Studying Chemistry at the University of Glasgow
Degrees in Chemistry

- Chemistry
- Chemistry with Medicinal Chemistry
- Chemical Physics
- Chemistry and Mathematics
- Chemical Studies
# Chemistry degrees

<table>
<thead>
<tr>
<th>Course</th>
<th>BSc</th>
<th>BSc (Hons)</th>
<th>MSci</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Chemistry with Medicinal Chemistry</td>
<td></td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Chemical Physics</td>
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<td>Chemistry and Mathematics</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>Chemical Studies</td>
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<td>✓</td>
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</tbody>
</table>
• Honours (4 years)

• MSci (5 years)

• MSci includes work placement year for Chem, CMC and Chemical Physics (WP)
Study three subjects in first year

Chemistry plus two others from:

• Archaeology
• Biology
• Earth Science
• Exploring the Cosmos
• Maths
• Psychology
• Astronomy
• Computing Science
• Geography
• Physics
• Statistics
•+ others
Flexibility of course choice

1\textsuperscript{st} Year
- Chemistry
- Biology
- Maths

2\textsuperscript{nd} Year
- Chemistry
- Biology

3\textsuperscript{rd} Year and 4\textsuperscript{th} Year
- Chemistry
- Or
- Chemistry with Medicinal Chemistry
- Or
- Biology degree*
Flexibility of course choice

1st Year
- Chemistry
- Biology
- Maths

2nd Year
- Chemistry
- Maths

3rd Year and 4th Year
- Chemistry
- Or
- Chemistry with Medicinal Chemistry
  - Or
  - Maths degree
  - Or
  - Chemistry & Maths degree
### Course structure

<table>
<thead>
<tr>
<th>Semester 1 &amp; Semester 2</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Year 1</strong></td>
<td><strong>Chemistry 1</strong> (CHEM1001) 40 credits</td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td><strong>Chemistry 2 X</strong> (CHEM2001) 30 credits</td>
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</tbody>
</table>
## Course structure

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Semester 1 &amp; Semester 2</th>
</tr>
</thead>
</table>
| **Hons MSci*** CHEM CMC | *Inorganic Chemistry 3 (CHEM3010) 40 credits*  
*Organic Chemistry 3 (CHEM3012) 40 credits*  
*Physical Chemistry 3 (CHEM3014) 40 credits*  
*Frontiers of Chemistry 3M (CHEM5016) 20 credits* |
| **Hons MSci CP(WP)* CP** | *Inorganic Chemistry 3 (half) (CHEM3011) 20 credits*  
*Physical Chemistry 3 (CHEM3014) 40 credits*  
*Frontiers of Chemistry 3M (CHEM5016) 20 credits*  
*Physics courses* |
| **Hons MSci C&M** | *Half courses in Inorganic, Organic and Physical Chemistry 20 credits each*  
*Mathematics courses* |
## Course structure

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Semester 1 &amp; Semester 2</th>
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</thead>
<tbody>
<tr>
<td><strong>Hons</strong></td>
<td>• Combination of Organic, Inorganic and Physical Chemistry courses (and Medicinal Chemistry for CMC). &lt;br&gt;  <strong>Chemistry + subject specific lecture courses.</strong>  &lt;br&gt; • Project : Chemistry / Chem or Phys/Maths</td>
</tr>
<tr>
<td><strong>CHEM/CMC/CP</strong> (WP) : work placement  &lt;br&gt; <strong>CP (no WP) : Chemistry project + Physics lectures</strong>  &lt;br&gt; <strong>C&amp;M : maths project + Chemistry &amp; Maths lectures</strong></td>
<td></td>
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</tbody>
</table>
### Course structure

<table>
<thead>
<tr>
<th>Year 5 MSci</th>
<th>Semester 1 &amp; Semester 2</th>
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</thead>
<tbody>
<tr>
<td><strong>CHEM CMC</strong></td>
<td></td>
</tr>
<tr>
<td>• Combination of Organic, Inorganic and Physical Chemistry courses (and Medicinal Chemistry for CMC)</td>
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<tr>
<td>• Chemistry Project</td>
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<tr>
<td><strong>CP</strong></td>
<td></td>
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<tr>
<td>no WP : Physics project + Phys &amp; Chem lectures</td>
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</tr>
<tr>
<td>WP : Chem or Phys project + Phys &amp; Chem</td>
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<tr>
<td><strong>C&amp;M</strong> :</td>
<td></td>
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<tr>
<td>Chem project + Chemistry &amp; Maths lectures</td>
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Core modules

Chemistry 1

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
## Example lecture timetable
### 1st Year

<table>
<thead>
<tr>
<th>Time</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thur</th>
<th>Fri</th>
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</thead>
<tbody>
<tr>
<td>9-10am</td>
<td>Lecture: Biology</td>
<td>Lecture: Biology</td>
<td>Lecture: Biology</td>
<td>Lecture: Biology</td>
<td>Lecture: Biology</td>
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<tr>
<td>10-11am</td>
<td>Lecture: Chemistry</td>
<td>Lecture: Chemistry</td>
<td>Lecture: Chemistry</td>
<td>Lecture: Chemistry</td>
<td>Lecture: Chemistry</td>
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<tr>
<td>12-1pm</td>
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<tr>
<td>1-2pm</td>
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<td></td>
<td></td>
<td>Tutorial: Mathematics</td>
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<tr>
<td>2-3pm</td>
<td>Lab: Biology</td>
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<td></td>
<td>Lab: Chemistry</td>
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<tr>
<td>3-4pm</td>
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<td>4-5pm</td>
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<tr>
<td>5-6pm</td>
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Learning & teaching

*Chemistry 1 classes (per week)*:

- 5 × 1 hr lectures (or 4 lectures + 1 revision tutorial)

- Lectures run twice daily (1000 and 1500)

- Class size: approx 550.
Learning & teaching

Chemistry 1 classes (per week):

- 1 × 3 hr lab
- 1000-1300 or 1400-1700
- approx. 80 students per lab
Support resources for lectures, tutorial and labs are available through Moodle; the learning platform used by the University of Glasgow.
Assessment

- 4 × class tests (2 per semester) (10%)
- December examination (30%)
- Practical mark (10%)
- Main Assessment is in April/May; 1 × 2-hour examination (50%)
Working with industry

Our **MSci degrees** involve work placement opportunities in:

- **industry** e.g.
  GSK, Merck, Hoffman La Roche, AZ, Diageo, BASF, Bayer

- **other institutions** e.g.
  CERN, Max Planck Institute, European Universities such as Alicante, Amsterdam, Barcelona, Utrecht
Working with industry

For students who are not on the MSci programme;

we have a close working relationship with our Careers Service and use this to encourage and support students on all degree programmes to secure work experience opportunities, such as overseas placements, internships and through IAESTE.
Accreditations

- Hons and MSci degrees in CHEM and CMC are accredited by the RSC
- Hons and MSci degrees in CP are accredited by the IoP

Recognition of:
- High standards
- Intellectual challenge and effective training of students
Careers

- Teacher
- Fragrance chemist
- Accountant
- University researcher/lecturer
- Publishing editor
- Science communicator
- Metallurgist
- Production manager
- Policy adviser
- Finance
- Cancer research.....
Careers

Close links with Careers Service and our Alumni Office;
- hosting a series of “A cup of Coffee with…” events
- Careers talks integral to all years
- Support students wishing to go into teaching as a career through the STEM Ambassador Programme, final year projects, COG
Student clubs & societies

• Chemistry students enjoy a wide and varied social and lecture calendar in addition to the normal teaching routine; coordinated by the Alchemists’ Club, one of the oldest student organisations on campus set up in 1918.

• 200+ SRC affiliated clubs and societies
Postgraduate

Chemistry Graduate School

- Over 120 graduate students (PhD and Masters students)
- Taught Masters degrees available in Chemistry and Medicinal Chemistry
- New Masters courses in Advanced Materials, Chemistry & Engineering, Chemical Biology and Conservation Science coming soon!
- MRes in Industrial Heterogeneous Catalysis starting September 2019
Research in the School of Chemistry

- Research activity in the School is grouped into six areas of activity:
  - Chemical Biology and Precision Synthesis
  - Complex Chemistry
  - Chemical Photonics
  - Energy Conversion and Storage
  - Heterogeneous Catalysis
  - Supramolecular, Electronic & Magnetic Systems
The School of Chemistry

- 4th best chemistry department in the UK on the basis of research outputs per faculty member

- Four Nobel laureates have worked or studied at the School: William Ramsay, Frederick Soddy, Derek Barton and Alexander Todd
Highly diverse research

Energy conversion and storage: Batteries, Organic LEDs and Solar cells; \( \text{CO}_2 \) and \( \text{H}_2 \) into fuels

Heterogeneous and industrial catalysis

Chemical Photonics: photonic crystals, optical tweezers

Supramolecular: polymers, single molecule quantum computing

Drug discovery

Origins of Life, Chemputing and AI in Chemical systems
Undergraduate enquiries: ug-enquiries@chem.gla.ac.uk
Postgraduate enquiries: pg-enquiries@chem.gla.ac.uk

https://www.gla.ac.uk/schools/chemistry/

#UofGChem