How a Sheffield chemistry degree equips you for an incredible career in a changing world.

Department Of Chemistry.
Contents

Learning chemistry 4
Which chemistry degree? 6
#WeAreInternational 7

Our courses
Chemistry courses 8
Courses with a year away from campus 10
Biological and medicinal chemistry courses 12
A typical week in your first year 14

Our chemistry
Sustainable and environmental chemistry 16
Biological and medicinal chemistry 18
Advanced materials and nanotechnology 20
Careers in chemistry 22
Life in Sheffield 24
Next steps 26

Science Undergraduate of the Year
In April 2019 one of our students, Madeleine Hill, was named Science Undergraduate of the Year by graduate recruitment site TARGETjobs. As well as completing a number of internships, Maddie has been chair of the University of Sheffield’s student welfare committee, helped design a wearable device for people with mental health conditions, and runs an award-winning Christmas pudding company. She’s pictured at the ceremony with Laura Yeates, Head of Graduate Talent at law firm Clifford Chance, where Maddie will do another internship, and awards host Rachel Riley.
Chemistry courses at the University of Sheffield are built around cutting-edge science that’s addressing big global challenges. We’re training our students for a future where plastic isn’t wasted in landfill sites, where antibiotic resistance no longer threatens lives and where nanoscale technologies have revolutionised daily life.

Our curriculum has been created in consultation with our students, and every module is designed to give you skills you can put on your CV. We offer a three-year BSc Chemistry degree, and a four-year MChem Chemistry degree that comes with an extra year of research training. Plus, there are options to study abroad for a year, complete a year-long work placement as part of your degree, or specialise in biological and medicinal chemistry.

All of our courses are accredited by the Royal Society of Chemistry, so you’ll cover the fundamental knowledge that every chemist needs for a successful career. But there’s a lot of flexibility too, so you can tailor your degree to your interests, your career goals and the global challenges you want to help solve.

Undergraduate research scholarships
In this scheme, some of our undergraduate students can get even more lab experience with a paid summer research placement. New undergraduates who meet the criteria will automatically be offered a placement to complete during the summer immediately before the final year of their course.

You get:
- A paid six-week summer placement in one of our laboratories
- An extra chance to put your research skills into practice, working with our academic staff
- Even more work experience to include on your CV

To qualify, you need:
- AAA or above at A level, or equivalent
- To maintain a strong performance on your course

Visit www.sheffield.ac.uk/chemistry/scholarship for more information.
Students become teachers
Some of our students get to inspire the next generation of chemists by working in our Kroto Schools Laboratory, helping run sessions where local school children make bath bombs and slime. The lab is named after Nobel Prize winner Sir Harry Kroto, who studied in our department and did lots to get children excited about science.

Learning chemistry

Lectures
Lectures are the bread and butter of a university education. They’re a great chance to learn the fundamentals from recognised experts and get insights into the latest research. Our lecture recording system means you can watch your lectures again later. This is perfect for revisiting content during exam revision, or catching up if you were absent.

Tutorials and workshops
You’ll also have small group tutorials and workshops to build on the topics you’ve covered in lectures and show you how to apply concepts when solving real problems. These sessions are led by your personal tutor in first year, and specialist tutors who are experts in the specific topics you’re studying in later years.

Laboratory work
We have four large teaching labs where you’ll put your scientific knowledge into practice. This includes three specialist labs: one for organic chemistry, one for inorganic chemistry and one for physical chemistry. Our dedicated teaching staff will take you from fundamental lab skills to conducting your own research experiments, recording and analysing data you’ve generated from chemical samples you’ve prepared.

Research projects
In your third year you’ll bring together all of your scientific skills in a group research project. Working as a team of professional scientists, you’ll go from concept, through all the practical and analytical stages, to produce a written report of your findings. You’ll do much more of this in your fourth year if you choose a MChem course. Then you’ll work with experienced academic staff, and postgraduate and postdoctoral researchers from across our areas of chemistry expertise.

Showcase your science writing
Our students run their own magazine, Resonance, which is published twice a year and is full of news and in-depth features on interesting bits of chemistry. It’s a great way to get experience of science journalism, and can lead to incredible interview opportunities.

“Not only is it so genuinely enjoyable to help bring a little bit of fun and science to children, but it felt good to be a part of something bigger.”
Charlotte Kiker, MChem Chemistry

Teaching takes place across the whole of the University of Sheffield campus, which you can explore in full by using the campus map on the University website. So, as well as being taught in the labs and lecture theatres in our department, you may also have sessions in other teaching spaces, like our new £81 million facility, The Diamond.
“I love teaching. Our students are amazing and it is great to see them develop from tentative first years into confident chemistry graduates and talented postgraduates.”

Dr Jenny Burnham,  
Senior University Teacher

Jenny teaches undergraduates in the labs and runs the inorganic chemistry laboratory in second year. She is one of several staff in the department who have won a University of Sheffield Senate Award for Excellence in Learning and Teaching.
Do you want to choose from our full range of chemistry topics, or specialise in biological and medicinal chemistry?

BSc or MChem Chemistry with Biological and Medicinal Chemistry, p12

Do you want to spend a year of your degree away from the University of Sheffield campus?

Work in industry or study abroad?

BSc or MChem Chemistry with a year in Industry, p10

MChem Chemistry with Study Abroad, p10

Three or four year course?

BSc Chemistry, p8

MChem Chemistry, p8

If you want to study chemistry, it’s important to find the right course for you. We have six different degree programmes to choose from, and they’re all great in different ways. So ask yourself, what would you like to do?
The University of Sheffield is a world top 100 university, with students from every corner of the globe. In the Department of Chemistry, we have students from more than 30 different countries, and academic staff who have come from as far as Russia, China and North Africa to conduct world-class research and train the next generation of chemists.

Our alumni include internationally recognised names such as Nobel Prize winner Sir Harry Kroto, who discovered buckminsterfullerene, and Dr Helen Sharman, the first British astronaut. Today our students graduate into scientific roles at major transnational and multinational companies including Unilever, GSK and BP, or pursue academic careers at some of the world’s most prestigious universities.

Support for international students
There is lots of support for international students when they come to Sheffield. You can be picked up from Manchester airport when you arrive and take part in a range of activities to help you get to know the city, the University and other students.

The University has a Student Services Information Desk to help with any academic, financial, personal, or social issues, with specially trained immigration advisers. The Students’ Union has its own Student Advice Centre and the university also provides health and wellbeing support through the University Health Service and the University Counselling Service.

To find out more about life as an international student, and for information, advice and support, visit www.sheffield.ac.uk/international.
Chemistry with a Foundation Year  UCAS code: F102

We offer a foundation year for students who want to study chemistry, but don’t meet the entry requirements to go straight into first year. So if you’ve studied the right subjects but haven’t achieved high enough grades, or you’ve achieved good grades in unrelated subjects, this could be the route for you. Finish the year-long programme with an average mark of 60 or above, and you’re guaranteed entry onto the first year of your chosen chemistry course.

Visit www.sheffield.ac.uk/sefy for more information and entry requirements.
Chemistry courses

BSc Chemistry UCAS code: F100
MChem Chemistry UCAS code: F105

On these courses, we cover a number of topics based on the latest advances in science, and the skills and expertise that chemistry graduates can offer industry and society. These topics include:

- environmental and sustainable chemistry
- biological and medicinal chemistry
- advanced materials and nanotechnology
- chemistry of light
- astrochemistry
- computational chemistry

All of our undergraduates take the same modules in their first two years. This allows you to have more flexibility and freedom to specialise later in your degree. In first year, you’ll spend a day a week in the lab, learning essential skills and techniques. You will study topics including the structure of atoms and molecules, how chemical reactions happen, and how to identify and analyse different chemicals and elements. You’ll also look at the biological processes that chemistry drives, and the technologies and products that chemistry has made possible – from cosmetics to explosives.

In second year, you’ll start spending two days a week in the lab, as you learn to run more complex experiments. You’ll move on to study more advanced topics in organic chemistry (functional groups, synthesis, biopolymers), inorganic chemistry (main group compounds, transition metal coordination complexes, inorganic solids) and physical chemistry (quantum mechanics, thermodynamics, polymers and colloids).

By your third year, you’ll be ready to work on your own research project: you’ll gather and evaluate data, run your own experiments and present your findings. You’ll have a wide range of optional modules to choose from too, with topics ranging from energy storage to chemistry in space.

If you do the MChem course, in your fourth year you’ll join one of our research groups and spend most of your time working on a bigger research project. You’ll choose the topic, get specialist training from professional scientists and have access to state-of-the-art equipment. Again, you’ll also have lots of optional modules to choose from, including astrochemistry, nanochemistry, photochemistry and advanced materials chemistry.

Our teaching labs are kitted out with specialist analytical equipment, including our dedicated undergraduate NMR spectrometer.
Courses with a year away from campus

These courses give you the same exceptional support and scientific training as our standard BSc and MChem courses, but you’ll spend a year away from the University, gaining valuable hands-on experience, before re-joining us back in Sheffield for your final year.

You can do a year-long work placement at a company in the chemical industry, spend a year studying chemistry in another country, or do a bit of both. Previous Year in Industry students have done their work placements with companies in Germany and Belgium.

BSc Chemistry with a Year in Industry UCAS code: F111
MChem Chemistry with a Year in Industry UCAS code: F106

Put your chemistry knowledge into practice at a top organisation. This kind of hands-on experience will set you apart from other graduates, give you lots of skills to put on your CV, and students are often offered graduate jobs at the end of their placements. Our students have gone to lots of different companies, including:

- Unilever
- GSK
- Pfizer
- Croda
- Scott Bader

Students who take the MChem option do their work placement instead of the standard third year. You’ll have distance learning materials to complete, so that you’re ready to return to the University for your fourth year. If you take the BSc option, you’ll do all three years of our BSc Chemistry course, but you’ll do your work placement between your second and third years. You’ll also have more freedom to explore placement opportunities outside the lab.

You’ll have academic and industrial supervisors to support you throughout your placement and a visit from a member of staff to make sure you are settling in.

MChem Chemistry with Study Abroad UCAS code: F110

Spend your third year learning chemistry at a university in Australia, New Zealand, Canada, the USA, or one in Europe that teaches in English. There are around 30 top institutions to choose from. You’ll take lecture and laboratory modules, and get the opportunity to be involved in a research project. It’s a once-in-a-lifetime chance to develop your independence both by living in another country and by learning chemistry in a way that is often unique to each chemistry department.

Students usually combine this with the chance to take on other new challenges: for example, sports or volunteering opportunities might be unique to your overseas location, and they can be a great way of making new friends. You’ll still remain in regular contact with academic staff in Sheffield, who will monitor your progress and provide support. Studying abroad offers a different style of learning, but equally effective training to help you prepare for the final year of your degree.

“I have really enjoyed my placement at GlaxoSmithKline especially developing my practical chemistry skills while meeting lots of great people.”

Juliette Craggs, Year in Industry at GlaxoSmithKline
“I spent the third year of my degree studying at McMaster University in Hamilton, Canada. This was one of the most exciting experiences of my life so far, and I couldn’t recommend it any more highly... The support offered by the University was great and it was so easy to get help with any problems that I had”

Lewis Jones, MChem Chemistry with Study Abroad

100% students who did an industrial placement were in work or further study six months after graduation

Destinations of Leavers from Higher Education 2017

Work placements, and study places at other universities aren’t guaranteed – it’s your responsibility to secure one but we’ll do everything we can to help.
Biological and medicinal chemistry courses

BSc Chemistry with Biological and Medicinal Chemistry UCAS code: F112
MChem Chemistry with Biological and Medicinal Chemistry UCAS code: C720

These degree programmes give you the chance to combine two great subjects. You’ll still do the key chemistry, but you’ll also develop a specialist area of expertise, by focusing on how you can use your chemical insights to address challenges in biology and medicine.

The course has been designed to equip graduates with the growing demands of the healthcare sector and pharmaceutical industry, as employers need chemists with the ability to work with complex genome datasets and research solutions to challenges such as antibiotic resistance.

The first two years of these courses are the same as our BSc and MChem chemistry courses, so that you have all the fundamental chemical knowledge that every chemist needs, but in the third year you will take compulsory modules that cover medicinal chemistry, drug synthesis and chemical biology, as well as choosing optional modules from any branch of chemistry. You’ll also take a module focused on giving you the practical and transferable skills you’ll need for a graduate career in biological and medicinal chemistry, and tackle project work in your specialism.

Students on the four-year course can study biophysical chemistry, pharmacology, medicinal chemistry and drug design at an advanced level in their final year, and complete a major research project focused on solving a problem in biology or medicine.

“Throughout the Biological and Medicinal Chemistry degree I developed a fascination with proteins, crystallography and computational chemistry.

As I aspire to become a senior research scientist, I have chosen to pursue an industry-based PhD focusing on chemical biology. This will enable me to apply my undergraduate knowledge to solve real-world issues and I look forward to the oncoming challenges.”

Oliver Longfield, MChem Chemistry with Biological and Medicinal Chemistry
### A typical week in your first year

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
</tr>
</thead>
<tbody>
<tr>
<td>9am</td>
<td>Chemistry in a sustainable future (lecture)</td>
<td>Fundamentals of chemistry (lecture)</td>
</tr>
<tr>
<td>10am</td>
<td>Fundamentals of chemistry (lecture)</td>
<td>Fundamentals of chemistry laboratory session (all day)</td>
</tr>
<tr>
<td>11am</td>
<td></td>
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<tr>
<td>2pm</td>
<td>Mathematics for chemists (lecture)</td>
<td></td>
</tr>
<tr>
<td>3pm</td>
<td>Chemistry in the world around us (optional module)</td>
<td></td>
</tr>
<tr>
<td>4pm</td>
<td>Physical principles in chemistry (lecture)</td>
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</tbody>
</table>

“We make our learning and teaching as varied as possible: we have lectures, labs, tutorials, presentations, videos, audios, quizzes, surveys, group work, projects, and of course exams. Our goal is to stimulate you to take control so that you become a good communicator and collaborator, an active citizen (for instance, by doing voluntary work), and an independent learner.”

Dr Colin Crook, University Teacher
When you start your first year, your actual timetable might look a bit different. This is just to give you an idea of how much time you’ll spend on each component of your course.

<table>
<thead>
<tr>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry in a sustainable future (lecture)</td>
<td>Skills for chemical science (lectures/workshops/activities)</td>
<td>Chemistry in a sustainable future (lecture)</td>
</tr>
<tr>
<td>Fundamentals of chemistry (lecture)</td>
<td>Fundamentals of chemistry (lecture)</td>
<td>Fundamentals of chemistry (lecture)</td>
</tr>
<tr>
<td>Mathematics for chemists (workshop)</td>
<td>Small group tutorial</td>
<td></td>
</tr>
<tr>
<td>Mathematics for chemists (workshop)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry in the world around us (optional module)</td>
<td>Physical principles in chemistry (workshop)</td>
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Environmental and sustainable chemistry

Chemistry has a crucial part to play in creating a sustainable world. Throughout all of our courses, we look at the contributions chemists can make to society, with a particular focus on sustainability and environmentally-friendly chemistry.

We start by looking at food and energy production processes, and renewable alternatives, and in second year you’ll learn how chemical processes can be made more sustainable. After that, there are modules on how chemistry can be used to develop renewable energy technologies and help solve the plastic waste problem.

Plastic waste
Professor Tony Ryan OBE, who leads our Sustainability in Polymer Science module, is also leading a research project to help tackle the problem of plastic waste. The project focusses on single-use plastics and will examine every stage of the plastic life cycle – from the manufacturing process through to how products with single-use plastics are used and disposed of.

“The amount of plastic waste is set to become even worse over the coming years, but it’s a problem that needs to be tackled now. Also this isn’t something that is just affecting our environment, plastic waste causes huge economic and social costs too.” – Professor Tony Ryan

Carbon capture and storage
One of our students, Josh Lawlor, won a prize at the Global Undergraduate Awards for his final year research project, which focussed on carbon capture and storage.

He worked with Dr Rob Dawson to synthesise a new type of material known as a hypercrosslinked polymer, which are being developed as safer, more cost effective alternative materials to use for carbon capture and sequestration. This is a big topic in modern science, aimed at mitigating the effects of global warming, which you can learn about in our Sustainable Chemistry, Energy Generation and Storage module.

Artificial photosynthesis
Photosynthesis is one of the chemical reactions that makes human life possible, from the air we breathe to the food we eat. Replicating it in the lab opens up a world of opportunities to develop sustainable technologies. For example, Professor Julia Weinstein’s experimental research and Professor Anthony Meijer’s theoretical research has helped show how clean solar hydrogen fuel can be produced from water, based on the principles of photosynthesis.

It’s one of the topics being explored in the Lord Porter Ultrafast Laser Spectroscopy Laboratory which Julia named after one of our Nobel Prize winners, George Porter.

Example modules
First year: Chemistry in a Sustainable Future
Second year: Environmental, Analytical and Sustainable Chemistry
Third year: Sustainable Chemistry, Energy Generation and Storage
Fourth year: Sustainability in Polymer Science
“Photochemistry draws on our understanding of light waves and how plants work, and is used to develop new technologies. This makes chemistry the central link between physics, biology and engineering, and it’s really exciting for us to work together on challenges like meeting the world’s energy needs.” Professor Julia Weinstein

Julia is a Professor in Physical Chemistry. Her research focuses on converting light into chemical energy, paving the way for new sustainability solutions.

What does Julia teach??
Mathematics for chemists, molecular photonics and photochemistry.

Soil-free crops
A project led by Professor Tony Ryan OBE could help refugees grow food in some of the most challenging conditions. His lab is working on ways to use polymer foams as an artificial soil. The technique is already being used by Syrian refugees at Zaatari refugee camp in Jordan, using recycled foam from old mattresses. Scan the QR code to learn more on our website.
Biological and medicinal chemistry

The role of chemistry in creating new medicines, and important biomolecules like DNA, are covered from the start of all of our courses. In later years there are more specialist modules where you can learn how chemists study the biological mechanisms behind disease and use these insights to develop treatments.

You can also learn about key pharmaceutical concepts, such as pharmacodynamics, pharmacokinetics and toxicology, and the computer-based technologies used in drug design.

Treating bacterial infections
Antibiotic resistance is an enormous threat to the way surgery and other healthcare interventions are conducted today. Researchers in Professor Simon Jones’ group are working with colleagues in medicine and microbiology to look for new ways to treat bacterial infections. They’re designing chemical probes to understand how existing drugs kill bacteria, and exploring new therapeutic targets and medicines.

Illuminating cells
Researchers in Professor Jim Thomas’ lab developed a new technique to capture images of the nucleus of a cell in unprecedented detail. They developed a luminescent probe based on the element ruthenium, which can bind to and “light up” cell components, so they can be seen under super-resolution microscopes. The technique was then used to construct 3D images of cancer cells, paving the way for new insights into human disease and ageing.

Cancer therapy
Professor Jane Grasby led an international team of scientists who studied how blocking a particular type of enzyme could pave the way for new cancer treatments. The enzyme, FEN1, removes single-stranded flaps of DNA that appear when the human body replicates, repairs and replaces damaged DNA. Studies have shown that cancer patients with a poor prognosis often have cancer cells with higher levels of this type of enzyme. Cancer cells also rely more heavily on FEN1 to repair themselves than other cells. This means a drug that blocked FEN1 could selectively kill cancer cells, because without the enzyme, the cancer cells would become unable to make repairs.

“Inspired by the wonders in medicine and how small molecules such as aspirin and penicillin can completely change people’s lives, I chose medicinal chemistry as a career. It is a subject I am passionate about and it’s been a pleasure to dedicate myself to it for the past 30 years.”

Professor Beining Chen

Beining is our Professor of Medicinal Chemistry, and runs our MChem Chemistry with Biological and Medicinal Chemistry courses.

What does Beining teach?
Medicinal chemistry and drug design.

Beining with two of our overseas students, May and Janice, at graduation.
“For my fourth-year project, I was under the supervision of Dr Sarah Staniland, and was working on the cell-free production of several proteins that are involved in magnetosome formation. Magnetosomes are structures found in highly specialised bacteria and have magnetic properties which can be exploited for a range of biomedical and nanotechnological applications.

My favourite part of the project was being introduced to new laboratory techniques in the area of molecular biology... I was able to put into practice a lot of the ideas and concepts which we had previously learned about in the biological components of the course.”

Nairah Chaudury, MChem Chemistry with Biological and Medicinal Chemistry

Example modules

First year:
Fundamentals of Chemistry, Chemistry in the Biological World Around Us

Second year:
Synthetic, Mechanistic and Biological Aspects of Organic Chemistry

Third year:
Medicinal Chemistry and Drug Synthesis; Structure and Mechanism of Biomolecule Function; Synthetic Approaches in Chemical Biology

Fourth year:
Pharmacology, Medicinal Chemistry and Drug Design; Biophysical Chemistry
Advanced materials and nanotechnology

Nanotechnology promises to revolutionise the modern world: from 2D materials that are one atom thick and extremely strong, to tissue engineering techniques that can be used in medical treatments.

Meanwhile, our experts in polymer science are working on everything from solutions to the plastic waste problem to new treatments for cancer. Polymer chemists also work on a range of innovative products for industry – oils, paints and coatings; food, cleaning agents and cosmetics; medical, agricultural and aerospace technologies.

By studying supramolecular chemistry in third year, you can learn about alternative approaches to designing complex molecules. This provides some of the foundations for studying nanomaterials in fourth year – how they are created and analysed, and their uses in computing, data storage and medicine. You can also learn how polymer chemists can help solve major environmental challenges.

Example modules
First year: Chemistry in the Physical World Around Us
Second year: Physical Chemistry and Polymer Science
Third year: Organometallic, Solid State and Coordination Chemistry; Properties of Inorganic Materials; Supramolecular Chemistry
Fourth year: Advanced Materials Chemistry; Nanochemistry; Sustainability in Polymer Science

Improving cancer treatments
Chemotherapy is commonly used to treat cancer, but often comes with unpleasant side effects. This is because the drugs used to attack cancer cells can attack healthy cells as well. But Professor Steve Armes is developing a new kind of nanoparticle to deliver the drugs. It's modelled on the dengue virus and responds to the acidity of breast cancer cells, so it would only release drugs when the right level of acidity was detected.

Two-dimensional materials
The graphite in an ordinary pencil can take on remarkable new characteristics when a single layer of carbon atoms is peeled off to produce a two-dimensional material called graphene. Since graphene was discovered, scientists have been working with many other layered materials that have revolutionary potential. For example, Dr Jonathan Foster is developing nanosheets with lots of potential applications; speeding up reactions, purifying water, identifying disease and improving solar cells.

Reducing carbon emissions
Some of our scientists are using polymer science to help the planet. Dr Rob Dawson, for example, is developing polymeric materials that capture carbon dioxide from the gases that are released after combustion reactions. Meanwhile, Dr Ahmed Iraqi has been developing organic semiconducting materials that can be used in solar panels, and that are cheaper and easier to produce than established silicon versions.
Ground-breaking technology
Professor Anthony Ryan OBE is investigating the physical properties of polymers with Dr Olesksandr Mykhaylyk, using our new £2 million Soft Matter Analytical Laboratory – the first facility of its kind in the UK.

The lab’s X-ray source is as powerful as a synchrotron particle accelerator, which accelerates electrons to almost light-speed, and it can be used to study samples that are 100 times smaller than a human hair.

Molecular machines
One of the most exciting areas of nanotechnology revolves around ‘molecular machines’, which are molecules that convert chemical energy into mechanical forces and motion.

Professor Sir Fraser Stoddart, a former chemistry lecturer at the University of Sheffield, was one of three scientists awarded the Nobel Prize in Chemistry for his work in this field. He returned to Sheffield after winning his prize, to give a lecture and meet our staff and students.

Recently I’ve published papers on topics ranging from micro-meteorites in our Solar System to hydrogels we can use to store human stem cells. That is why I love polymer chemistry – the diversity of applications is remarkably broad if you have an open mind for both problems and opportunities.”

Professor Steve Armes
Steve is our Professor of Polymer and Colloid Chemistry. He’s published a staggering 600 research papers and is one of the department’s four Fellows of the Royal Society.

What does Steve teach?
Polymer and colloid science, and the industrial science behind paint, laundry, shampoo, sun cream and chocolate.
There are lots of things you can do with a chemistry degree – the case studies here are just a snapshot of where some of our graduates have ended up.

What does a career in chemistry look like?
Chemists make things. Some of the biggest employers of our students are pharmaceutical companies, where chemists develop new medicines, and consumer goods companies, where they make lots of the products you see on supermarket shelves. Graduates can also go into industrial chemical labs creating the chemicals and materials that make large-scale manufacturing possible.

The science jobs market is about more than working in labs though – big companies like Unilever and GSK need graduates who understand science to work in communications, market research and business development roles. Students on our Chemistry with a Year in Industry course are often offered jobs at the companies where they did their placement year.

If the lab bench is where you feel most at home, you could also work as a scientist at a university or research institute. Many of our MChem students build on their fourth year research project by staying with us to do their PhD.

What if I want to work outside science?
Sheffield is a World Top 100 University, and a good degree from a great university can take you far, whatever you want to do. We have graduates using their scientific minds in everything from finance to computer programming.

Lucy Stone
Degree: MChem Chemistry
Graduate role: Senior Account Manager, Notch Communications

While doing her chemistry degree, Lucy wrote for our student-run magazine, Resonance, which helped her get a job in marketing after graduation.

“As a chemistry student, I did lab placements at GSK and AstraZeneca but quickly realised that a career in the lab was not for me. However, I stumbled across a marketing agency that was looking for science graduates who had a passion for science communication, so I used my experience at Resonance to show my communications skills and managed to get the job!”

Matt Fazakerley
Degree: MChem Chemistry with a Year in Industry
Graduate role: Applications Scientist, Croda

Matt works for a speciality chemical company, where he is responsible for testing lubricant additives. He decided to pursue a job in the chemical industry after working for the pharmaceutical company AstraZeneca on his placement year.

“I like that my role allows me to have involvement with the full research and development chain, from contact with customers and involvement in the initial synthesis of new products through to the scaling up of products at the manufacturing plant.”
Jenna Spencer-Briggs  
**Degree:** MChem Chemistry  
**Graduate role:** PhD student, The University of Sheffield  
After her undergraduate degree, Jenna decided to stay in Sheffield to complete her PhD with Professor Simon Jones.  
“It was my undergraduate degree that helped me realise that research was the next step I wanted on my career path. Being at the cutting edge of science and surrounded by people at the top of their field is a great place to be. The undergraduate laboratories prepared me well for a synthetic chemistry PhD, teaching me all the skills and techniques that I use daily.”

Harry Lloyd-Gardner  
**Degree:** MChem Chemistry  
**Graduate role:** Graduate Programme, Deloitte  
Harry is applying the analytical skills he gained from his chemistry degree to work on the audits of some of the largest companies in the world, particularly in the energy sector.

“In chemistry has a reputation for being a tough subject and employers really value the technical knowledge, numeracy and analysis skills that chemistry students possess. In my intake of ten students at Deloitte, four students hold chemistry degrees!”

Ingrid Schiager Skinnarland  
**Degree:** MChem Chemistry  
**Graduate role:** Eyde Trainee, Eyde-cluster  
Ingrid came from Norway to study chemistry in Sheffield. After graduation, she returned home to join the chemical process industry as a graduate trainee.

“Choosing chemistry as a career path was easy as it was my favourite subject and I enjoyed understanding the underlying mechanisms and reactions of what we can observe. My time in Sheffield gave me a great chemistry degree, making it possible to be where I am today.”

Sara Whittaker  
**Degree:** MChem Chemistry  
**Graduate role:** Graduate Recruitment Consultant, Deloitte  
Sara is applying the analytical skills she gained from her chemistry degree to work on the audits of some of the largest companies in the world, particularly in the energy sector.

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Read more student stories at www.sheffield.ac.uk/chemistry
Life in Sheffield

Sheffield has got it all: groundbreaking annual festivals, galleries with links to the Tate and the V&A, a world-famous theatre scene, and the biggest indie cinema outside London. More than a third of the city is inside the Peak District National Park.

It’s a green, friendly, affordable and safe city where you’ll find incredible bars, restaurants, clubs, and sports facilities, both on and off campus.

Students’ union
Our students’ union has a thriving nightlife, countless cultural events, and hundreds of student societies. It is therefore not surprising that it has regularly been rated as the best students’ union in the country.

Accommodation
University accommodation is another great place to meet new friends when you arrive. We offer a quality range of room types, affordable rents and three fantastic locations to choose from - all in walking distance from campus.

Your accommodation includes your bills, free internet, and insurance. You’ll also benefit from Residence Life events, sports activities, and support from our Residence Mentors.

Top 5
for accommodation
for five years running
Times Higher Education Student Experience Survey 2014-2018
The UK’s best students’ union for the last 10 years running
Times Higher Education Student Experience Survey 2009-2018
What next?

Below you can work out where you’re up to in the process of deciding where to go to university, and see what you need to do next.

**June-September**
**Have you shortlisted some University Open Days?**
You can book online to see our department, accommodation, and all that the University and the city have to offer.

**September-January**
**Have you made your university choices?**
Once you’ve finalised your choices of university, you’ll be able to complete and submit your UCAS form. The UCAS code for the University of Sheffield is S18 SHEFD. Check the UCAS course search for more details and deadlines.

**November-March**
**Have you heard from us?**
Once we receive your UCAS form, we’ll send you an acknowledgement and carefully review your application. We’ll then make you an offer and invite you to visit the department on one of our post-offer open days.

**Early May**
**Have you made your final choices?**
UCAS requires you to make firm and insurance choices for any courses you applied for. The deadline for any applications you have made through UCAS Extra is later.

**Mid-August**
**Have you got your results?**
If you made Sheffield your firm choice and you have met the conditions of the offer, your place in the department will be confirmed. However, if you narrowly miss the conditions of your offer, you will be considered for any remaining places we have on our courses before they are released into clearing.
Entry requirements
For all of our MChem courses, we ask for the following grades at A level, or equivalent:
- AAB including Chemistry.
For the Study Abroad and Study in Industry courses, one of your A grades must be in Chemistry.

For our all of our BSc courses, we ask for the following grades at A level, or equivalent:
- ABB including Chemistry
All of our courses require at least grade B or 6 in GCSE Mathematics.

We can accept other qualifications including Scottish Highers, Welsh Baccalaureate, Irish Leaving Certificate, International and European Baccalaureates, Access and BTEC courses. A full list is given on the University of Sheffield’s webpages for undergraduate students: www.sheffield.ac.uk/undergraduate/apply.

English language requirements
If you have not already studied in a country where English is the majority language, it is likely that you will need to have an English language qualification. Visit www.sheffield.ac.uk/undergraduate/policies/englang.

Tuition fees
Tuition fees for UK, European Union and international students are given on the University of Sheffield’s webpages for undergraduates: www.sheffield.ac.uk/registration/ tuitionfees.

Disabled students
We are committed to responding effectively and appropriately to your support needs. Visit www.sheffield.ac.uk/undergraduate/policies/disability for more information.