Welcome

The Department of Chemistry at Warwick is a thriving community of academics, researchers, support staff and students. By joining our department, you too will quickly share in our enthusiasm for chemistry and its applications, from medicine through to renewable energy.

You’ll be inspired by our dedicated team of academics who, as world-leading researchers, use their expertise and enthusiasm for innovation and discovery.

You can also play a part in our diverse research through our high-quality comprehensive syllabus. Expect teaching that takes the best from both modern and traditional methods. What’s unquestionably modern is our high-specification, industry-standard synthetic laboratories. You’ll also use the latest spectroscopic and analytical instrumentation, and powerful facilities for computational chemistry.

To get the most out of Warwick, you’ll also want to consider what happens beyond the department. What you’ll find is a wealth of sports, learning and entertainment facilities, including Warwick Arts Centre, the largest outside London. Warwick also has a very active Students’ Union, which provides headline entertainment and has an impressive range of societies and sports clubs.

That’s just a summary of the world of discovery awaiting you here at Warwick. You can find out more by reading this brochure or visiting our website. I look forward to meeting you soon at one of our many campus Open Days.

Professor Alison Rodger
Head of Department

5th
Warwick Chemistry rated 5th best in UK*

* Source: Guardian University League Tables 2017
The University of Warwick

Warwick is one of the UK’s leading universities, consistently ranked within the top 10 Universities in the UK and top 50 Universities in the World.

Warwick was declared University of the Year by The Times and Sunday Times Good University Guide 2015 and has a growing population of over 23,000 students and over 5,000 staff. The success and reputation of the University of Warwick is attributed to excellence in research and teaching, strong links with business and industry, and a drive for impact and innovation.

The campus houses the nationally-recognised Warwick Arts Centre, a world-class venue for theatre and the arts and the largest of its kind outside London. The Warwick Students Union is one of the largest in the UK and has over 250 societies for students to choose from. The Sports Centre and Warwick Sport offer our students world-class facilities for swimming, tennis, climbing and fitness as well as over 70 different sports clubs to choose from. The University of Warwick also houses an up-to-date and innovative Library, an outstanding Careers Service, and a wide range of accommodation to support our students while they are with us.
Warwick is a dynamic and cosmopolitan campus university set in picturesque countryside, but with excellent travel links to Coventry, Leamington Spa, Warwick, Birmingham, and London.
Research

New graphene-based materials, synthetic cells for gene regulation, organic solar cells for portable electronics, and trailblazing developments in the fight against HIV.

These are just a handful of the breakthroughs made at Warwick.

We are a research-driven community with an enviable reputation for creating new knowledge. That research informs and contributes to our teaching, making it relevant and up to date.

All students on all degrees have the opportunity to contribute to cutting-edge research projects, working alongside academics at the forefront of their subjects and continually making groundbreaking advances. Practical work will be carried out in our state-of-the-art laboratory space and could be selected for publication in a chemical journal. Students on the MChem degrees have the greatest research component to their degree, with their final year being dominated by a research project.
Summer Research Projects

All students can take paid research internships through Warwick’s Undergraduate Research Scholarships Scheme (URSS). These projects are entirely optional, taken in the summer holiday (typically between years 2 and 3), provide a wonderful experience that is not formally assessed and are great fun.

Industrial placement opportunities are available worldwide. These take place during the summer break for a typical period of 3 months and qualify for ERASMUS support if carried out in Europe. They are organised either directly with industry, or through the IAESTE exchange network.

87% of our research is ‘world-leading’ (3*) or ‘internationally excellent’ (4*)

6th (equal) best UK research department*

* Source: REF 2014
Courses

Chemistry is central to solving some of the most pressing problems facing humanity, including climate change, renewable energy, and eliminating hunger and disease.

Most of our graduates enjoy the subject so much that they pursue it further. However, the analytical, numerical and logical reasoning skills that our courses develop mean that our graduates are in great demand across the entire spectrum of employment.

Chemistry (BSc and MChem)

Warwick’s BSc Chemistry degree provides training across all areas of the subject in an innovative department with world-class facilities. On top of a solid grounding in key areas, there is flexibility later in the course for you to tailor your module options to your own interests. If you’re inclined towards further study, our MChem degree opens up opportunities for a high-level research career.

At Warwick you benefit from strong research-led teaching and we encourage our students to take part in the Undergraduate Research Support Scheme, which involves undertaking cutting-edge research during vacations. Recent research projects have included studying the structure of graphene, and working on platinum anti-cancer drugs and novel anti-inflammatory drugs. As well as enriching your subject knowledge, a Chemistry degree will develop your analytical and problem-solving ability, alongside time-management, communication, presentation and numerical skills.

Classes in our state-of-the-art undergraduate labs will form an integral part of your learning with on average 10 hours of lab work per week, counting for around 25% of your final degree mark. Your first and second years will develop understanding of core areas of Chemistry including Organic, Inorganic and Physical as well as a Mathematics component. Final-year BSc students can choose optional advanced Chemistry modules or modules from other science or language departments and Warwick Business School.

For MChem students third-year work includes an extended lab, or an industrial or overseas placement. You can also select optional modules from across the science faculty, or from the Language Centre or Warwick Business School. In your final year you will complete an individual project on a topic of your choice (worth 50% of the year’s mark) in collaboration with one of our academics, and you can select optional modules to support your choice of research project.
Chemistry with Medicinal Chemistry (BSc and MChem)

This degree provides a good foundation in Chemistry coupled with specialist knowledge of medicinal chemistry. You will explore the process of medicinal drug discovery, starting from the initial concept of a new product, to the discovery stage, through clinical trials, scale-up and finally production. In addition to research-led teaching from top academics in their field, you will benefit from external lectures given by pharmaceutical industry leaders. You will also hone your analytical and problem-solving abilities, time management, communication, presentation and numerical skills, all of which are highly valued by employers.

Classes in our state-of-the-art undergraduate labs will form an integral part of your learning experience with on average 10 hours of lab work per week, counting for around 25% of your final degree mark. Your first and second years will develop your understanding of core areas of Chemistry including Organic, Inorganic, Biological/ Medicinal and Physical as well as a Mathematics component. BSc students will have considerable flexibility in their final year to select from advanced topics in Chemistry or Life Sciences.

Third-year work for MChem students includes an extended lab, or an industrial or overseas placement. You can also select optional modules from across the science faculty, but in particular from Life Sciences. In your final year you will complete an individual project on a topic of your choice (worth 50% of the year’s mark) in collaboration with one of our academics, and you can select optional modules to support your choice of research project.

“Warwick Chemistry ranked number 1 amongst all Russell Group Universities for teaching, feedback, and personal development.”

Source: National Student Survey 2015
How will I learn?

**Years 1 and 2**
A combination of about ten lectures, one tutorial, one workshop and 1-2 days per week in the laboratory.

Your first and second years will develop your understanding of core areas including some medicinal chemistry where you’ll benefit from strong research-led teaching. Classes in our state of the art undergraduate labs will form an integral part of your learning.

**Year 3**
Terms 1 and 2 – A combination of lectures, tutorials and workshops. Term 3 – Lab work. Either extended labs at Warwick or a placement either overseas or within industry.

Final-year BSc students can choose optional advanced Chemistry modules or modules from other science or language departments. You’ll also have the opportunity to embark on an extended lab or industrial or overseas placement.

**Year 4**
Research project orientated, supported by optional lecture modules. In your final year you will complete an individual project on a topic of your choice. This is worth 50% of the year’s mark and takes place in collaboration with one of our academics.

For students on the Chemistry with Medicinal Chemistry degree streams, guest lecturers, mainly from the pharmaceutical industry, will provide expertise and knowledge and in your final year you will have the flexibility to select from advanced topics in Chemistry or Life Sciences.

We encourage our students to take part in the Undergraduate Research Support Scheme, which involves undertaking cutting edge research, during vacations.
How will I be assessed?

In the first two years of your degree, there will be on average 10 hours of continually assessed lab work per week, counting for around 25% of your year mark, other material is assessed by a combination of marked assignments and unseen exams. The year 3 lab work or placement also counts for around 25% of that year’s mark, again other material is assessed by a combination of marked assignments and unseen exams.

For MChem students, the research project counts for 50% of the 4th year (assessed by a combination of a written report, oral interview and presentation) with the optional modules (assessed by a combination of presentations, written work and unseen exams) making up the final 50% of that year.

* BSc only
** Compulsory for MChem
† Options from other departments available
Placements

Placements are a great way to enhance a degree. Warwick students have the option of industrial placements throughout the UK or academic placements across Europe or in Singapore or Australia.

Students are expected to have achieved a high 2:1 in their exams and show excellence in laboratory work in order to be accepted onto a placement.

3-6 month industrial or academic placement (MChem only)

Placements may be taken in industry or at an overseas university/ research institute between April and September in Year 3. Students taking this option will take the usual lectures, tutorials and workshops at Warwick during the first two terms, sitting their exams in March. The placement replaces the laboratory classes that the students at Warwick take during the summer term.

Our current partner universities are:

Europe:
- Barcelona, Spain
- Chalmers, Sweden
- Modena, Italy
- Toulouse, France
- Wien, Austria
- Eindhoven, Netherlands

Overseas:
- Monash University, Australia
- University of Tasmania, Australia
- Nanyang Technical University, Singapore

Funding support is available either via the Erasmus scheme (for European placements) or from the department (for overseas placements, for which ERASMUS funding is not available).

During the placement, students must complete a 5000-word report which is submitted at the beginning of Year 4. They also produce a poster based on their project work; a poster presentation session is held during the first term of Year 4. The supervisor at the host university or industry will write a report assessing the student on their attendance, enthusiasm and commitment.

These three components make up the final grade for the placement, worth around 25% of the year, which counts towards the final degree result. The words ‘with Professional Experience’ are added to the degree title.

3 month industrial or academic placement (BSc only)

Placement opportunities are available worldwide at one of our exchange-partner universities, or industry. Funding support is available via the Erasmus scheme. Placements are taken between April and June and replace the laboratory classes that the students at Warwick take during the summer term.

Students must write a 5000-word project report during their placement; their performance will also be assessed by their supervisor at the host institution. These two components make up the final grade for the placement, worth 25% of the year, which counts towards the final degree result.
“Choosing to go on a placement abroad is the best thing I have ever done. I grew in confidence during my time at Monash - both in my skills as a Chemist and also in a wider sense. Spending time at Monash has given me the chance to travel, explore and have many new and exciting experiences. A placement abroad can be challenging but it is so rewarding and allowed me to step outside my comfort zone and achieve things I would never have thought possible before I went.”

Gaby Newson
Placements

12 month industrial placement with integrated distance learning (MChem only)

The industrial placement replaces Year 3 of study and aims to provide students in developing a range of interactive skills as well as gaining professional experience in an industrial environment. The actual day-to-day running of the placement will be defined by the industrial supervisor but will be designed to be of maximum benefit to both you and the company, ensuring that your professional development will encompass as wide a variety of experience as possible in the context of the placement.

During the placement, students follow three modules studied by distance learning. They must also complete project work that is assessed by a written literature review, and an oral presentation about their project followed by an interview during the first term of Year 4. The industrial supervisor will write a report assessing the student on their attendance, enthusiasm and commitment.

These components make up the final grade for the placement, worth 75% of the year, which count towards the final degree result. The words ‘with Industrial Training’ are added to the degree title.

12 month industrial placement Intercalated Year (BSc or MChem)

It is also possible to carry out a 12 month placement via an ‘Intercalated Year’. The placement should involve working for a company, institution, or organisation related to chemistry, allowing students to gain valuable professional experience, without formally counting towards the final degree result. The words ‘with Intercalated Year’ are added to the degree title.

Placement opportunities are available as advertised by UK/worldwide industry. Industrial placements in Europe qualify for ERASMUS support.

“The greatest source of inspiration for my future career came from my academic placement to Eindhoven. It exposed me to a plethora of opportunities that I could pursue when I graduate, such as simply working abroad now that I know how enjoyable and feasible it can be. In addition to gaining research experience at a top international university, I also cherish the wealth of support I got from my supervisors and the insight I gained into their working environment. Establishing strong friendships abroad and getting to explore Europe more conveniently makes this placement the highlight of my university experience and I would strongly endorse this option for upcoming third years.”

Huda Shaikh
studying at Eindhoven University of Technology (TU/e)
Career pathways

Chemistry is an extremely versatile degree that will allow you to develop a range of practical and theoretical skills highly valued in the world of both work and academia.

The ability to analyse and interpret data, anticipate and solve complex problems and communicate information concisely is highly valued in Chemistry graduates. Our programmes offer a range of options to work and/or study abroad for 3, 6 or 12 months, for example at a pharmaceutical company or at Monash University in Melbourne, Australia.

Why Warwick?

Our graduates are the third most often targeted by the UK’s top graduate employers.*

In the QS World University Rankings, Warwick is ranked in the top 20 in the world for employer reputation.**

Warwick is highly ranked in the major university league tables: 6th overall in the Times and Sunday Times (September 2015); 5th in the Guardian league table (May 2016) and 8th in the Complete University Guide (April 2016).

What do Chemistry graduates do?

Jobs of recent graduates include: Flavour Research Scientist, Trainee Process Chemist, Sixth Form Chemistry Teacher, DNA Analyst, Junior Programmatic Trader, Risk Analyst, Copywriter, Junior Research Executive, Real Estate Analyst, Software Developer.

Sectors where graduates were working include: Chemical/Materials Industry, Pharmaceuticals, Banking and Finance, Accountancy, Marketing, Digital Media, Teaching, Building and Construction, Retail.

Chemistry career destinations: 2014 graduates

Further Study
- PhD: 63%
- MSc: 23%
- PGCE: 9%

Science and Pharmaceuticals, Healthcare: 42%
- Food and Beverage: 10%
- Finance, Business and Management: 15%
- Marketing and Advertising: 8%
- Teaching and Education: 11%

* Graduate Market 2016, research conducted by High Fliers Research
** QS World University Rankings 2015/16
Warwick’s International Community

International students make up over a third of the student population at Warwick, and are supported by our excellent Office for Global Engagement, dedicated to providing services such as application advice, visas and immigration advice, and a comprehensive Welcome to Warwick programme for incoming students.

International students can also obtain language support through our Centre for Applied Linguistics, including a free, ‘In-sessional’ English Programme to improve English language ability during their degree course study.

“When I first came to Warwick, I was quite anxious about how it would be both studying, and living in a foreign country. I was worried about how I would cope academically having taken 2 gap years between my A Levels and starting university. Thankfully I found the integration easier than expected, with great support from the academic team and a welcoming bunch of course mates. The teaching staff here are passionate in their work, with some truly exceptional lecturers. The administrative staff is top quality too, helping our study experience flow unbelievably smoothly. There is a great balance here between studies and pursuing interests. There is a society here for basically every hobby and interest group. It’s been great fun being part of the cast and crew in the Singapore Society Musical, and representing the university in Bridge matches for 2 years so far. It has been a fantastic, holistic experience.”

Zach Chu
What’s next?

Application
We do not typically interview applicants. Offers are made based on your predicted and actual grades, along with your personal statement. Occasionally, some applicants may be interviewed, for example candidates returning to study or those with non-standard qualifications.

Typical offers:

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<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Typical offer</th>
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<tbody>
<tr>
<td>F100</td>
<td>BSc Chemistry</td>
<td>A level: AAB</td>
<td>A level: AAA</td>
</tr>
<tr>
<td>F121</td>
<td>BSc Chemistry with Medicinal Chemistry (3 Years)</td>
<td>IB: 36 points</td>
<td>IB: 38 points</td>
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<tr>
<td>F105</td>
<td>MChem Chemistry</td>
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<tr>
<td>F125</td>
<td>MChem Chemistry with Medicinal Chemistry (4 Years)</td>
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Open Days
We take into account individual circumstances when making our offer and consider it very important that you have first-hand experience of where you intend to study. We strongly advise candidates to attend one of our Departmental Admissions Days, which are reserved for current applicants. Offers are normally made before candidates have attended a Departmental Admissions Day. For information on our main University Open Days and other opportunities to visit us see go.warwick.ac.uk/opendays. Candidates living outside the UK are welcome to visit at any time.

Access Courses
Access to HE Diploma (QAA-recognised) including appropriate subjects with distinction grades in level 3 units. Candidates must meet essential subject requirements. Please contact the Department of Chemistry before application.

We welcome applicants with non-standard qualifications or relevant experience, and applicants with other internationally recognised qualifications.
Warwick and local area

While you’ll enjoy the benefits of our great campus facilities, it’s definitely worth exploring a little further afield. Whether you’re a country-lover or a confirmed urbanite, our campus is perfectly positioned to give you the best of both worlds.

Warwick is located in central England, making it easy to reach by road, rail or air. Public transport links are plentiful, with bus stops across campus, train stations a short distance away and a national coach service operating close to our campus.

- 1 hour to London by train
- Nearest airport: Birmingham International, 20 minutes
- Nearest train: Coventry

For detailed versions of our campus map, please visit warwick.ac.uk/maps
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Getting in touch

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