Overview

The Chemistry stream is designed for students who wish to specialise in the chemical sciences and undertake the maximum number of Chemistry courses. It is designed to provide education and training in all contemporary fields of chemistry, and should be selected by students who wish to devote the majority of their studies at Stage III to Chemistry.

The School of Chemistry recommends the following complementary discipline areas for a major in Chemistry: Biochemistry, Biotechnology, Earth Science, Materials Science, Mathematics or Physical Sciences. Inclusion of advanced level studies from more than one field of specialisation results in a broadly based degree in the chemical sciences. For example, a combination of Chemistry and Biochemistry leads to further work in areas such as toxicology and neurochemistry. Combining Level III Chemistry with Mathematics provides a valuable basis for the many applications of computers in Chemistry. Chemistry with Physics or Materials Science allows entry into the rapidly developing field of advanced materials.
**Faculty**
Faculty of Science

**School**
School of Chemistry

**Study Level**
Undergraduate

**Minimum Units of Credit**
78

**Specialisation Type**
Major
Available in Program(s)

Program(s) in which this major is available

Bachelor of Advanced Science (Honours) - **BAdvSci(Hons)**

3962 Advanced Science (Honours)

Faculty: Faculty of Science
Campus: Kensington
Units of Credit: 192
Typical Duration: 4 Years
Specialisation Structure

Students must complete 78 UOC.

Level 1 Core Courses

Students must take 30 UOC of the following courses.

CHEM1031 | 6 UOC
Higher Chemistry 1A: Atoms, Molecules and Energy

CHEM1041 | 6 UOC
Higher Chemistry 1B: Elements, Compounds and Life

One of the following:
MATH1031 | 6 UOC
Mathematics for Life Sciences

MATH1131 | 6 UOC
Mathematics 1A

MATH1141 | 6 UOC
Higher Mathematics 1A

One of the following:
MATH1041 | 6 UOC
Statistics for Life and Social Sciences

MATH1231 | 6 UOC
Mathematics 1B

MATH1241 | 6 UOC
Higher Mathematics 1B

One of the following:
PHYS1111 | 6 UOC
Fundamentals of Physics
**Level 2 Core Courses**

Students must take 24 UOC of the following courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>UOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM2011</td>
<td>6</td>
</tr>
<tr>
<td>Physical Chemistry: Molecules, Energy and Change</td>
<td></td>
</tr>
<tr>
<td>CHEM2021</td>
<td>6</td>
</tr>
<tr>
<td>Organic Chemistry: Mechanisms and Biomolecules</td>
<td></td>
</tr>
<tr>
<td>CHEM2031</td>
<td>6</td>
</tr>
<tr>
<td>Inorganic Chemistry: The Elements</td>
<td></td>
</tr>
<tr>
<td>CHEM2041</td>
<td>6</td>
</tr>
<tr>
<td>Analytical Chemistry: Essential Methods</td>
<td></td>
</tr>
</tbody>
</table>

**Level 3 Prescribed Electives**

Students must take at least 24 UOC of the following courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>UOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM3011</td>
<td>6</td>
</tr>
<tr>
<td>Quantum Nature of Molecules - from Earth to Space</td>
<td></td>
</tr>
<tr>
<td>CHEM3021</td>
<td>6</td>
</tr>
<tr>
<td>Organic Chemistry: Modern Synthetic Strategies</td>
<td></td>
</tr>
<tr>
<td>CHEM3031</td>
<td>6</td>
</tr>
<tr>
<td>Inorganic Chemistry: Transition Metals and Complexes</td>
<td></td>
</tr>
<tr>
<td>CHEM3061</td>
<td>6</td>
</tr>
<tr>
<td>Chemistry of Materials</td>
<td></td>
</tr>
</tbody>
</table>
Enrolment Disclaimer

Unless advised otherwise by your program authority, you should follow the rules for the handbook for the year you commenced your program. You are also responsible for ensuring you enrol in courses according to your program requirements. myUNSW enrolment checks that you have met enrolment requirements such as pre-requisites for individual courses but not that a course will count towards your program requirements.
Additional Information

Honours

For information about Honours in Chemistry see the Chemistry Honours plan or contact the School of Chemistry.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions
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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179