Department of Chemistry

Unique Offerings

Research Labs and Facilities
As one of the best funded and most active chemistry research departments in North America, we are home to several state-of-the-art instrumentation laboratories. Our Mass Spectrometry Laboratory, Nuclear Magnetic Resonance Laboratory, and X-ray Crystallography Laboratory are some of the largest and best equipped in Canada.

Undergraduate research opportunities are offered throughout the four year degree and can start as early as first year by volunteering in a lab, or in second year by enrolling in the CHEM 299 Research Opportunity Program in Chemistry.

Redefining the Classroom
With over 30,000 square feet of newly renovated laboratory spaces, we offer many experiential courses in which undergraduates develop their technical abilities.

In response to the need to diversify the STEM field, our student-driven initiative, Working for Inclusivity in Chemistry welcomes everyone to push the boundaries for diversity in chemistry.

More Information
undergrad@chem.ualberta.ca
ualberta.ca/chemistry
Undergraduate Programs

Widely considered the ‘central science’ discipline, a chemistry degree provides a broad background in the theory and practice of chemistry, and is a solid foundation from which to branch out to almost anything.

CHEMISTRY - BSc Major/Minor | BSc Honors
A required set of courses lays the groundwork for exploration that suits each student’s interests and goals. Once the fundamentals are in place, students can choose to study a wide range of topics, including analytical chemistry, catalysis, chemical biology, environmental chemistry, organic and inorganic chemistry, physical properties and dynamics of chemical systems, quantitative and qualitative methods of analyses, spectroscopy, and more.

Connect with Industry

Coursework in CHEM 300: Introduction to Industrial Chemistry incorporates professional perspectives via participation of chemical industry representatives, acting in collaboration with professors who help to build students’ knowledge of the chemical industry, networking skills, professional interviewing skills, and resume quality.

The Science Internship Program (SIP) allows for paid work placements with well-known companies such as Gilead Alberta ULC., Guardian Chemicals Inc., and NOVA Chemicals.

Possible Careers

In addition to serving as a great basis for professional training (e.g., medicine, pharmacy, dentistry), a Chemistry Major or Honors degree leads to a diverse set of career paths:

- Analytical chemist
- Biochemist or biotechnologist
- Cancer researcher
- Cosmetic chemist
- Environmental auditor
- Food and drug inspector
- Forensic laboratory analyst
- Hazardous waste management
- Hydrometric technologist
- Occupational health and safety officer
- Oil and gas worker
- Organic chemist
- Pharmaceutical scientist
- Purchasing agent
- Quality control manager
- Toxicologist

For admission requirements: ualberta.ca/admissions
For admission related questions: science.recruiting@ualberta.ca