016/17). Upon graduation, you will have the knowledge and expertise to work in a range of exciting sectors. Due to the outstanding reputation of Birmingham, your degree will enable you to succeed in your chosen career path.

Our graduates can be found in roles as diverse as:
- Process engineer
- Analytical scientist
- Patent attorney
- Investment banker
- Project manager
- Design engineer

Our graduates have gone on to work for well-known employers such as:
- Procter & Gamble
- Unilever
- BP
- PepsiCo
- ExxonMobil
- AstraZeneca

HANNAH
MEng Chemical Engineering with Industrial Study

‘I love studying chemical engineering, and I can’t imagine a better place to do it than at Birmingham. It’s a fun, exciting place to study, being a stone’s throw away from the city centre, it also boasts a beautiful campus and provides an interesting course. It will set you up for anything you want to do after university. The degree is, of course, challenging – but never enough to hinder progress and there are many ways to get help. Besides, who doesn’t want a challenge!’
PATHWAYS

Our flexible degrees are structured to give you a thorough understanding of chemical engineering, so that you are equipped to meet the challenges of the course content, as well as a career beyond university.

Students can follow either the MEng Chemical Engineering programme (four years) or a BEng Chemical Engineering programme (three years). However, in addition to these pathways, we also offer industrial and international options. All of our degree programmes are accredited by the IChemE.

Industrial Year
We offer degree courses which have a built-in industrial year, where you are able to work for major employers in the field of chemical engineering for one year (usually after your third year). An industrial placement is a fantastic opportunity to learn new skills on the job, and explore future career paths.

International Year
We also offer the option to study at an international university in your third year of study. The most popular destinations are Melbourne, Montreal, Singapore and Iowa. This is a fantastic opportunity for students to travel the world and build a global professional and social network.

MODULES

Our degrees are designed to teach you the knowledge you’ll require as a chemical engineer and allow you to tailor your degree to your personal interests. In Years 1 and 2, the fundamental principles of Chemical Engineering are taught. In Year 3, all students undertake a Design Project, working in small teams to design a specific chemical process and in Year 4, more optional modules allow you to specialise in the material that interests you.

First-year modules may include:
- Chemistry and Materials
- Modelling Concepts and Tools
- Process Design and Analysis
- Introduction to Transport Phenomena
- Reaction, Equilibria and Thermodynamics
- Labs and Mastery

ISABELLA

MEng Chemical Engineering

'Chemical Engineering at the University of Birmingham is exciting and I have had the chance to meet inspiring new people through group projects. In addition to the fundamentals, we are taught modules on the research fields of the moment by world-leading specialists, giving us skills and knowledge that will set us up for success in the working world after university.'
ENTRY REQUIREMENTS

MEng and BEng
A level: MEng: A*AA; BEng: AAA
IB: MEng: 7, 6, 6; BEng: 6, 6, 6

Required subjects and grades:
A level: Maths and Chemistry*
IB: To include Maths and Chemistry at Higher Level with a minimum of 32 points overall. We will consider Standard Level Maths at grade 7.

*General Studies, Critical Thinking, Use of Maths not considered

We also consider a range of other equivalent qualifications. Further details can be found on our website, for specific information on entry requirements please contact our Admissions team.

Chemical Engineering foundation year
If you are a Home student who would like to study Chemical Engineering here but do not possess the required qualifications for BEng/ MEng entry, we offer a Chemical Engineering foundation year.

GCSE: 6/B in GCSE Mathematics
A level: BBB, students taking Mathematics are not considered, General Studies not considered.

BTEC: DDD Extended Diploma in Engineering, Applied Science or Computing with entry test. Others accepted alongside A levels.
Access to HE: In Engineering, Combined Sciences (with at least 12 credits in either Chemistry or Physics), Chemical Sciences or Physical Sciences with 60 credits overall with at least 45 at Level 3 out of which 30 are at Distinction.

Scholarships
The School of Chemical Engineering provides a number of scholarships to candidates with excellent academic records applying for undergraduate programmes, and awards prizes to our top performing undergraduate students at all levels of study. For Home/ EU students, we typically offer entrance scholarships of up to £1,000 and for international students they can range up to £3,000. Full details of the scholarships we offer can be found on our website.

Visit www.birmingham.ac.uk/chemical-engineering for details
SOCIETY

The Birmingham University Chemical Engineering Society (BUCES) is our award-winning society – run by students, for students! The Society plays a key role in student life within the School and was recently awarded Society of the Year 2019/20 at the EPS Societies’ Awards. BUCES is extremely active and offers something for everyone; fantastic socials, networking events, sports tournaments, careers advice and charity fundraising. Everyone is welcome to join, no matter what your interests are! BUCES runs regular sober socials, in addition to its nights out and bar crawls. From GoKarting to Laserquest, there are ample opportunities to catch up with your course mates outside of lectures. The trip to Coniston Water at the start of term is the perfect event for new students, and helps them get to know each other and their lecturers through teambuilding activities.

Find out more at www.birmingham.ac.uk/buces

SUPPORT

At Birmingham, we aim to create a friendly and supportive environment for our students, hence we offer a range of support services within the School to help you adjust to university life.

When you enrol in the School of Chemical Engineering, you will be assigned a personal tutor: an academic member of staff whose role it is to provide academic support throughout your studies. Your personal tutor will also be able to advise you should you require any additional support whilst studying, including any welfare issues, and will be an important support when you begin considering future careers or further study. We also have a School wellbeing officer, who runs drop-in sessions throughout the week.

All academic staff have regular published ‘office hours’ when they will be specifically available to students taking their courses. However, if you would prefer to receive academic support from other students in higher years you can attend Peer Assisted Study Sessions (PASS). Furthermore, first-year students who attend the Welcome Dinner at the start of term will be assigned second-year ‘parents’, who you can go to for academic assistance or general advice.
Birmingham has one of the largest concentrations of Chemical Engineering expertise in the UK, meaning our research is of the highest quality. 87% of our research was rated as world-leading or internationally excellent in the Research Excellence Framework (REF, 2014). At Birmingham, we are at the forefront of solving global problems. Our internationally recognised research is addressing some of the world’s biggest challenges, such as the future energy crisis, advancing healthcare technologies, and manufacturing healthier food. As an undergraduate at Birmingham, you will be able to draw upon the wealth of research expertise that resides in the School.

LUCY

MEng Chemical Engineering

'I chose to study at the University of Birmingham because, out of all the universities that I applied to, I found the lecturers the most engaging and approachable. I was also looking for a course with lots of variation, with the opportunity to work on innovative projects, and I was not disappointed. I've touched a wide range of fields through the different design projects I've undertaken during my time here at Birmingham, from recycling carbon fibre composites, to designing ice cream factories and dressings for chronic wounds. Studying at Birmingham has equipped me exceedingly well for the beginning of my career.'
INDUSTRY/ ORGANISATIONAL LINKS

At Birmingham, we have extensive links with industry and company representatives regularly visit the Department to deliver presentations and application days specifically for Chemical Engineering students. In their third year, students undertake a Design Project championed by an industrial partner, previous and current partners include:

- ExxonMobil
- PepsiCo
- Scotsgold Resources PLC
- Mondelez
- Rolls-Royce
- IMERYS
- Solvay
- Unilever

Every year, BUCES also puts on an Industrial Dinner, where students get the chance to mingle with company representatives looking to recruit. Many of our students have secured placements, or even jobs, following the connections they make on the night!

SEB

MEng Chemical Engineering with Industrial Study

‘I was extremely lucky to get an industrial placement at Unilever, one of the world’s largest FMCG companies. I was working in a detergent factory in Port Sunlight. It was a great experience knowing that products from the lines I was working on, like Persil, Cif and Domestos, were being used by people every day. I did a lot of work towards making the factory more sustainable, by using less water and I also got involved in new factory technology. My work got noticed by some very high-up people in the company, so much so that they offered me a job!’

YASMIN

MEng Chemical Engineering with Industrial Study

‘The Department prepares us for life in industry in a number of ways, one being offering students summer internships, which I was fortunate enough to do during the summer after my second year. This opportunity gave me the chance to work both independently and in a group, as well as improve my interpersonal and soft skills, like networking and communication.’
DR MATT KEITH
Alumnus

‘Studying at Birmingham allowed me to develop the skills necessary to help tackle one of the most significant challenges facing us today: climate change. The course here is very well supplemented with a range of lab sessions, which allowed me to learn outside of lectures. The hands-on experiences offered as part of the course steered me towards applying for a PhD, also at Birmingham!’

APPLICATION TIPS

We want to make offers to applicants whose passion for chemical engineering ensures they will be an enthusiastic and motivated student, with the ability to succeed on the course. Information we carefully consider includes your predicted or achieved grades, prior qualifications, academic reference and, crucially, your personal statement. Your personal statement is your opportunity to show us why you are uniquely interested in chemical engineering and how you are able to demonstrate this outside of your formal education. For instance, this could include examples of further research you have carried out, such as reading books or articles, watching documentaries, listening to podcasts, attending lectures, participating in taster days or completing work experience placements. We look forward to receiving your application!

CONTACT US

General admissions enquiries:
Tel: +44 (0)121 414 5333
Email: chemeng-admissions@contacts.bham.ac.uk

DISCOVER MORE ABOUT THE SCHOOL OF CHEMICAL ENGINEERING AT BIRMINGHAM NOW:
WWW.BIRMINGHAM.AC.UK/CHEMICAL-ENGINEERING
This leaflet was written several months in advance of the start of the academic year. It is intended to provide prospective students with a general picture of the programmes and courses offered by the School. Please note that not all programmes or all courses are offered every year. Also, because our research is constantly exploring new areas and directions of study some courses may be discontinued and new ones offered in their place.

Please note the information in this brochure is correct at time of publication but may be subject to change (July 2020).