The School of Chemistry at UNSW is recognised nationally and internationally for world-class fundamental and applied research to address real-world challenges.

Our students benefit from our strong links with government research agencies and industry partners, including Australian Nuclear Science and Technology Organisation (ANSTO), Commonwealth Science and Industrial Research Organisation (CSIRO), National Measurement Institute (NMI), Parnell Industries, Cochlear, Exanta, Pharmaxis, Metabolife and Intellectual Ventures.

Our state-of-the-art laboratory and research facilities are housed in one of Australia’s newest chemistry buildings, which is also home to the Mark Wainwright Analytical Centre, the ARC Centre of Excellence in Convergent Bio-Nano Science and Technology, the Australian Centre for NanoMedicine and the Centre for Advanced Macromolecular Design. We are consistently ranked amongst the world’s best Chemistry schools. Both our alumni and staff have been recognised with a host of awards both in Australia and abroad.

**Undergraduate Studies in Chemistry**

Chemistry is a central science dealing with the design, synthesis and analysis of molecules. As a core science, it is unique in providing opportunities for creativity. Chemistry develops enquiring, analytical and problem solving minds, with strong powers of observation and deduction. There are various ways of studying Chemistry at UNSW. Chemistry can be studied either as part of our school’s degree programs, or via majors in selected degree programs.

The following degree programs are offered by the School of Chemistry:

**Bachelor of Medicinal Chemistry (Honours)**

Medicinal Chemistry is an exciting, rapidly-expanding area within the broad discipline of Chemistry that has seen enormous growth worldwide. It covers all areas relevant to the development of new pharmaceutical agents, taking concepts out of the lab and into the clinic. Many different stages are involved; from the design and synthesis of novel drug candidates, to their biochemical effects, testing regimes and regulatory and ethical considerations. The Medicinal Chemistry program has been designed to ensure that graduates will have a strong background in contemporary biology, biochemistry and pharmacology, based upon a solid foundation of essential chemical knowledge.

**Bachelor of Science (Honours)**

Bachelor of Science is a rigorous degree that will appeal to those with a broad interest in science. It is ideal for those interested in combining Chemistry major with related fields, such as Pharmacology, or non-science strengths, such as Languages, Information Systems, Marketing or Finance. An optional fourth year Honours course is also available and can be taken jointly with another science subject.

**Bachelor of Advanced Science (Honours)**

This Honours Science degree is for those who have already decided to specialise in Chemistry. The degree starts with a broad foundation of knowledge in Science during the first year, and concentrates on Chemistry in years 3 and 4. During the fourth year, students will undertake an Honours project in a specialised area of Chemistry.

**Bachelor of Life Sciences (Major: Biological Chemistry)**

The Bachelor of Life Sciences brings together the biological, environmental and medical sciences into a far-reaching and fascinating field of study. The life sciences domain will satisfy your innate curiosity about life, from the way things work at the molecular level, to the study of entire ecosystems.

**Bachelor of Science and Business**

The Bachelor of Science and Business degree allows students to follow their passion for science and, at the same time, gain vitally important business knowledge to expand their career options.

**Career Opportunities**

Chemistry majors can find employment opportunities in industry as consultants and managers, in government, or in education. There are career paths for people who prefer to work in an academic or research environment.

Chemists do not necessarily work in labs - your savvy skills will be highly transferrable and will suit many industries from finance to politics, food manufacturing to smart packaging, and everything in between. It's possible (and advisable) to use your personal interests as a basis for your choice of career. Graduates from the Medicinal Chemistry program will be equipped with a unique and wide range of skills, ranging from fundamental chemistry enabling the synthesis and analysis of drug candidates, through to relevant pharmacology and molecular biology skills. This combination will see graduates in high demand both locally and globally in pharmaceutical companies involved in modern drug design. In addition, the multidisciplinary nature of the program means that graduates are also highly marketable within other science-based industries and related fields.

Nanoscience is an emerging growth industry worldwide. Well known producers of nanotechnological devices and materials include the CSIRO, Adscend, Davacon, DuPont, IBM, Intel, L’Oreal, Motorola, Microsoft, Nokia, and Samsonite. These organisations employ nanoscience graduates because of their broad training, capacity to think critically and laterally, and their problem solving abilities. Many of our graduates pursue careers in academic research or research and development in the science and technology sector.

**Admission Details**

<table>
<thead>
<tr>
<th>Program</th>
<th>UAC Code</th>
<th>UNSW Program Code</th>
<th>Length of Study</th>
<th>Entry Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Medicinal Chemistry (Honours)</td>
<td>429720</td>
<td>3999</td>
<td>4 years full time</td>
<td>2017 Guaranteed Entry: 90.00 IB: 34 or equivalent</td>
</tr>
<tr>
<td>Bachelor of Nanoscience (Honours)</td>
<td>429450</td>
<td>3618</td>
<td>4 years full time</td>
<td>2017 Guaranteed Entry: 85.00 IB: 37 or equivalent</td>
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<tr>
<td>Bachelor of Science</td>
<td>429500</td>
<td>3970</td>
<td>3 years full time</td>
<td>2017 Guaranteed Entry: 86.00 IB: 31 or equivalent</td>
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<tr>
<td>Bachelor of Advanced Science (Honours)</td>
<td>429350</td>
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<td>4 years full time</td>
<td>2017 Guaranteed Entry: 96.00 IB: 37 or equivalent</td>
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<td>Bachelor of Life Sciences</td>
<td>429590</td>
<td>3906</td>
<td>4 years full time</td>
<td>2017 Guaranteed Entry: 80.00 IB: 29 or equivalent</td>
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<tr>
<td>Bachelor of Science (International)</td>
<td>429420</td>
<td>3987</td>
<td>4 years full time</td>
<td>2017 Guaranteed Entry: 88.00 IB: 32 or equivalent</td>
</tr>
<tr>
<td>Bachelor of Science and Business</td>
<td>429100</td>
<td>3925</td>
<td>3 years full time</td>
<td>2017 Guaranteed Entry: 90.00 IB: 34 or equivalent</td>
</tr>
</tbody>
</table>

A Chemistry major can also be studied within the following degree programs:

- Bachelor of Science (International)
- Dual Degrees
- Medicinal Chemistry program

[UNSW Chemistry](http://chemistry.unsw.edu.au)
During high school I always really enjoyed science. I knew that this was the area of study I wanted to pursue. The Bachelor of Medicinal Chemistry caught my eye. UNSW was the only university to offer an undergraduate course specifically in this field. My chemistry teacher and I agreed that this program was a perfect combination of biology and chemistry, and I have never looked back. The courses are tailored perfectly to address the programs overall aim, to develop an understanding of concepts and applications of the drug development process, through a focus on pharmacology and organic chemistry. The willingness and helpfulness of all the academics, tutors and lab demonstrators has always astounded me. What I have enjoyed most about this program is the large amount of lab classes on offer. The lab really puts into perspective the theory learnt in lectures.

For as long as I can remember, I have always been passionate about science. And I didn’t just like one science, I liked all of them. That is why I chose to study Nanotechnology (now Nanoscience) at UNSW. Unlike other universities, only the Nanoscience program at UNSW School of Chemistry involves learning concepts in chemistry, physics, biology, maths and materials science. I have now finished my Honours year and started my PhD. My research involved the use of nanocrystals, carbon nanomaterials and sunlight to split water into oxygen and hydrogen – a potential source of clean energy for everyone! The journey studying Nanoscience is a venture into a new world full of fascinating phenomena. My vision is to tackle problems in renewable energy through the wonders of nanoscience.