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Welcome to the School

WHY STUDY CHEMISTRY AT BIRMINGHAM?

Chemistry is a dynamic subject that is constantly evolving to meet the needs of society. As chemists, you will develop a broad, multi-disciplinary outlook, which is vital if we are to help solve the problems we face in health care and medicine, sustainability and the environment.

Chemistry also impacts on all other areas of science, medicine and engineering. For example, we are helping biologists to understand the fundamental interactions and processes between the molecules that underpin life; indeed, no new medicine or pharmaceutical product would be developed these days without the expertise of synthetic and computational chemists. In collaboration with physicists and engineers we are making new materials which are improving our lives and changing the way we work. In this arena, Birmingham chemists are leading the development of new materials to provide for our ever increasing energy needs in an environmentally sustainable manner, as well as working with environmental scientists to understand global problems such as pollution and climate change. Choose Chemistry at Birmingham and you will have the opportunity to learn first-hand from researchers who are pushing back the boundaries of current knowledge in all of these important areas.

The School of Chemistry is home to many internationally leading researchers who are working in a wide range of areas including Nanoscale Chemistry, Functional Nanomaterials, Green Polymers, Chemical Biology, Hydrogen Storage and Fuel Cells, Synthesis of Therapeutic Molecules and Chemical Imaging. Importantly, our research influences our teaching, as our academics draw upon their scientific findings to inform their teaching and provide the cutting-edge content for our degree programmes.

PUTTING OUR STUDENTS FIRST

We strive to ensure our students experience an inspiring, engaging and supportive learning environment to equip them with the key skills needed to meet the challenges they may face in their futures. Our teaching is guided by the latest research and we employ many teaching innovations to enhance our students’ learning. We also provide a network of support, including individual organic, inorganic and physical tutors in the first two years of study, a dedicated personal tutor and welfare tutors, to support every aspect of our students’ experience. As a result, we are justifiably proud that our students regularly place us amongst the top Chemistry departments in the UK for student satisfaction.

OUR PROUD HISTORY AND EXCITING FUTURE

For over 100 years, the School of Chemistry has been at the forefront of chemistry teaching and research, developing generations of graduates whose careers have helped to shape our world. Our groundbreaking research has an international reputation for excellence, with a number of our researchers being awarded Nobel Prizes for their key contributions to increasing our understanding of chemistry to benefit society.

The School hosts the UK’s only Doctoral Research and Training Centre focusing on physical sciences in medical research, this £7 million Centre advances medical research and links the School of Chemistry with 18 industrial and five public sector partners.

The School of Chemistry has benefited from significant investment in its teaching and research laboratories, and analytical facilities. Funding has come from a wide range of sources to provide further state-of-the-art instrumentation, thus ensuring the department remains at the forefront of the application and development of chemical analysis.

The University’s new £40 million Collaborative Teaching Laboratory now hosts all chemistry laboratory teaching. This exciting new development has enabled us to take advantage of the latest technology and state-of-the-art equipment to offer our students an unrivalled laboratory learning experience to prepare them for their future careers.

In addition, work is due to commence on a new £80 million home for the School of Chemistry. This will house sector-leading research facilities to conduct even more world-leading research. These are indeed exciting times for the School of Chemistry.

If you would like any further information, please contact the Chemistry Admissions Team.

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Birmingham B15 2TT
Tel: +44 (0)121 414 4361
Email: ug-chemistry-admissions@contacts.bham.ac.uk
www.birmingham.ac.uk/chemistry
Degree programmes

Chemists at Birmingham adopt a broad, multidisciplinary approach to the subject. This is going to be vital if we are to solve the problems of the 21st Century in healthcare, medicine, sustainability and the environment.

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<th>Single Honours programmes</th>
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<td>Chemistry (MSci/BSc)</td>
<td>F101/F100</td>
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<td>Chemistry with Industrial Experience (MSci)</td>
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Major/Minor programmes

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<td>Chemistry with Pharmacology (MSci/BSc)</td>
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Foundation Year programme

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<td>Chemistry with Foundation Year</td>
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If you would like to study chemistry, whilst developing your language skills, then our Chemistry with a Modern Language programmes could be the right choice for you. Current languages available are: German, French, Spanish, Mandarin and Japanese.

If you are looking for a programme where chemistry is the main subject but where you can also explore another subject area within a second discipline, then our Major/Minor (two thirds chemistry, one third minor subject) programmes may be for you.

Chemistry with Pharmacology will give you a solid grounding in chemistry, whilst allowing you to also learn about the science of drugs and the toxic and therapeutic effects that chemical agents have on the body. This degree will be attractive to you if you wish to become a professional chemist in the pharmaceutical, biotechnology or life sciences industries.

Chemistry with Business Management will again give you the solid grounding of modern chemistry, whilst allowing you to apply the scientific and analytical tools developed in a science degree to understanding how business, finance and the economy work.

Our Chemistry with Foundation Year is designed for students who have not taken the right combination of subjects that are required to apply for Year 1 entry into any of our programmes, but have still performed well. It also caters for those with unconventional qualifications, mitigating circumstances or if you are returning to study after a period away. This programme is for UK/EU students, but if you are an international students, the Birmingham International Academy, also offer a Foundation Year (Engineering and Physical Sciences Pathway). It is ideal if you need to improve your academic or language skills before starting Year 1 of undergraduate study.

The School of Chemistry offers scholarships and prizes which seek to promote and reward academic excellence.

School Scholarships

Birmingham Chemistry offers a large number of entry scholarships to Home/EU students, up to a value of £5,000. To be eligible, students must place Birmingham Chemistry as their firm choice before their UCAS deadline. For the latest details, including eligibility criteria, please visit our scholarships website.

School Prizes

The School is committed to recognising sustained academic excellence and is proud to offer a range of named prizes to reward outstanding performance. These prizes are awarded to successful students at the end of each academic year.

University Scholarships

The University offers a range of scholarships including Music and Sports Scholarships for students who excel in these areas.

BP Scholarships

Students on eligible programmes (F101, F104 and F106) will be able to apply for the highly prestigious BP scholarship worth between £6,000–£9,000 (£3,000 per academic year, from year 2).
Outside your degree

As a chemistry student at the University of Birmingham, you will have many exciting opportunities to enrich and enjoy your time outside your studies.

We have a vibrant chemistry society, known as ‘ChemSoc’, run by chemistry students for all our chemistry students. The society organises many social activities, charity events, guest lectures, industrial trips and our Annual Chemistry Ball. This year it is led by Tamsin Durrant (MSci Chemistry).

Beyond ChemSoc, there are many opportunities within the University to broaden your experiences, develop new skills and meet new people. Our Guild of Students offers over 300 clubs and societies to join. Whether you’re interested in activities and games, academic assistance, campaigning, volunteering, food and drink, religious beliefs, music, performance or media, there is bound to be something that will appeal to you – and if there isn’t, then the Guild will give you the help you need to set up a group that matters to you.

If you enjoy sport, for fun recreation or as an elite athlete, then we have some of the best sporting facilities in the UK.

Music is also a distinctive part of life at the University of Birmingham. We have two symphony orchestras, a number of choirs, a jazz orchestra, symphonic wind band and brass ensemble for you to become involved with. We also have our own 450-seat Bramall concert hall.

‘ChemSoc is a really important part of our community here in the School of Chemistry. I’ve loved being involved in it’s events and this year I’m excited about making sure it goes from strength to strength!’

TAMSIN DURRANT, MSci Chemistry, ChemSoc President
Collaborative Teaching Lab

This outstanding new facility plays host to all our laboratory teaching. It has been designed to provide you with access to the very latest equipment and technologies to support your learning.

INVESTMENT
The CTL is an impressive £40 million investment by the University of Birmingham to revolutionise the School of Chemistry’s ability to deliver an exciting and engaging practical course.

NEW INSTRUMENTATION
£2.5 million of state-of-the-art equipment dedicated for Chemistry teaching, making the laboratory better equipped than the majority of research environments in both academia and industry.

ADVANCING THE CURRICULUM
We have developed an innovative, skills-based curriculum to turn you into highly skilled practical chemists.
NEW EXPERIMENTS
We are designing exciting new experiments in collaboration with our research groups in the School and with external industry collaborators.

TECHNOLOGY-ENHANCED LEARNING
A state-of-the-art audio-visual system has been installed, which allows the lecturers to interact in real-time with students on an individual basis, giving instantaneous help, advice and feedback.

INFORMAL BREAKOUT AREAS
Around the lab are areas for students and teaching staff to discuss ongoing experiments and associated theory.

PAPERLESS LAB WORK
We have produced online material to support before, during and after lab sessions to reinforce and support your learning.

INCLUSIVITY
The CTL contains height adjustable fume hoods, which can make practical chemistry more accessible to disabled students.
Where will your degree take you?

Our graduates are in high demand within many different industries. Many graduates progress to become professional scientists; however, the problem-solving and transferable skills developed on our programmes, means our graduates are highly sought after in marketing, law, accountancy, business, retail, public services, web design, computing and IT, publishing and investment analysis.

The employability of our students is paramount and it’s the reason why employability support and skills-training is embedded throughout all of our courses, right from the beginning.

Our degree programmes equip you with the subject-specific and generic skills that you will need when seeking employment. Generic skills-training is embedded throughout the course and here we develop skills that employers see as crucial: written and spoken communication skills, presentation skills, team working, interpersonal skills and problem solving.

By the time you graduate you will be able to analyse problems and interpret complex data, propose innovative solutions and design new molecules and materials to solve challenging societal needs. With high developed laboratory skills, ranging from meticulous analytical work and the measurement of physical properties to the ability to carry out multi-step synthetic procedures; you are primed to enter the workplace and bring new ideas to fruition.

Tailored careers support from Careers Network

We provide a wealth of opportunities to develop your career. From your first day at Birmingham to after you graduate, Careers Network is here to help you identify and achieve your individual career aspirations through its wide range of services.

Our dedicated careers team brings you information, advice and guidance tailored to your specific needs. Careers advisers offer one-to-one advice appointments where you can discuss your career plans and explore your options.

Our multi-award winning work experience team has dedicated internship officers to help you find the right work experience for you. Make the most of these opportunities and apply for our Work Experience Bursary Scheme, the Birmingham Internship Programme or one of our successful mentoring schemes.

‘I have very fond memories of my undergraduate days at Birmingham and the quality of teaching there was outstanding. I currently work at Nature Publishing Group in London and after spending a couple of years as an associate editor at Nature Nanotechnology, I have been made chief editor of Nature Chemistry.’

STUART CANTRILL (Chemistry and Bioorganic Chemistry BSc) Chief Editor, Nature Chemistry

Example employers

- AstraZeneca
- AkzoNobel
- GlaxoSmithKline
- BASF
- HSBC
- Ernst and Young
- Johnson Matthey
- Marks and Spencer
- Procter & Gamble
- RBS
- Reckitt Benckiser
- Severn Trent Water
An industrial year
You can choose to take a full year out in your third year, working in industry if you choose our MSci Chemistry with Industrial Placement programme (F104). We provided dedicated staff to help you identify the type of placement that best matches your career aspirations. Over many years now, our students have been placed at leading companies in the UK and throughout the world, and so we have the experience and contacts to help you secure a truly life-changing experience.

SIMON JOHNSON, 4th Year Undergraduate on our Chemistry with Industrial Placement programme (F104) talks about his placement.
I was thinking about a career in the chemical industry and so I choose the Year in Industry course. I was delighted to secure a placement at Roche in Switzerland, one of the world’s largest pharmaceutical companies. My project involved synthesising new drug molecules, working with some great people from all over the world. On our days off we went skiing in the Alps, holidayed in Italy, and much more. I really enjoyed my time and would recommend it to anyone. I learned so much, and got the chance to put what I’d studied in Birmingham into practice. And, from my Roche research I have my name on a patent!

‘My lab experiences at Birmingham, and my summer placements within the School, convinced me to pursue a career in chemistry. I am now working towards a PhD in synthetic organic chemistry at Oxford University, thanks to the training, preparation and guidance that I received at the University of Birmingham.’
JOHN ILUPEJU (Chemistry MSci) PhD student, University of Oxford

‘My time at Birmingham was excellent. I have developed transferable skills, gained academic knowledge and made friends for life. After my degree, I went on to complete a PGCE in science and am now teaching pupils in a large inner city school.’
SAM HOLYMAN (Chemistry with Business Management BSc) Teacher, Swanshurst School
Life in Birmingham

Birmingham is a modern and exciting city, famous for its historic, industrial past; it is also a centre of arts and culture, commerce and entertainment with a vibrant and diverse community. At Birmingham, you will benefit from the best of both worlds; a beautiful green campus, just a few minutes away from the heart of an exciting, busy city. With our very own railway station on campus, trains take just minutes to travel into the city centre.

**RETAIL THERAPY**
The city centre offers a first-class retail experience; from famous brands to independent stores, Birmingham has every shop you could ever need.

**FOOD**
Digbeth Dining Club is the perfect place for foodies to try all the mouth-waterting offerings of Birmingham. Check out Independent Birmingham (www.independent-birmingham.co.uk) for some Birmingham favourites and hidden gems. Birmingham is home to the famous Balti Triangle, a must-visit place for curry lovers.

**AFTER DARK**
As a thriving city for students and young professionals, when the sun sets, Birmingham has a vibrant nightlife and a huge selection of pubs, bars and clubs. As a student-friendly city, there are set student nights for every day of the week in Birmingham; with something for everyone.

**ART AND CULTURE**
For the culture vultures out there, Birmingham has something to suit all tastes; whether it be Old Masters, contemporary artists or performing arts. The city regularly hosts a variety of music and cultural festivals including the annual German Market.
MUSIC
Birmingham is full of different beats to suit all tastes, from large arenas and big names in music to smaller more intimate venues, where you can hear everything from new artists to old favourites.

LOCAL FAVOURITES
There is more to Birmingham than its city centre. You’ll find plenty going on just a short walk from our Edgbaston campus. A student favourite, Harborne is home to a number of bars, restaurants and cafes. Nearby Moseley and Kings Heath are buzzing with bars and live music to discover.

ACTIVE BIRMINGHAM
Stay active during your time at Birmingham by getting involved in the huge variety of opportunities on offer. There are numerous park runs, local teams including hockey, tennis and rugby. Immerse yourself in sport in one of the iconic venues including Edgbaston Cricket Ground, Villa Park and Alexander stadium.

LIFE ON CAMPUS
When you step onto campus, you are immersed in our historic red-brick buildings and glorious green spaces. You’ll find our Edgbaston campus both a peaceful and vibrant place to spend your time, whether it’s studying on one of the lawns, or enjoying a drink in one of the many cafes.

SPORTS AND FITNESS
Our sport and fitness centre opened its doors last year and features an exceptional range of quality facilities for everyone from beginner to elite athlete. It will be another iconic sporting venue for the city as the 50-metre pool and arena sports hall will host national and international events.

NEW FACILITIES
In 2017 we opened the doors to our state-of-the-art library, phase I of the Collaborative Teaching Laboratory (CTL) and a new halls of residence – Chamberlain in the Vale Village. The second phase of the CTL opened its doors to new students in September 2018, the Green Heart will be fully completed in 2019 but parts of it are already open and looking spectacular, and plans are also underway for a new Teaching and Learning building on campus.

THE GUILD
The Guild of Students represents all of the students at the University. The Guild offers support and advice to all students, delivers fantastic student nights and entertainment, and has over 300 student groups and clubs for you to choose from.
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. This is because our research is constantly exploring new areas and directions of study, some courses may be discontinued and new ones offered in their place.