Learn the chemistry behind living things.
Biochemistry is the study of molecules used by living things, as well as how these molecules can be used to develop new products and solve problems. As a biochemist your future could be in the growing biotechnology industry or in graduate or professional school in areas such as pharmacy or medicine. Biochemists have the knowledge and skills to take these diverse directions and many more.

UWL’s biochemistry major is accredited by the American Society for Biochemistry and Molecular Biology, which allows the program to offer a prestigious ASBMB-certified bachelor of science degree in biochemistry. UWL biochemistry graduates often find themselves choosing among several good job offers. They are also highly attractive to graduate and professional programs.

What is biochemistry?
Biochemistry is the chemistry of biology. It is one of the five main subdisciplines of chemistry. A biochemist explores chemical processes within basic biological systems. Biochemical research has provided a more comprehensive understanding in regenerative medicine, infectious disease, organ/tissue transplantation, clinical diagnostics and genetic disease.

What can you do with a biochemistry degree?
Many biochemistry students pursue careers in the health professions, biotechnology industry or government laboratories, working in areas such as drug design, vaccine development, biological assays and protein or genetic engineering. Employment surveys show that biochemistry majors are the primary candidates recruited by biotechnology companies. Biochemistry graduates also may continue their education in doctoral programs.

Biochemistry careers
Entry level
- Analysis/testing as a laboratory chemist or biochemist
- Management trainee
- Pollution control
- Production control
- Quality assurance chemist
- Research technician
- Sales representative
- High school science teacher (with teacher certification)

Advanced
- Chief project biochemist
- Director of research and development
- Industrial administrator
- Plant manager
- Production control manager
- Research and development biochemist

Further education
- Medical or other professional study in pharmacy, veterinary medicine, nuclear medicine, optometry, dentistry and more
- Graduate study in cell and molecular biology, systems biology, genetics, genetic counseling, developmental biology, analytical chemistry, biochemistry, organic chemistry, inorganic chemistry, physical chemistry, material science, polymer chemistry, biomedical engineering and more
- Law school (example: patent law)
- Industrial management training
- Graduate study in business

UWL has helped me in various aspects of my career, ranging from understanding difficult biological principles to working as a team with colleagues and customers. It taught me how to be self-motivated, to think creatively and to problem solve on the spot.

Nanna Takahashi
What distinguishes UWL’s Biochemistry program?

- **Prestigious ASBMB-Certified B.S. degree in biochemistry**
  The UWL Department of Chemistry and Biochemistry is fully accredited by both the American Chemical Society-Committee on Professional Training (ACS-CPT) and the American Society for Biochemistry and Molecular Biology (ASBMB). These recognitions acknowledge the quality program, staff and facilities of the department, and they enable the program to offer prestigious ASBMB-Certified degrees in Chemistry and Biochemistry, along with several other degree options.

- **Student scholarships available**
  The Department of Chemistry and Biochemistry awards student scholarships annually to support returning undergraduate students in the major and graduates of the program who are entering a professional program in the basic sciences and/or health professions.

- **Undergraduate research opportunities**
  Students have numerous opportunities to get involved in cutting-edge chemical, biochemical and educational undergraduate research projects. In 2019-20, the Chemistry & Biochemistry Department had the highest percentage of students participating in undergraduate research at UW-La Crosse. Summer undergraduate research fellowships are also available to conduct research with a faculty member.

- **Co-author with faculty**
  Students routinely co-author professional presentations and publications with chemistry faculty members. Students often present their research at regional and national meetings, and have won awards for their research presentations at national conferences.

- **High percentage of graduates successfully pursue doctoral degrees**
  The Chemistry & Biochemistry Department currently has over 250 student majors. Each year, over 30 students graduate with bachelor of science degrees in chemistry or biochemistry. Typically, 30-50% of graduating seniors apply to, and are accepted by graduate programs at major research universities where they pursue doctoral degrees in chemistry or related areas.

- **Internships available**
  Students are encouraged to participate in internship experiences, which may be taken for academic credit. They offer practical experiences in the field and in some cases are paid. Campus support is available to help find internships through UWL Career Services and Handshake.

- **Experiential learning opportunities for all majors**
  Students gain 300 hours of hands-on, practical laboratory experience with specialized scientific equipment.

- **Make connections with other students**
  Students have opportunities to connect and enjoy fun and informative experiences through the Chemistry and Biochemistry Club.

- **One-on-one advising**
  Students in the program benefit from a comprehensive and inclusive approach to academic and career advising. Each student is assigned a departmental staff member to provide coordinated and focused academic and career planning. This approach empowers each student to make decisions compatible with their interests.

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Chemistry and Biochemistry Department

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**Phone:** 608.785.8268  
**Web:** www.uwlax.edu/chemistry-and-biochemistry  
View degree requirements at catalog.uwlax.edu