



FACULTY OF SCIENCE

## BIOCHEMISTRY

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This degree combines knowledge and methodologies of biochemistry, cell biology, genetics, and microbiology with those of the physical sciences to investigate living systems.

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Biochemistry is the chemistry of life. It includes the structure and function of biologically important molecules, such as proteins, nucleic acids like DNA, carbohydrates, lipids, and many smaller biologically-active chemicals. Biochemistry graduates work in many different fields. These include research on the molecular basis of diseases, development of pesticides and medical diagnostics, forensics, immunology, environmental remediation, and physiology. Throughout this program (formerly known as Molecular Biology) important developments in the field are highlighted and future directions explored.

At The University of Winnipeg, Biochemistry is an interdisciplinary program. Most required courses are taught in the Departments of Biology and Chemistry. Students also take relevant courses in Physics, Mathematics, and Statistics along with elective courses. You will learn about the chemical make-up of cells, the regulation of metabolism, and the actions and control of genes. In addition, you will become familiar with the laboratory techniques used in this large area of science.

This program leads to a Bachelor of Science (3-year, 4-year, or Honours). Also, please see related fact sheet on "Chemistry."

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### SAMPLE CAREERS

