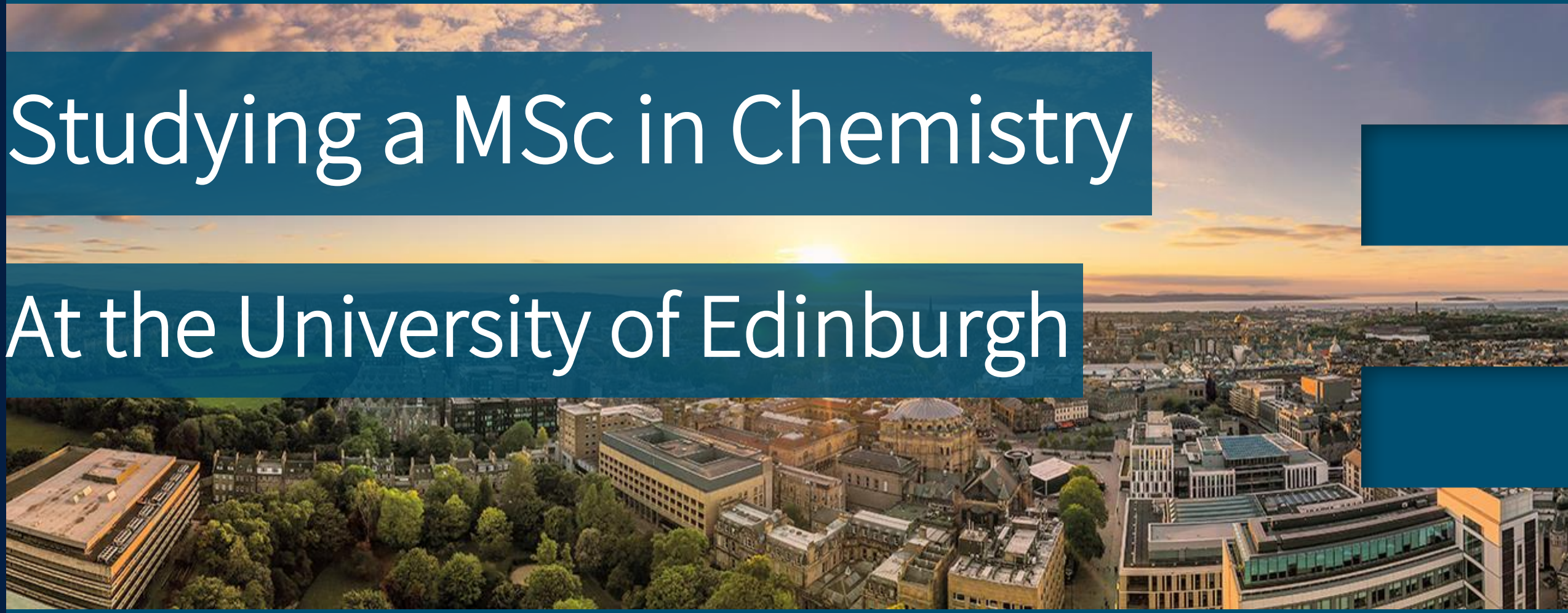
THE UNIVERSITY of EDINBURGH

Studying a MSc in Chemistry

At the University of Edinburgh



Dr David August – PGT Academic Cohort Lead

EDINBURGH
Extraordinary futures await

The University – Historic & Prestigious

- Founded in 1583
- Research Excellence Framework (REF 2021) - EaStCHEM partnership between Edinburgh and St Andrews provides the largest chemistry research unit in the UK.
- Together we are one of only three chemistry units to achieve a 100% “world-leading” score for our research environment.
- Associated with 19 Nobel Prize winners - in areas such as Chemistry, Physics, Medicine, Economics
- 49% of students from outside the UK (Times Higher Education World University rankings 2026)
- **Edinburgh is ranked the 2nd best student city in the UK and 15th in the world - *QS Best Student Cities 2026***
- Ranked 18th in the *Times Higher Education: The World's Most International Universities 2025*. Since 2010 we have taught students from 160 countries.

The City of Edinburgh

- Population around 500,000 – Students make up over one tenth
- Historic, cosmopolitan, safe, cultured city
- One of the most vibrant cities in Europe and most desirable places to live in the world
- UNESCO World Heritage Site
- 12 annual festivals, including the world's largest arts festival
- Financial centre
- Popular tourist destination
- Excellent transport networks

Distinguished Alumni

Charles Darwin, Naturalist

David Hume, Philosopher

Joseph Lister, Surgeon

Piers Sellers, NASA Astronaut

Gordon Brown, UK Prime Minister

Adam Smith, Economist

James Clerk Maxwell, Physicist

Sir Walter Scott, Writer

Robert Louis Stevenson, Writer

JK Rowling, Writer

John Witherspoon, signatory of *US Declaration of Independence*

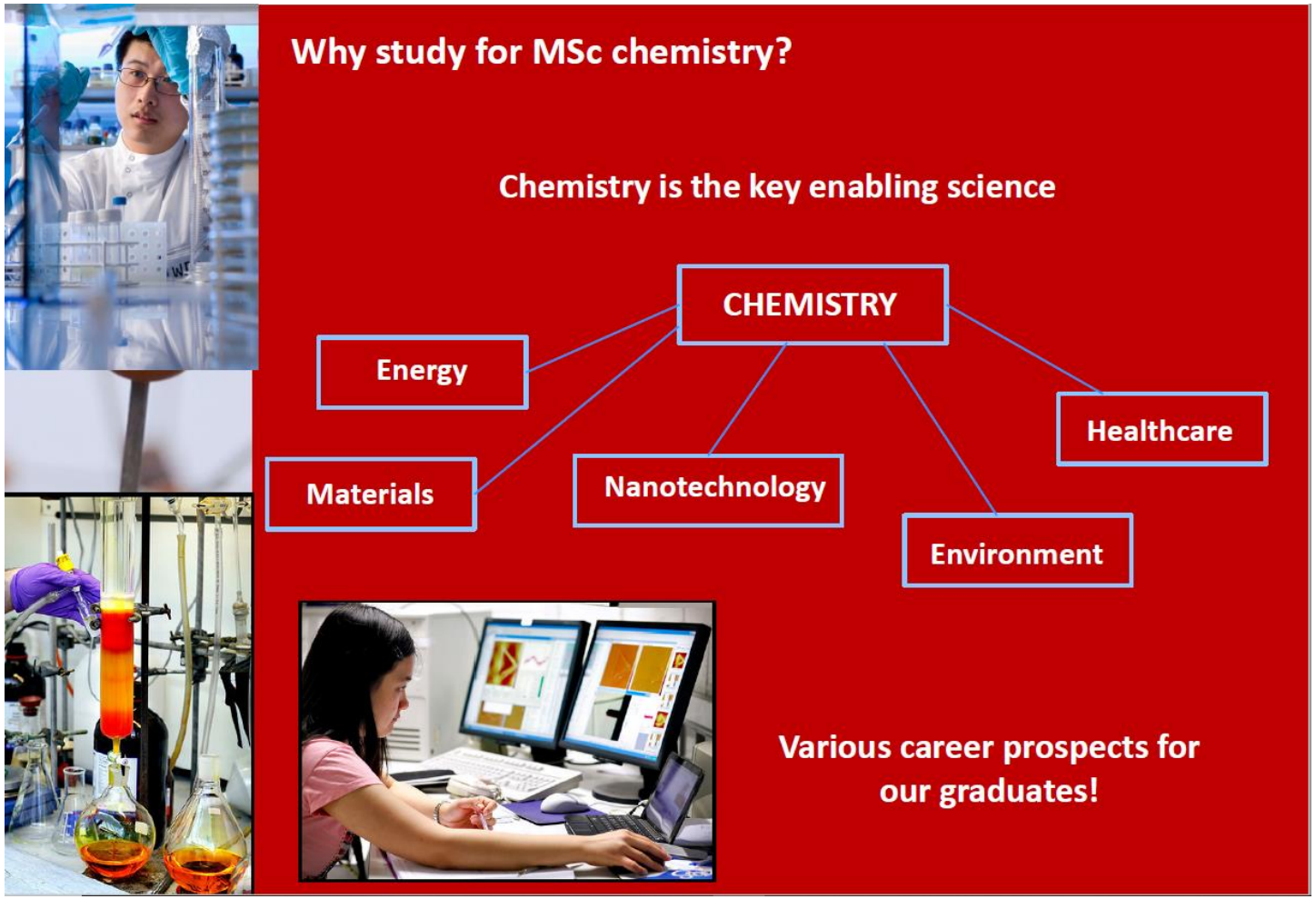
Sir Christopher Hoy, three gold medals at Beijing Olympics

Peter Higgs, 2013 Nobel laureate in Physics

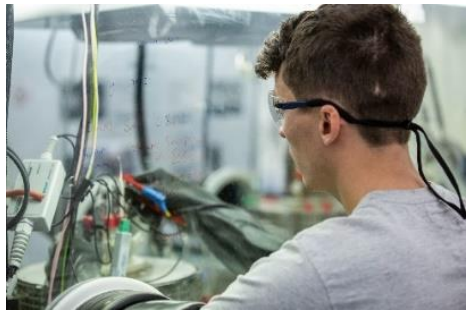
Sir Fraser Stoddart, 2016 Joint Nobel laureate in Chemistry

Geoffrey Hinton, 2024 Joint Nobel laureate in Physics

Why study for a MSc in Chemistry?



MSc Programmes at the School of Chemistry



MSc Materials Chemistry

Focussing on the chemistry of materials from their fundamentals to the most advanced understanding for a wide range of applications such as polymer science, energy storage, microelectronics, nanotechnology.

MSc Medicinal and Biological Chemistry

Focussing on the chemistry to understand biological mechanisms and processes, and applying this to design and deliver pharmaceutical interventions.

MSc Analytical Chemistry

Focuses on the separation, identification, and quantification of matter using various techniques. This MSc programme covers both the theory and the applications of a number of techniques in analytical chemistry, as well as introducing students to the principles of the "analytical process"

Photo: Advanced Organic Chemistry Lecture with Professor Guy Lloyd-Jones

STUDYING FOR A MSc AT EDINBURGH

Dr David August (David.August@ed.ac.uk)

Degree Structure – MSc Materials Chemistry

Courses Taught	Semester	Credits
Concepts of Materials Chemistry	1	20
Optional Courses in Chemistry*	1	20
Laboratory Techniques	1	20
Advanced Materials Chemistry	2	20
Advanced Analytical and Characterisation Methods	2	20
MSc Research Techniques	2	20
MSc Research Project & Dissertation**	summer	60

***Optional Courses in Chemistry** available topics in 2024-25 include e.g.:

- *Solar-Driven Chemistry*
- *Green Chemistry*
- *Biosensors*
- *NMR Spectroscopy*
- *Synthetic Chemistry*
- *Statistics, Data Handling, and Sampling*

You choose 4 topics

****Examples of Research Project Areas**

- *Crystalline Molecular and Network Solids*
- *Electronic and Magnetic Materials*
- *Polymers & Amorphous Materials*
- *Cement minerals*
- *Biomaterials*
- *Materials Simulation and Theory*

Degree Structure – MSc Medicinal and Biological Chemistry

Courses Taught	Semester	Credits
Concepts in Medicinal and Biological Chemistry	1	20
Optional Courses in Chemistry*	1	20
Laboratory Techniques	1	20
Advanced Biological Chemistry	2	20
Advanced Medicinal Chemistry	2	20
Research Techniques	2	20
MSc Research Project & Dissertation**	summer	60

***Optional Courses in Chemistry** available topics in 2024-25 include e.g.:

- *Solar-Driven Chemistry*
- *Green Chemistry*
- *Biosensors*
- *NMR Spectroscopy*
- *Synthetic Chemistry*
- *Statistics, Data Handling, and Sampling*

You choose 4 topics

****Examples of Research Project Areas**

- *Biocatalysis*
- *Peptide-based drugs*
- *Structural Biology*
- *Bioanalytical chemistry*
- *in silico drug discovery*
- *Synthesis of Bioactive compounds*
- *Imaging agents and Biosensors*
- *Biomaterials*

Degree Structure – MSc Analytical Chemistry

Courses Taught	Semester	Credits
Concepts of Analytical Chemistry	1	20
Optional Courses in Chemistry	1	20
Laboratory Techniques	1	20
Advanced Analytical Chemistry	2	20
either ***Advanced Bioanalytical Chemistry***	2	20
or ***Advanced Analytical and Characterisation Methods***	2	20
Research Techniques	2	20
MSc Research Project & Dissertation*	summer	60

***Optional Courses in Chemistry** available topics in 2024-25 include e.g.:

- *Solar-Driven Chemistry*
- *Green Chemistry*
- *Biosensors*
- *NMR Spectroscopy*
- *Synthetic Chemistry*
- *Statistics, Data Handling, and Sampling*

You choose 4 topics

***Examples of Research Project Areas**

- *Analysis of complex mixtures*
- *Chromatography*
- *NMR spectroscopy*
- *Mass spectrometry*
- *X-ray diffraction*
- *Sensors etc.*

MSc Research Project and Dissertation

- The taught component (120 credits) is followed by a *Research Project* leading to a written *MSc Dissertation* (60 credits)

- You will have a vast range of research project areas to choose from → We want our students to enjoy their projects and work in an area of their interest.

- There are **different project options** available. You will join one of the world-leading research groups at the School of Chemistry to carry out independent lab work.

- To learn about the research at the School of Chemistry visit:
  https://www.chem.ed.ac.uk/research/research-themes

  or staff profiles:
  https://www.chem.ed.ac.uk/staff/academic-staff

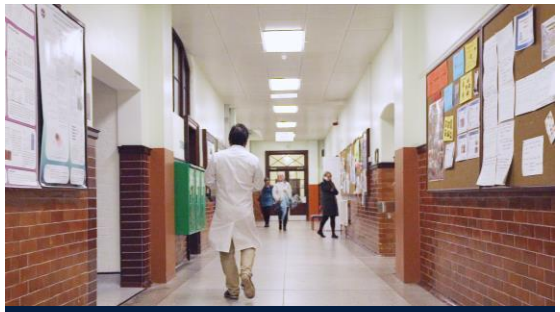
Where you'll study

The School of Chemistry – Joseph Black Building

Christina Miller Building

Lecture Theatres

The Social Space



Oldest Building at KB

Teaching laboratories

Facilities - Analytical Chemistry Instrument Suite

Analytical Chemistry Instrument Suite

The School of Chemistry has recently opened an Analytical Chemistry Instrument Suite (ACIS) Laboratory to further enhance the School's already impressive facilities.

- The ACIS is primarily operated as a hands-on training facility to support student development in all areas of chemistry
- The lab features in excess of £500k of state-of-the-art equipment and is continuing to expand!
- The ACIS is also accessible to all researchers within the School of Chemistry to support and enable many aspects of our world class research.
- The facility includes 14 new high-tech instruments allowing rapid identification, quantification and purification of organic compounds, complex mixtures, solid-state structures and biomolecules (among many other uses!)

Facilities –The Nucleus – MSc lectures

The Nucleus Building is a new shared learning, teaching and social hub at the heart of our King's Buildings campus.

Opened in October 2023, facilities include:

- Five lecture theatres
- Two Teaching studios
- First year chemistry teaching lab
- Group study rooms
- 400 study spaces
- Open access computers
- Café
- Shop

Video Tour of the Nucleus
https://media.ed.ac.uk/media/1_wa3tdjin

After Graduation

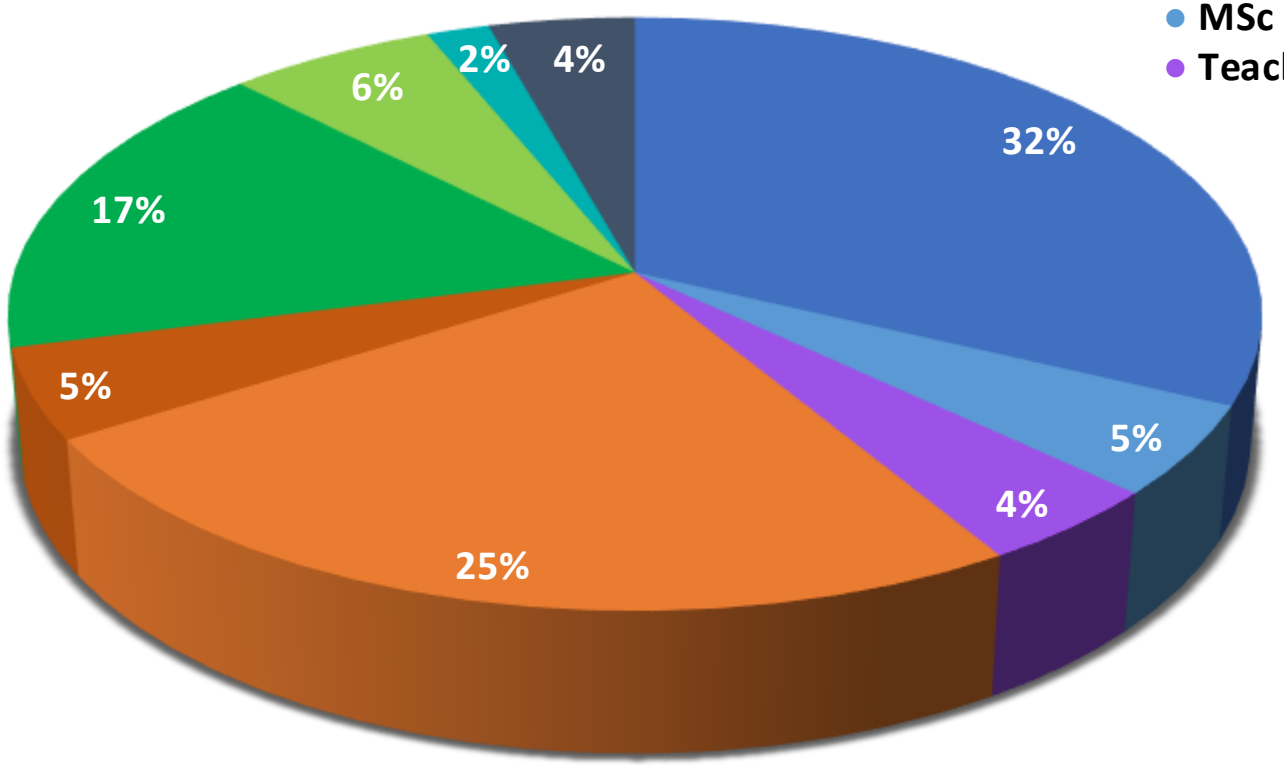
Destinations of recent UoE Chemistry graduates:

41% Further study & training

- **PhD or equivalent**
- **MSc or equivalent**
- **Teaching** *(including PGCE/PGDE)*

29% Outside of Chemistry

- **Finance and Business**
- **IT, Data and Software**
- **Other STEM industry**
- **Other non-STEM industry**
  (e.g., public sector, law, arts)



30% Chemistry Professionals

- **Chemical industry**
- **Pharmaceuticals**

Graduate Outcomes Survey 2021/22

15 months after graduation:

- 96% of responders employed or in further study
- 89% of responders in highly skilled employment and further study
- Employers of previous graduates include Charles River, KPMG, P&G, GSK, Almac Sciences, AstraZeneca.

Chart data sourced from Graduate Outcomes Survey 2019/2020, 2020/2021 and 2021/2022

After Graduation

Student Profiles

https://chem.ed.ac.uk/studying/masters/student-profiles

Hear from our MSc students about their experiences of studying in Edinburgh

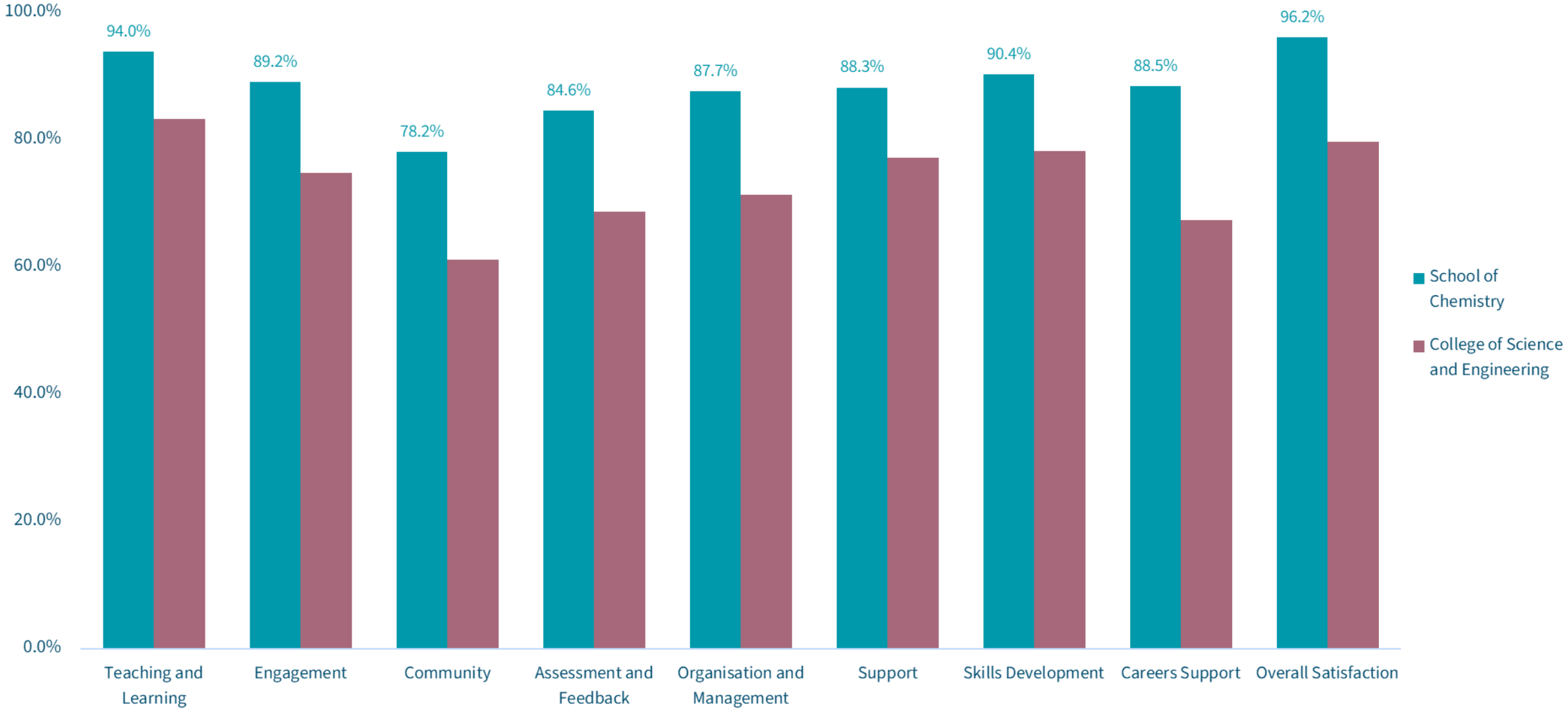
Vienty Sabrina

Vienty decided to study abroad to find out more about the health-related applications of chemistry. After graduating from the MSc Medicinal and Biological Chemistry degree programme in 2024, she secured a job as a patent scientist.

Diduo Zhang

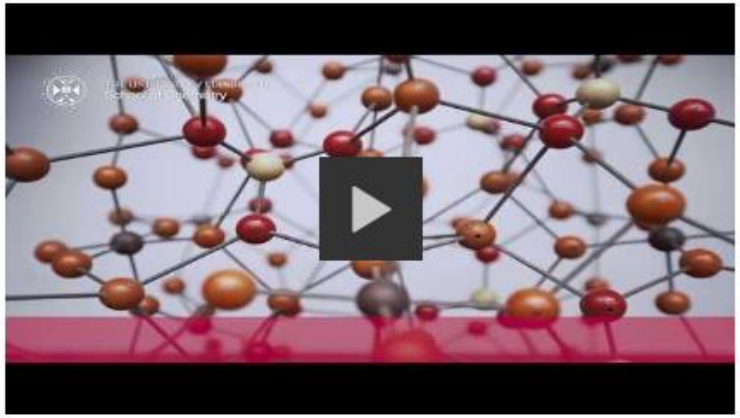
Diduo deepened his interests in academic research through the MSc Medicinal and Biological Chemistry degree programme. Since graduating in 2021, he has moved to Canada to pursue a PhD in radiopharmaceuticals.

MSc Student Satisfaction – PG Taught Experience Survey



Lots of information on our web pages

The School in 60 Seconds



Student Experience

Hear what our students think about what it's like studying Chemistry at Edinburgh University.

Undergraduate

- Undergraduate Degrees
- Applying

PhD

The School provides a broad range of Research degrees.

Masters

One year courses teaching advanced chemistry.

www.chem.ed.ac.uk/studying

Contact details for follow-up questions

- We apologise if we did not get through all of your questions in the time allotted for this session. If you have further questions that have not been answered, please email: chemistry.pgt@ed.ac.uk

THE UNIVERSITY of EDINBURGH

Thank you

Dr David August

chemistry.pgt@ed.ac.uk

EDINBURGH
xtraordinary futures await