

Biochemistry

MAJOR @ VITERBO UNIVERSITY



10/10

Overview

Biochemistry is the study of chemical processes in living organisms, which is achieved by determining the structure and function of biological molecules. Both chemists and biologists recognize the important role of an undergraduate major in biochemistry. Preparation in biochemistry provides the student a wide range of options in chemistry and biology, from careers in the medical professions, to molecular biology, to pharmaceutical chemistry, to high school teaching. Modern instrumentation and research opportunities are fully integrated into the curriculum.

Why Viterbo?

The Viterbo University biochemistry program:

- offers an American Chemical Society (ACS) certified degree.
- supports various pre-professional programs.
- features a curriculum with a broad foundation in biology and chemistry.
- is located in state-of-the-art science and laboratory facilities.
- features opportunities to engage in mentored research with faculty.
- develops skills such as analysis, problem solving, communications, decision making, and working both independently, and in a research-team environment.
- includes strong academic advising within the natural sciences division.

Career Options *(some require advanced degrees)*

- college professor
- molecular biologist
- pharmacist
- teacher
- dentist
- optometrist
- physician
- technical writer
- forensic chemist
- pharmaceutical sales
- research and development

Features of the Curriculum

- cellular and molecular biology
- molecular genetics
- general and organic chemistry
- introductory and directed research

For More Information www.viterbo.edu/biochem

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General education requirements

See the general education section of the catalog.

Major requirements

- General Biology 1 and 2
- Molecular and Cellular Basis of Life
- Biochemistry
- Biochemical Techniques
- Molecular Genetics
- General Chemistry 1 and 2
- Organic Chemistry 1 and 2
- Analytical Chemistry
- Physical Chemistry
- Advanced Biochemistry
- Independent Research Series (5–8 credits)

Support courses

Calculus 1, Calculus 2, University Physics 1 and 2

Those students interested in graduate work in biochemistry should follow the recommendations of the American Chemical Society which requires specifically Calculus 1, 2 and 3; University Physics 1 and 2; and also either Instrumental Analytical or Physical Chemistry 2 with lab.

American Chemical Society (ACS) Accredited Biochemistry Major (Bachelor of Science)

The same as the above biochemistry major with the additional major requirements of:

- Advanced Inorganic Chemistry
- Physical Chemistry 2 with lab
- Instrumental Analytical Chemistry or Environmental Chemistry

Because a biochemistry major program intrinsically contains significant work in both biology and chemistry, declared minors in biology and chemistry will not be granted.

This is an unofficial course outline. For complete degree requirements, refer to the course catalog.