University of Strathclyde Glasgow

DEPARTMENT OF PURE & APPLIED CHEMISTRY

Forensic & Analytical Chemistry

www.strath.ac.uk/science/chemistry/

Use your passion for chemistry to help bring justice to victims of crime, or preserve the health of people and environments around the world...

The prestigious MChem Forensic & Analytical Chemistry degree at the University of Strathclyde is taught by forensic scientists and world leading chemists. This fascinating course provides graduates with a comprehensive education in chemistry and forensic science, opening doors to an exciting array of career opportunities.

One of the main skills of a forensic scientist is to form and present reasoned judgements on the basis of reliable evidence. They may be painstakingly analysing drugs or explosives from a crime scene in order to contribute to successful prosecution or defence. Or testing the safety of water supplies to protect the health of thousands of people who depend upon it. The lives of many people can be greatly impacted by the vital work that is performed by forensic and analytical chemists, and they have a tremendous responsibility to get the science right.

Here at Strathclyde's Department of Pure and Applied Chemistry, we pride ourselves on our high-quality teaching on this five-year, undergraduate Masters degree.

The University of Strathclyde's Centre for Forensic Science is rated 2nd overall in the UK*. The Department of Pure and Applied Chemistry attracts the largest annual intake of undergraduates in Scotland as a result of the excellence of our teaching, the flexibility of our courses, the opportunities to specialise, as well as our graduate employment prospects.

The University of Strathclyde, home to the Centre for Forensic Science (CFS), has provided degrees in forensic science for longer than any other university in the United Kingdom, and was amongst the first in the world to do so. The CFS is recognised internationally as a centre of excellence in forensic science education, research and practice . Our staff are extensively engaged as expert witnesses and consultants in the UK and internationally.

Added to the mix is on-going investment in buildings, laboratories and equipment (over £12M in recent years) and a vibrant student social life, helped by the Andersonian Chemical Society, one of the longest established student societies in the UK.

Broaden your horizons and gain invaluable professional experience through a 12 month paid industrial placement or a research or Knowledge Exchange placement

How is the course structured?

At the beginning of your degree, you will be taught alongside students studying other chemistry degrees, giving you experience across all of the fundamental areas of Chemistry. During the early years it is possible to transfer between chemistry courses as you discover new areas of the science, as long as your exam results are satisfactory.

Year 1: You will be given a solid grounding in disciplines at the core of Forensic and Analytical Chemistry. You will undertake foundation courses, consisting of the fundamentals of Chemistry, Mathematics and either Biology or Physics. You can also choose Forensic Science and other courses from across the University. Both theory and practical skills are taught as well as generic skills such as IT, communication, group work and safety awareness.

Years 2 & 3: You spend more time on practical laboratory work and the core discipline of Chemistry is taught in more depth, along with specialist classes related to forensic trace analysis, drugs and analytical chemistry.

Year 4: Industrial Placement: During your fourth year you will undertake either a 12 month paid industrial placement (IP) or a research or Knowledge Exchange placement within our Chemistry Clinic. These placements can take place in the UK or abroad, giving you the opportunity to gain valuable work experience, make crucial contacts and even potentially earn a realistic salary. It is an experience that can truly broaden your horizons in many senses and make a real impact on the professional and personal outlook of students. The University of Strathclyde's IP scheme has been running successfully for more than 25 years, so we have excellent links with employers and a tried and tested support network in place.

Year 5: You will attend specialised taught classes, including DNA analysis, toxicology, and process analytical chemistry. A large part of your time will be devoted to a practical research project in the chemistry discipline of your choice.

Check out some of our students working in our Chemistry Clinic by visiting:

https://www.strath.ac.uk/science/chemistry/chemistryclinicvideo/

Where can this course lead you?

The real potential of the course, and the reason why it is so highly regarded and sought after, is that it covers analytical chemistry in all its forms. The course offers exposure to organic and inorganic chemistry, as well as a wide range of analytical instrumentation used in industry.

This degree qualifies graduates as an 'all round' analytical chemist and forensic scientist, opening doors to a broad spectrum of exciting career opportunities.

This course is truly unique, as it is the only UK degree that has achieved professional accreditation from both the Royal Society of Chemistry and the Chartered Society of Forensic Sciences – a testament to the high standards and scope of its curriculum.

You may seek opportunities in the field of forensic chemistry. This may involve you working alongside police forces, crime scene officers and pathologists to carry out painstaking scientific investigations and testing, presenting your findings in court in order to contribute to successful prosecution or defence. Opportunities also lie in analytical chemistry, including the analysis of foodstuffs, water supplies, the environment and industrial materials. These areas of work are becoming increasingly vital to society, protecting our health and preserving the global environment.

Did you know?

MChem Forensic & Analytical Chemistry is the only UK undergraduate Forensic degree to be accredited by two independent professional bodies – the Royal Society of Chemistry and The Chartered Society of Forensic Sciences

"Annually, the laboratory receives over 150,000 forensic evidence submissions, which are cases of alleged controlled substances, firearms evidence and criminalistics evidence from homicide, rapes and other serious crimes. I oversee 350 laboratory personnel with approximately 200 criminalists and 50 detectives.

The work is extremely challenging but can be equally rewarding when you see the effect your efforts can have on an investigation or trial. The quality of the science at Strathclyde has been a tremendous asset to me here at NYPD. When you get a degree from Strathclyde, you get a degree that means something."

Graduate snapshot: Scott O'Neill, Deputy Director of the Police Crime Laboratory at the NYPD

Did you know?

Dr Henry Faulds, a pioneer of the identification of people through their fingerprints, graduated with a physician's licence from Anderson's University (as the University of Strathclyde was then called). He published a paper in the journal Nature on the potential of fingerprint evidence as early as 1880.

Staff profile: Professor Angela Gallop

Professor Angela Gallop, Strategic Director of the Centre for Forensic Science at the University of Strathclyde has been a practising forensic scientist for over 40 years. She is renowned for setting up and running full scale forensic laboratories (including LGC Forensics - the largest forensic provider in the UK), and for establishing and personally directing the scientific teams which have helped to solve many of the UK's most complex and intractable criminal cases. These include, for example, Rachel Nickell, Damilola Taylor, Stephen Lawrence and the Coastal Path Murders.

Amongst other things, Angela is also a Past President of the Chartered Society of Forensic Sciences, and sat as a Commissioner on the recent independent Parliamentary Commission into the Future of Policing.

The Centre for Forensic Science is the oldest, and most respected teaching centre for forensic science in the UK. Angela is building on this impressive base to create a Centre for Advanced Forensics where students learn not only the basics of forensic science, but how to combine these in elegant strategies to help solve even the most difficult of cases.

With this new level of expertise available independently within Scotland, the Centre will also provide second opinions to lawyers and police alike to help ensure that offenders are identified and prosecuted, and the courts reach just and sustainable verdicts.

In this way, Strathclyde will continue to stand apart from other teaching institutions, giving students a real and deep understanding of operational forensics to the highest level. At the same time, it will provide a valuable independent resource for law enforcement and criminal justice within Scotland.

Studying, working and living in Glasgow

The University of Strathclyde campus is situated in the heart of Glasgow, a vibrant, multi-cultural city with an exciting social scene, great transport links, and many part-time employment prospects.

Glasgow has a long reputation as Scotland's largest, friendliest and most cosmopolitan city. You will find beautiful architecture around every corner and activities to suit every taste.

You can enjoy a vast array of places to eat out and shop, from high street names to off-beat boutiques; and revel in legendary nightlife, with a huge selection of bars and clubs to choose from. Glasgow is home to an eclectic mix of cutting-edge music, with over 100 gigs taking place every week.

There are more than 20 incredible museums, galleries and science centres scattered across the city, and best of all, most of them are completely free!

The city is also home to numerous theatres, cinemas, Scottish Opera, BBC Scottish Symphony Orchestra, Scottish Royal Ballet, and an abundance of sporting stadiums and events; as well as vibrant festivals and pop up events throughout the year.

"Glasgow" means "dear green place", and with over 90 parks and gardens open to the public across the city, it is easy to see why. With the spectacular scenery of the highlands and islands less than one hour from the city centre and the 'bonny banks' of Loch Lomond just 40 minutes away; you're never far from the breath taking vistas of Scotland's great outdoors.

Did you know?

The University of Strathclyde is rated internationally as a five-star institution in the prestigious QS World University rankings.

Guideline Entry Requirements for MChem Forensic & Analytical Chemistry

(UCAS Code FF41 MChem/FAC)

Applicants with Scottish Qualifications

First-year entry: SQA Highers AABB or AAAC, including Chemistry B, Mathematics B. Alternative Higher pass grades in Chemistry or Maths are acceptable in combination with a pass in the subject at SQA Advanced Higher level.

Second-year entry: SQA Advanced Highers ABB to include Chemistry, Maths and either Biology or Physics.

Applicants with A-Levels

First-year entry: GCE A-levels ABB to include Chemistry and either Maths or Biology or Physics.

Second-year entry: GCE A-levels ABB to include Chemistry, Maths and either Biology or Physics.

We are a truly international university, and welcome students to apply for our courses from around the world. Other European and International qualifications covering the subjects above are acceptable.

If you narrowly miss any of the qualification criteria above for first or second year entry, you have alternative qualifications, or are not applying as a recent school leaver, then please contact us for an individual assessment of your situation.

All applications should be via UCAS. UCAS personal statements and references will also be taken into account with offer decisions.

Entry requirements are correct at the time of printing and may be subject to change.

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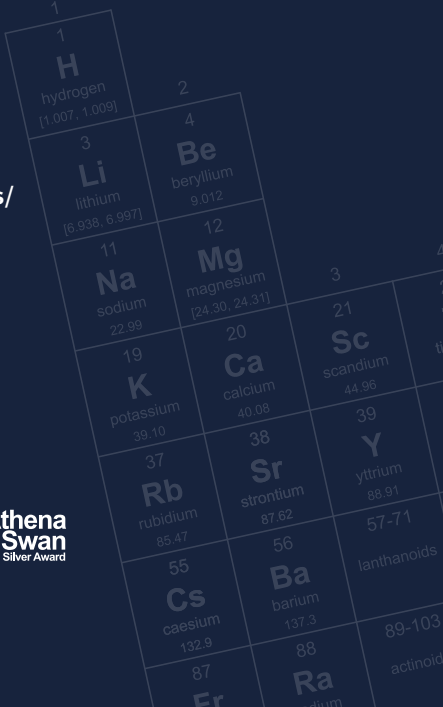

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Athena Swan Silver Award
GENDER CHARTER