Department of Biochemistry

Unique Offerings

Certificate in Biomedical Research
Students who pursue this certificate will be engaged in world-class biomedical research and will acquire a broad range of skills through substantive laboratory courses and independent research project experiences. As an optional embedded certificate, courses taken also count towards a student’s degree.

Redefining the Classroom
Biochemistry is a medical science that relies on research, therefore training to work as a researcher is central to the program. Students have the opportunity to experience world-renowned research in a foreign country through BIOC 497. This spring and summer study abroad course allows students to work in labs in the United Kingdom, Germany, Sweden or Spain.

The Undergraduate Summer Students’ Research Program in the Faculty of Medicine & Dentistry provides undergraduate and medical students the opportunity to participate in summer research under the supervision of a faculty member.

More Information
ualberta.ca/biochemistry
Undergraduate Programs

While the Department of Biochemistry is housed within the Faculty of Medicine & Dentistry, the undergraduate degrees are offered through the Faculty of Science.

BIOCHEMISTRY - BSc Major/Minor | BSc Honors

The field of biochemistry is concerned with the complex chemical reactions that occur in a wide range of biological systems and is one of the most broadly useful disciplines for understanding modern biology. These programs provide the basis for practical advances in medicine, veterinary medicine, and agriculture. Specialized topics include:

- Cell signaling in cancer
- Proteomics and systems biology
- Structural biology
- Membrane protein biochemistry
- Prion proteins and neurodegeneration

Biochemistry can be combined with numerous other sciences – chemistry, genetics, microbiology, immunology, pharmacology, cell biology and many others – to provide both an individually-tailored and well-rounded course of studies as part of an undergraduate career.

Possible Careers

- Bacteriologist
- Biochemist
- Clinical Biochemist
- Cytologist
- Food & Drug Inspector
- Food Science Technologist
- Forensic Laboratory Analyst
- Geneticist
- Immunologist
- Laboratory Technician
- Medical Librarian
- Medical Writer
- Pharmaceutical Researcher
- Pharmaceutical Sales
- Professor/Teacher
- Public Health Officer
- Quality Control Manager
- Research Scientist
- Toxicologist
- Virologist

Note: Additional education or specialized training is required for many occupations.

For admission requirements: ualberta.ca/admissions

For admission related questions: science.recruiting@ualberta.ca

Updated August 2023