Research in the School of Chemistry is focused into three strategic areas:

- **Molecular Devices**, 
- **Catalysis and Energy**, and 
- **Medicinal Chemistry**.

Specific programs include:

1. **Designer surfaces; nanostructured materials:** biosensors, and molecular electronics.
2. **Homogeneous catalysts for efficient and selective synthesis; nitrogen fixation and carbon dioxide sequestration.**
3. **Synthesis of biologically active naturally occurring molecules; development of molecules as biomedical agents.**

The School of Chemistry is located in state-of-the-art laboratories, with outstanding facilities for research. The School’s reputation as one of Australia’s leading research facilities is confirmed by the consistently high level of funding it receives, most notably from the Australian Research Council. Links with institutes and universities in Europe, Asia and the USA, as well as with industry, also ensure the School’s position at the forefront of international research efforts.

Many staff members are recognised, nationally and internationally, as leaders in their fields. Several have been elected Fellows of the Australian Academy of Science. In recent times, staff members have received important awards, such as the Eureka Prize, the Royal Australian Chemical Institute’s Leighton Memorial Medal, the H. G. Smith Award, and the Organometallic Chemistry Award, as well as the Analytical Division’s Lloyd Smythe Medal.

The School’s graduate programs lead to respected qualifications and provide the opportunity to work and learn alongside researchers and educators of high standing. There are three programs that provide the opportunity to carry out research in the School. In addition, there are coursework degrees that provide training in advanced chemical analysis techniques.

## Coursework Programs

### Graduate Certificate in Chemical Analysis and Laboratory Management

- **Program Code:** 7428
- **Commencement:** Semester 1 or Semester 2
- **Units of credit:** 36 (advanced standing of 12 UOC possible for prior qualifications)
- **Length of study:** 6 months full-time or equivalent part-time
- **Entry requirement:** A recognised 3 year Bachelor degree with chemistry major (this will attract the 12 UOC advanced standing for the suitable prior qualification) or a related qualification, or a science degree with analytical chemistry up to a second year level.

Offers training in advanced chemical analysis techniques and associated management issues. It allows students to select courses covering all aspects of modern chemical analysis and people management. It is particularly suited to new graduates in areas related to chemistry such as the health sciences, chemical sciences and engineering, science education, or laboratory chemists and managers who wish to upgrade their qualifications in and knowledge of chemical analysis and related topics. This is the first stage in a fully articulated program of the Graduate Certificate, Graduate Diploma and Master of Science and Technology in Chemical Analysis and Laboratory Management.
**Graduate Diploma in Chemical Analysis and Laboratory Management**

- **Program Code:** 5648
- **Commencement:** Semester 1 or Semester 2
- **Units of credit:** 36
- **Length of study:** 1 year full-time or equivalent part-time
- **Entry requirement:** A recognised 3 year Bachelor degree with chemistry major.

**Master of Science and Technology in Chemical Analysis and Laboratory Management**

- **Program Code:** 8708
- **Commencement:** Semester 1 or Semester 2
- **Units of credit:** 48
- **Length of study:** 1 year full-time or equivalent part-time
- **Entry requirement:** A recognised 4 year Bachelor degree with a major in chemistry; or a 3 year Bachelor degree with at least one year of relevant experience in a laboratory environment; or sufficient progress in the Graduate Diploma or Graduate Certificate (24 UOC passed with a WAM of at least 65).

**Research Degrees**

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<thead>
<tr>
<th>Program</th>
<th>Code</th>
<th>Length of study</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Master of Philosophy</strong></td>
<td>2475 (Chemistry)</td>
<td>1.5 years of advanced study leading to the submission of a thesis. Minimum duration for completion is 1 year.</td>
<td>This program is open to all recent BSc Chemistry graduates. Students complete a component of coursework, including research methodology, and a thesis comprising an original piece of research work, of a limited scope but at least 66% of the degree.</td>
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<tr>
<td><strong>Master of Science</strong></td>
<td>2910 (Chemistry)</td>
<td>1.5 to 2 years of advanced study leading to the submission of a thesis. Minimum duration for completion is 1.5 years.</td>
<td>This program is open to BSc (Hons) graduates who have attained at least the level of Honours Class II division 2. This program requires the completion of an original piece of research, more limited in scope and nature than the PhD program. Candidates develop mastery of appropriate methodology and learn the fundamentals of research. Findings are presented in a thesis that places the work in the wider context of their discipline.</td>
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<tr>
<td><strong>Doctor of Philosophy</strong></td>
<td>1870 (Chemistry)</td>
<td>3 to 4 years of advanced study leading to the submission of a thesis. Minimum duration for completion is 3 years.</td>
<td>This program is open to BSc (Hons) graduates who have attained at least the level of Honours Class II division 1. A PhD requires the completion of a piece of research that demonstrates a significant and original contribution to knowledge in the field of study. Candidates acquire advanced specialist research training under academic supervision. The candidate's thesis summarises the research and provides evidence for independent thought and critical analysis, effective communication and expert knowledge of the discipline in the international context.</td>
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