The Glasgow experience

The University of Glasgow is one of the world’s top universities. Since opening our doors over 550 years ago, we’ve dedicated our time to inspiring great minds throughout history, from the father of economics, Adam Smith, to the pioneer of television, John Logie Baird.

Here are just a few reasons why our students choose to join us:

- Established in 1451, fourth oldest University in the English-speaking world
- 23,000 students from 130 countries
- Member of the prestigious Russell Group of leading UK research universities
- 1st in the Russell Group for student satisfaction (International Student Barometer 2012)
- One of the UK’s top 3 best-value universities (Student Value for Money Report 2012)
- In the UK’s top 6 for career prospects (The Guardian University Guide 2013)
- Over 100 clubs and societies, from karate to student theatre
- Two student unions with GUU being voted UK Student Union of the Year
- One of the best libraries in Europe, open 361 days of the year from 7.15am-2am with
  2.5 million print books and journals.

Find out more about the Glasgow experience:

- Get our students’ views on campus life: www.glasgowgen.net
- Chat to one of our current students: www.glasgow.ac.uk/studentnetwork
- Email us direct: student.recruitment@glasgow.ac.uk

Open days and student visits

www.glasgow.ac.uk/visit

We offer many opportunities for you to visit us and find out about the University.

- **Open days:** If you’re interested in visiting the University before you apply for a specific programme, we’d be happy to welcome you to one of our Open Days held in June, September and October.

- **Applicants’ Visit Day:** Once you have applied to and received an offer from the University, you will get another chance to visit us on our Applicants’ Visit Day in March.

- **Afternoon visits:** If you can’t make either of the above we will be running three afternoon visits throughout the course of the year.

- **Plan your own visit:** You are welcome to visit the University at a time that suits you, to gather information and see the sights of our beautiful campus in your own time.

How to apply

www.ucas.com

You must apply through the Universities & Colleges Admissions Services (UCAS), tel: 0871 468 0468 or visit their website.
Chemistry

Chemistry is the science of molecules and materials. It is a science with a well-developed theory base which is central to modern life and which continues to make advances in, for example, new materials, antibiotics, semiconductors and trace analysis.

Additional accreditation (see panel for details)

Programme structure

Year 1
The topics covered include
- the periodic table and main group chemistry
- transition metal chemistry
- organic chemistry
- chemical kinetics
- theoretical chemistry
- chemical energy changes
- aqueous equilibria and pH
- macromolecules.

You will also study two other subjects of your choice in year 1 – www.glasgow.ac.uk/ug/aboutdegrees.

Year 2
Your second year builds on the first-year course and involves the following topics:
- molecular thermodynamics
- organic stereochemistry
- quantum mechanics, chemical bonding and symmetry
- organometallic chemistry
- main group chemistry
- enols and enolates
- spectroscopy
- kinetics
- aromatic chemistry
- coordination chemistry
- organic synthesis
- biophysical chemistry
- applied organic chemistry.

You will also study one or two other subjects in year 2 – www.glasgow.ac.uk/ug/aboutdegrees.

Years 3, 4 and 5
If you progress to Honours (years 3 and 4) you will study advanced topics in chemistry including aspects of synthetic methods, nanoscience, catalysis, quantum mechanics, biomolecular interactions and transition metal chemistry. In your final year you will undertake a research project at the frontiers of the subject.

You can take Chemistry as an MSci degree which includes an additional work placement year in the UK or overseas, between the third and final years of the degree.

Special feature
We have two interactive teaching units that concentrate on ethical, environmental and financial issues in chemistry, designed to help you develop teamwork and presentation skills.

Partnership and industry links
The ScotCHEM initiative links more than 180 chemistry research teams based at Scottish universities, including Glasgow, to pool resources in a world-class research collaboration.

Our international links
The MSci degree offers the opportunity to spend a year doing research in a European university or a work placement beyond the UK before returning for your final year of study.

Career prospects
We offer employability and professional development training to our Chemistry students in years 1 and 2 of their degrees.

Our graduates are employed as chemists working in research, process development or analysis, as well as in management, marketing, environmental control, patents and finance.

Our recent Chemistry graduates have been employed by EDF Energy, Quotient Clinical, Reckitt Benckiser, Sterling Medical Innovation, and Synergy Outsourcing, among many other companies.

You may also be interested in
- Chemical Physics
- Chemistry with Medicinal Chemistry

Degrees and UCAS codes

BSc (Hons) (F100) – four years; MSci (F101) – five years; MSci with work placement (F102) – five years

Accreditation
These programmes are accredited by the Royal Society of Chemistry.

Joint Honours
At Honours level, Chemistry can be taken as a Single Honours or as a Joint Honours degree with Mathematics. See www.glasgow.ac.uk/ug/chemistry for a full list of Joint Honours combinations and UCAS codes.

Entry requirements

BSc, MSci
Highers: AAAA or AAABB (including two science subjects) at first sitting = unconditional offer. Applicants who achieved AAAB or AABB (including two science subjects) at their first sitting WILL receive an offer from the University. This offer may be conditional (on second sitting results) or unconditional, depending on how many applications are received from students who have attained these grades. Additional offers, either conditional or unconditional, MAY be made to applicants who achieved ABBB and AABB (including two science subjects) at their first sitting. A decision re these applications will be made in March 2014 once all applications have been reviewed. Applicants who receive an offer conditional on second sitting results will be required to study Advanced Highers in relevant subjects as an integral part of their conditional offer.

A-levels: AAB, including two science subjects. A Level at B or above in Chemistry.

IB: A minimum of 34 points is required to be considered for an offer. Actual offers will specify subjects and grades to be attained at Higher Level.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements

Advanced entry
If you have exceptional A-level or Advanced Higher grades it’s possible to follow a faster route, which allows you to complete a standard BSc (Hons) or MSci degree in one year less than usual – see www.glasgow.ac.uk/undergraduate/degrees/advancedentry

Glasgow International College
For international students entry to this programme is supported by courses from Glasgow International College - www.glasgow.ac.uk/gic

E: student.recruitment@glasgow.ac.uk
W: www.glasgow.ac.uk/ug/chemistry
Chemistry with Medicinal Chemistry

This degree programme provides a thorough training in the main branches of chemistry and also concentrates on the study of areas of medicinal chemistry and pharmacology most relevant to carrying out research with medicinal and other biologically active compounds.

Students in work/ study six months after finishing
Additional accreditation (see panel for details)

90%  YES

Data published by Unistats (unistats.direct.gov.uk) January 2013.

Programme structure

Year 1
The topics covered include:
- the periodic table and main group chemistry
- transition metal chemistry
- organic chemistry
- chemical kinetics
- theoretical chemistry
- chemical energy changes
- aqueous equilibria and pH
- macromolecules.

You will also study two other subjects of your choice in year 1 – www.glasgow.ac.uk/ug/aboutdegrees.

Year 2
Your second year builds on the first-year course and involves the following topics:
- molecular thermodynamics
- organic stereochemistry
- quantum mechanics, chemical bonding and symmetry
- organometallic chemistry
- main group chemistry
- enols and enolates
- spectroscopy
- kinetics
- aromatic chemistry
- coordination chemistry
- organic synthesis
- biophysical chemistry
- applied organic chemistry.

You will also study one or two other subjects in year 2 – www.glasgow.ac.uk/ug/aboutdegrees.

Years 3, 4 and 5
If you progress to Honours (years 3 and 4), you will choose courses from a list of topics which includes anticancer compounds, antibiotics, analgesics and antivirals. In the final year you will undertake a project involving research in chemistry with medicinal or pharmacological applications, for example, making selected compounds and testing them for specific biological activity.

You can take Chemistry with Medicinal Chemistry as an MSci degree which includes an additional placement year. Placements are usually in the UK, but can also be taken overseas. They happen between third year and the final year of the degree.

Special feature
A lecture course on industrial medicinal chemistry is presented by research workers from a pharmaceutical company on topics such as drug/receptor interactions and the design, synthesis, transport and metabolism of important drugs.

Partnership and industry links
The ScotCHEM initiative enables more than 180 chemistry research teams based at Scottish universities, including Glasgow, to pool resources in a world-class research collaboration.

Our international links
The MSci degree offers the opportunity to spend a year doing your placement in a European university before returning for your final year of study.

Career prospects
Our graduates are employed in research in the pharmaceutical industry, forensic science and related areas. Many graduates also go on to postgraduate study or directly into employment in the chemical industry.

We offer employability and professional development training to our Chemistry students in years 1 and 2 of their degrees.

You may also be interested in:
- Chemical Physics
- Chemistry
Chemical Physics

Chemical Physics is concerned with electrons, nuclei, atoms and molecules in all states of matter, and how they interact with their environment. This degree programme covers the area in which chemistry and physics overlap.

Programme structure

Years 1 and 2
Initially you will study chemistry, physics and mathematics. In the following year you will study chemistry and physics.

Years 3, 4 and 5
If you progress to Honours (years 3 and 4) you will study:

- in physics: a range of courses including quantum mechanics, thermal physics, solid state physics, waves and diffraction, electromagnetism, nuclear and particle physics, and atomic systems.
- in chemistry: various aspects of physical and inorganic chemistry including catalysis, solid state chemistry, coordination chemistry, quantum mechanics and symmetry, spectroscopy, thermodynamics and diffraction.

You will gain an in-depth knowledge of chemistry, physics, mathematics and computing, and will be able to tackle most problems in chemistry and physics. In the final year, you will work closely with a member of staff on a research project.

You can take Chemical Physics as an MSci degree which may include an additional placement year. This is normally spent doing research in industry or some other organisation such as a research institute like CERN or an academic laboratory. Placements may be in the UK, but are often taken overseas. They happen between third year and the final year of the degree.

Our international links
The Schools of Chemistry and Physics & Astronomy have strong international links across a wide range of research fields.

Career prospects
Our graduates are employed in industry, commerce, government research and education. Many graduates proceed to research leading to a higher degree.

You may also be interested in
- Chemistry
- Chemistry with Medicinal Chemistry
- Physics/Theoretical Physics
- Physics with Astrophysics

‘My course has amazing teaching, fantastic facilities and the experience is one I am never going to forget.’
Julia Kennedy, Chemical Physics student

Degrees and UCAS codes
BSc (Hons) (F335) – four years
MSci (F322) – five years
MSci with work placement (F320) – five years

Accreditation
These programmes are accredited by the Institute of Physics.

Entry requirements
BSc, MSci
Highers: AAAA or AAABB (including two science subjects) in first sitting = unconditional offer.

Applicants who achieved AAAB or ABBBB (including two science subjects) at their first sitting WILL receive an offer from the University. This offer may be conditional (on second sitting results) or unconditional, depending on how many applications are received from students who have attained these grades.

Additional offers, either conditional or unconditional, MAY be made to applicants who achieved between ABBB and AABB (including two science subjects) in first sitting = unconditional offer.

Applicants who achieved AAAB or ABBBB (including two science subjects) at their first sitting WILL receive an offer conditional on second sitting results or unconditional, depending on how many applications are received from students who have attained these grades.

You do not have to take any specific subjects in highers but having physics and chemistry is highly recommended. Applicants who achieve AAAB or ABBBB (including two science subjects) at their first sitting WILL receive an offer conditional on second sitting results or unconditional, depending on how many applications are received from students who have attained these grades.

Applicants who achieved AAAB or ABBBB (including two science subjects) at their first sitting WILL receive an offer conditional on second sitting results or unconditional, depending on how many applications are received from students who have attained these grades.

For a full list of alternative qualifications please see www.glasgow.ac.uk/undergraduate/entryrequirements.

E: physics-ugadmissions@glasgow.ac.uk
W: www.glasgow.ac.uk/ug/chemicalphysics
The city of Glasgow

- The UK’s 3rd largest city and one of the world’s top student cities (QS Best Student Cities 2012)
- Lively nightlife with more than 700 bars, pubs and nightclubs and 7 cinemas, including the tallest cinema in the world
- More than 20 museums and art galleries, including Kelvingrove Art Gallery & Museum and the Gallery of Modern Art
- Known as ‘dear green place’ with over 90 parks and public gardens
- Host of the MOBO awards x 2 plus over 10 different festivals each year
- UK’s first UNESCO City of Music, host to around 130 music events every week
- Largest retail centre in the UK outside London with everything from high street favourites to independent and vintage stores
- Commonwealth Games host 2014
- Excellent sports facilities including wall climbing venues, indoor and outdoor ski slopes and the Sir Chris Hoy Velodrome.

‘Glasgow is one of Britain’s urban gems.’
James Bainbridge, Author, Lonely Planet’s Study Glasgow

Follow Glasgow on Facebook, Twitter and YouTube: www.glasgow.ac.uk/interact

Discover the city with your free Glasgow App. Search ‘Glasgow’.