Chemistry
Undergraduate Handbook 2018
Welcome to the School of Chemical Sciences

An undergraduate degree in Chemistry gives you a sound understanding of the chemical nature of matter and a grounding in laboratory-based chemical science.

Chemistry is rightly referred to as the central and enabling science. Society’s ability to meet our social and economic needs while minimising our environmental impact is underpinned by science.

A Chemistry degree will provide you with knowledge of chemical processes, design of new instruments, development of new medicinal drugs, and synthesis of new materials.

Many of the most exciting scientific discoveries are occurring at the boundaries of chemistry with other applied and fundamental sciences. The major in Chemistry provides you with a solid chemical education but also allows you to incorporate subjects such as Biological Sciences or Physics.

Our School of Chemical Sciences also offers undergraduate qualifications in Medicinal Chemistry and Food Science and Nutrition and postgraduate qualifications in Food Science, Forensic Science, Medicinal Chemistry and Wine Science for those students who seek extended applications of their chemical education.

We welcome you to our School of Chemical Sciences, and hope you are inspired by our vibrant intellectual community.

GORDON MISKELLY
Head of School
Bachelor of Science in Chemistry

Studying chemistry will help you understand and appreciate the world in which you live. Advances in chemistry have had an enormous influence on our modern lifestyle and standard of living. Inventions such as semiconductors, polymers, pharmaceuticals and advanced materials of all kinds are based on chemical science. The study of chemistry leads to a deep appreciation of the scientific method, particularly the intellectual skills needed to develop new theories and to design experiments to test the validity of these theories.

Preparation for school leavers
Preparatory chemistry online is designed to assist prospective first year chemistry students who have had some years away from formal study, or who do not have a strong background in chemistry.

www.chemistry.auckland.ac.nz/preparatory

For course planning and enrolment:
www.science.auckland.ac.nz/student-centre

Complementary majors
A double major is strongly recommended as it will enhance your career options by providing a broader base of skills and knowledge.

CHEMISTRY +
- Biology
- Geography
- Earth Sciences
- Environmental Science
- Geophysics
- Pharmacology
- Physics
- Physiology

www.science.auckland.ac.nz/doublemajors
BSc degree planner – Chemistry

Year 1

<table>
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<tr>
<th>CHEM 110</th>
<th>CHEM 120</th>
<th>MATHS 110*</th>
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*With appropriate prerequisites can also be filled by Stage II or III. *MATHS 108 or 150 can also be counted.

Year 2

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<tr>
<th>CHEM 210-240</th>
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*We recommend selecting all four CHEM 210-240 courses and consider CHEM 260 as an additional option

Year 3

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<th>CHEM 310-340</th>
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Stage III Science  Stage II or III Science

1. Courses in a minimum of three subjects listed in the BSc Schedule.
2. At least 180 points (12 courses) must be above Stage I.
3. Up to 30 points (two courses) may be taken from outside the faculty.
4. 30 points (two courses) must be taken from the appropriate General Education Schedules for BSc students.
5. At least 75 points must be at Stage III, of which 60 points must be in the majoring subject.

To view regulations for majors, and course descriptions, see www.calendar.auckland.ac.nz

BSc degree requires: 360 points (24 x 15 point courses). Each box represents one 15 point course.

We recommend that students enrol in eight courses each year.

Degree Planners for double majors can be found at www.science.auckland.ac.nz/course-planning

It is the student’s responsibility to check that the final programme complies with University Regulations.
The Faculty of Science is the final authority on all BSc regulations.
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<tr>
<th>Undergraduate Chemistry Courses</th>
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<td><strong>Stage I</strong></td>
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<td>CHEM100/100G</td>
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<td>CHEM390</td>
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<td>CHEM392</td>
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For course descriptions and prerequisite information: [www.chemistry.auckland.ac.nz/courses](http://www.chemistry.auckland.ac.nz/courses)
Rupal Madaan is studying toward a Bachelor of Science majoring in Chemistry.

“My interest for chemistry began in high school because I had a fascination with drug designing and biochemistry, and I wanted to know more.

“I chose the University of Auckland because I knew that the Faculty of Science is New Zealand’s biggest science faculty and that the education is of a high standard. It is also close to home, not only to make expenses more manageable but it helped to create a smooth transition between high school and University.

“My favourite part of study is the labs because the work we do there relates back to the real world, they can also be a great education tool in order to understand the course better. In Medicinal Chemistry we had to make pharmaceutical drugs and compare them to the commercial ones which was really interesting.”
Helpful information

Academic dates
www.auckland.ac.nz/dates

Academic Integrity Course
www.auckland.ac.nz/academic-integrity

Accommodation
www.accommodation.auckland.ac.nz

Buy coursebooks
www.science.auckland.ac.nz/resource-centre

Career Development and Employment Services
www.auckland.ac.nz/careers

Course advice and degree planning in Science
www.science.auckland.ac.nz/student-centre

General education
www.auckland.ac.nz/generaleducation

How to apply
www.apply.auckland.ac.nz

How to enrol
www.auckland.ac.nz/enrolment

International students
www.international.auckland.ac.nz

Māori and Pacific students
www.science.auckland.ac.nz/tuakana

Need help?
www.askauckland.ac.nz

Rainbow Science Network for LGBTI students
www.science.auckland.ac.nz/rainbowscience

Scholarships and awards
www.scholarships.auckland.ac.nz

Support for students
www.science.auckland.ac.nz/support

APPLICATIONS CLOSE ON 8 DECEMBER
Questions about Chemistry? chemistry@auckland.ac.nz

Disclaimer
Although every reasonable effort is made to ensure accuracy, the information in this document is provided as a general guide only for students and is subject to alteration. All students enrolling at the University of Auckland must consult its official document, the University of Auckland Calendar, to ensure that they are aware of and comply with all regulations, requirements and policies.