BIOCHEMISTRY

Biochemistry is an interdisciplinary science that encompasses large segments of biology and chemistry and significant areas of mathematics and physics. This rapidly expanding science explores the molecular aspects of living organisms. Biochemists attempt to explain life processes regarding the structures and properties of the molecules that compose living organisms. The tools and concepts of biochemistry are a foundation for careers in many areas of medicine and research.

PROGRAMS

DEGREES AND CERTIFICATES

- Bachelor of Art in Biochemistry
- Bachelor of Science in Biochemistry

ABOUT THE PROGRAM

The Department of Biochemistry, Chemistry and Geology at Minnesota State Mankato offers both BA and BS degrees in Biochemistry. The BS degree is accredited by the American Society for Biochemistry and Molecular Biology (ASBMB). Students considering a BA or BS degree in biochemistry should consult a biochemistry advisor for specific information regarding their program.

REAL-WORLD CONNECTIONS

SKILLS AND TALENTS

- Chemistry
- Data Analysis
- Research Skills
- Statistical Analysis
- Laboratory Procedures
- Problem-solving

CAREERS

- Lab Technician/Scientist
- Medical Doctor
- Researcher
- Chemist
- Pharmacist
- Veterinary Lab Technician

EMPLOYERS

- BioLife Plasma Services
- Inspire Medical Systems
- Integrated DNA Technologies • 3M
- Mayo Clinic Health System
- Monteris Medical

INSPIRED ACTION

EMPLOYMENT RATE

100%

of program graduates begin their careers within one year of graduation.

Graduates: 46 Respondents: 40 link.mnsu.edu/graduate-follow-up

MEDIAN SALARY

\$103,810 The median annual wage for Biochemists and Biophysicists in May 2022.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Biochemists and

Biophysicists, at link.mnsu.edu/biochemistry-salary

PROGRAM WEBSITE



cset.mnsu.edu/biochemistry

MINNESOTA STATE

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SAMPLE FOUR-YEAR PLAN - BIOCHEMISTRY, BS

First Year (Fall)	First Year (Spring)
ENG 101 Foundations of Writing & Rhetoric (4) MATH 121 Calculus I (4) CHEM 201 General Chemistry I (5) General Education Course (3)	BIOL 105 General Biology (4) STAT 154 Elementary Statistics (4) CHEM 202 General Chemistry II (5) General Education Course (3)
Second Year (Fall)	Second Year (Spring)
BIOL 106 General Biology II (4) CHEM 305 Analytical Chemistry (4) CHEM 322 Organic Chemistry I (4) General Education Course (3)	BIOL 211 Genetics (4) CHEM 281 Biochemistry and Chemistry Professional Foundations (1) CHEM 324 Organic Chemistry II (3) CHEM 325 Organic Chemistry II Lab (1) General Education Course (3)
Third Year (Fall)	Third Year (Spring)
PHYS 211 Principals of Physics (4) CHEM 460 Biochemistry I (3) CHEM 465 Biochemical Techniques I (2) CHEM 481W Inquiry and Writing in Biochemistry and Chemistry (3) General Education Course (4)	PHYS 212 Principles of Physics II (4) CHEM 461 Biochemistry II (3) CHEM 466 Biochemical Techniques II (2) General Education Course (3) General Education Course (3)
Fourth Year (Fall)	Fourth Year (Spring)
CHEM 445 Physical Chemistry I (4) CHEM 450 Physical Chemistry Laboratory I (1) General Education Course (3) General Education Course (3) Elective Course in Major (3)	BIOL 479 Molecular Biology (4) CHEM 489 Senior Capstone (1) General Elective Course (4) Elective Course in Major (3)

For more information about program requirements, visit: <u>mnsu.edu/academics/academic-catalog</u>

LEARN MORE

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NOTES