DISCOVER CHEMISTRY UNDERGRADUATE STUDIES
DID YOU KNOW?

THE DEPARTMENT OF CHEMISTRY has a strong track record for outstanding undergraduate teachers. Boasting two 3M Teaching Fellows, eight recipients of the Rutherford Award for Excellence in Undergraduate Teaching as well as winners of the Provost’s Award for Early Achievement of Excellence in Undergraduate Teaching and the William Hardy Alexander Award for Excellence in Undergraduate Teaching, it is clear that the Department of Chemistry is the premier place to study in Canada.

THE SCIENCE OF MATTER

CHEMISTRY

THE UNDERGRADUATE CHEMISTRY PROGRAM at the U of A is exemplary. Our teaching and research is recognized internationally. Our faculty members, lecturers, lab coordinators, teaching assistants and staff work together to offer an award-winning and engaging experience that enables our students to excel.

THE DEPARTMENT OF CHEMISTRY allows you to build a solid set of core courses. Once the fundamentals are in place, you can choose from senior chemistry options in your own area of interest, including:

- Bioanalytical Chemistry
- Bioconjugate Chemistry
- Computational Chemistry
- Environmental Chemistry
- Molecular Spectroscopy and Dynamics
- Organic Synthesis
- Separations and Mass Spectrometry
- Synthesis and Application of Inorganic and Nano-materials
- X-ray Crystallography

OUR PROGRAMS

Dr. Charles Lucy, Professor and recipient of numerous distinguished teaching awards including a Rutherford Award for Excellence in Undergraduate Teaching and a 3M National Teaching Fellowship, provides an engaging experience that enables our students to excel.

DR CHARLES LUCY, Professor and recipient of numerous distinguished teaching awards including a Rutherford Award for Excellence in Undergraduate Teaching and a 3M National Teaching Fellowship.
OUR PROGRAMS

A BACHELOR OF SCIENCE IN CHEMISTRY can be completed in three different programs, each with distinct features. Widely considered the 'central science' discipline, a degree in Chemistry provides a solid foundation from which to branch out to almost anything.

BACHELOR OF SCIENCE GENERAL, CHEMISTRY MAJOR OR MINOR
- A required set of courses lays the groundwork for exploration that suits your personal interests and goals
- Allows the greatest amount of flexibility
- Can be paired with your choice of minor or double major

BACHELOR OF SCIENCE, SPECIALIZATION IN CHEMISTRY
- Offers excellent training in chemistry
- Allows greater flexibility to take courses in other branches of science
- Prepares you for a career as a professional chemist
- Accredited by the Canadian Society for Chemistry

BACHELOR OF SCIENCE, HONORS IN CHEMISTRY
- Highest level of specialized training in chemistry
- Prepares you for work as a professional chemist
- Recommended for students considering graduate studies
- Accredited by the Canadian Society for Chemistry

OUR PROGRAMS

Undergraduate student Daniela Hernandez (left) works with chemistry professor Florence Williams, who studies NEUROTROPHIC CELL RESPONSE.

WHETHER A FUTURE GRADUATE PROGRAM, professional program such as Medicine or Dentistry or even getting started in industry is on the horizon, a degree in Chemistry is flexible and highly regarded by professionals in any field.

FOR ADMISSIONS REQUIREMENTS SEE ADMISSIONS.UALBERTA.CA
EXPERIENTIAL LABS
TEACHING OUR STUDENTS TO THINK LIKE SCIENTISTS in a lab environment makes our undergraduate programs second to none. To ensure a quality lab experience, students work in small groups. Our active and collaborative labs enrich the educational experience and foster the examination, experimentation and observation skills that are the forefront of a science degree.

RESEARCH LABS
GETTING UNDERGRADUATE DEGREES AT A WORLD-CLASS RESEARCH INSTITUTION allows our students to interact with researchers working at the forefront of their field. Research opportunities are available for students at all levels of their degree via formal research courses, paid positions, volunteer opportunities, or competitive awards and studentships.

CONNECT WITH INDUSTRY
THERE ARE OPPORTUNITIES TO LEARN ABOUT INDUSTRY via coursework in such courses as ‘Introduction to Industrial Chemistry’ and ‘Special Topics: Medicinal and Pharmaceutical Chemistry’. These courses incorporate professional perspectives via participation of industry representatives, acting in collaboration with professors. Those seeking full participation in chemistry-related employment are encouraged to take advantage of the SCIENCE INTERNSHIP PROGRAM.

HANDS-ON LEARNING
What makes the Chemistry program outstanding? “Research, research, and more research! When I first started undergrad I had no idea that undergrads could or should do research - but I am so happy I did” —JENNER LAKUSTA, ’16 BSC

Students work closely with LAB COORDINATORS AND TEACHING ASSISTANTS in the undergraduate laboratories.
SCIENCE INTERNSHIP PROGRAM

THE SCIENCE INTERNSHIP PROGRAM (SIP) IS A PAID WORK EXPERIENCE opportunity combining classroom study with a 4-16 month work term. Students are assigned robust projects and make valuable contributions to their employers. Past and present employers include:

• Gilead Alberta ULC
• Syncrude Canada
• Natural Resources Canada-CanmetENERGY
• Guardian Chemicals Inc
• NOVA Chemicals

SIP WILL PROVIDE YOU THE OPPORTUNITY TO:

• Clarify your strengths, interests, and goals
• Apply classroom knowledge to hands-on, real-life situations.
• Graduate with a resume packed with relevant, paid work experience.
• Boost your chances of landing a great job after graduation.

VISIT UAB.CA/SCIENCEINTERNSHIP TO LEARN MORE
A FUTURE IN CHEMISTRY

The Chemistry program only becomes better year after year. Give yourself time to find a field of chemistry that you really enjoy, and pursue it throughout your degree.”

JOSE RODRIGUEZ, ’16 BSC

SKILLS

OUR STUDENTS DEVELOP A DIVERSE SKILL SET that can be applied in a variety of careers and advanced degrees. Students gain advanced technical skills via hands-on laboratory experience throughout their degree, including the possibility of participation in research. Professional skills, including oral presentations and technical writing, are an integral part of both advanced coursework and research training.

CAREERS

Careers in Chemistry are diverse and rewarding. As a core science, your chemistry background and training is broadly applicable in a wide variety of sectors including industry, academia, government and non-profit. Examples include, but are not limited to:

- Oil and Gas
- Biotechnology
- Cancer Research
- Forensics
- Environment
- Organic Synthesis
- Quality Control
- Pharmaceutical Industry
- Catalysis

ADVANCED DEGREES

AN UNDERGRADUATE DEGREE IN CHEMISTRY provides an excellent foundation for many professional programs such as medicine, pharmacy, and dentistry. Students continuing into graduate programs in chemistry enjoy careers in research and academia, as well as industry.
DISCOVER CHEMISTRY

CONTACT
Questions about programs?
Contact a Faculty of Science recruiter.
Email: science.recruiting@ualberta.ca

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UNIVERSITY OF ALBERTA
DEPARTMENT OF CHEMISTRY