



CHEMISTRY

UNDERGRADUATE COURSES

- ▶ Bachelor of Science
- ▶ Bachelor of Science Advanced (Honours) – Research
- ▶ Bachelor of Science Advanced (Honours) – Global Challenges
- ▶ 11 Double Degrees with a Bachelor of Science
- ▶ Bachelor of Applied Data Science
- ▶ Bachelor of Applied Data Science Advanced (Honours)

CHEMISTRY



Chemistry is the science of matter and energy – the study of the makeup and structure of substances, how their atoms and molecules react and interact, and how that behaviour can be harnessed to transform materials, medicine, and technology.

Both observation and measurement are essential in chemistry. Our chemistry units cover synthetic, analytical and physical chemistry with an emphasis on the environment, materials, medicine, biology, and sustainability. All our units involve laboratory work in addition to workshops and tutorials, and are undertaken in our state-of-the-art Green Chemical Futures building.

Our School of Chemistry is amongst the top 50 in the world and is ranked number 1 in Australia. We place a strong emphasis on research, innovative teaching and science education, developing students in modern chemical practice, problem solving, as well as oral and written communication skills.

Our scientists are at the forefront of their specialist fields including:

- ▶ Analytical chemistry
- ▶ Anti-cancer agents
- ▶ Bio-diagnostics
- ▶ Bio-spectroscopy
- ▶ Biotechnology
- ▶ Catalysis
- ▶ Chemical education
- ▶ Computational chemistry
- ▶ Drug design
- ▶ Energy
- ▶ Environmental chemistry
- ▶ Fluorescence
- ▶ Food chemistry
- ▶ Glasses and polymers
- ▶ Green chemistry
- ▶ Medicinal chemistry
- ▶ Molecular design and synthesis
- ▶ Nanotechnology
- ▶ Water chemistry and quality



UNIQUE OPPORTUNITIES

Green Chemical Futures Building

A state-of-the-art multi-functional facility home to our School of Chemistry.

Field Trips

Learn beyond the classroom.

Industry Internships

Apply your skills in the workplace to gain some professional experience.

International Experiences

Study overseas with an exchange, study abroad or Global Immersion Guarantee program.

Research Projects

Work closely with an academic supervisor to carry out an independent research project.

Society of Chemistry Students

Supplement your studies by joining this dedicated student-run club.

EXAMPLE FIRST YEAR COURSE MAP

CHEMISTRY

Semester 1	CHM1011 OR CHM1051	BIO1011	MTH1020 OR MTH1030 (OR MTH1035 depending on VCE background) OR SCI1020 OR SCI1022 OR STA1010	Another science sequence OR Science elective OR Non-science elective
Semester 2	CHM1022 OR CHM1052	BIO1022 OR BIO1042	SCI1000 Science communication to influence change	A unit to complete that sequence OR Science elective OR Science elective OR Non-science elective

Other science sequences:

Computational Science, Earth Atmosphere and Environment; Mathematics; Physics; or Psychology.



Scan here for all other first year example course maps.

monash.edu/science/current-students/manage-your-science-studies/example-by-major

POTENTIAL CAREERS

- ▶ Agrochemical chemist
- ▶ Analytical chemist
- ▶ Biomedical chemist/ analytical chemist
- ▶ Biotechnologist
- ▶ Biotechnology sales and marketing manager
- ▶ Cosmetology
- ▶ Drug development chemist
- ▶ Explosives chemist
- ▶ Food technologist
- ▶ Forensic scientist
- ▶ Medical laboratory technician
- ▶ Instrumentation chemist
- ▶ Industrial chemist
- ▶ Molecular design chemist
- ▶ Occupational health and safety officer
- ▶ Occupational hygienist
- ▶ Paint chemist
- ▶ Perfumer
- ▶ Pharmaceutical and product manufacturer
- ▶ Pharmaceutical representative
- ▶ Polymer chemist/ materials scientist
- ▶ Process control specialist
- ▶ Quality controller
- ▶ Research chemist
- ▶ Risk-management consultant
- ▶ Science journalist
- ▶ Teacher
- ▶ Toxicologist
- ▶ Waste and resources management consultant
- ▶ Water quality and management consultant
- ▶ Winemaker



JUSTIN

Degree: Bachelor of Science (Honours)

Majors: Chemistry and Biochemistry

Minor: Pharmacology

Job: Instrumentation Chemist



AURORA

Degree: Bachelor of Science Advanced – Research (Honours)

Major: Chemistry

Minor: Biochemistry

Current position: Chemistry PhD Candidate at Monash University



Scan here for the full school brochure.



Your Essential Guide to Monash Science

monash.edu/science/future-students/your-essential-guide-domestic-students