BIOTECHNOLOGY

Biotechnology is the application of recent developments in technology to manipulate the genetic and biochemical characteristics of an organism so that the organism or its metabolites can be economically produced for our benefit. By studying how living organisms respond to their environment, researches can better understand our planet's natural processes. With its many applications, this technology offers immense potential to protect the environment and improve human lives.

PROGRAMS



DEGREES AND CERTIFICATES

• Bachelor of Science in Biotechnology

ABOUT THE PROGRAM

The Bachelor of Science in Biotechnology will prepare students to have a strong understanding of the analytical and quantitative areas of science. Students will become familiar with the theory and practice of genetic engineering and biochemical processes.

REAL-WORLD CONNECTIONS



SKILLS AND TALENTS

- Research Skills
- Data Analytics
- Problem-Solving
- Technology Skills
- Laboratory Skills
- Critical Thinking

CAREERS

- Lab Technologist
- Biostatistician
- Lab Technician
- Pharmacist
- Computational Biologist
- Research Associate

EMPLOYERS

- 3M
- Bio-Techne
- Genentech
- Biogen
- Lifecore Biomedical
- Novo Nordisk

INSPIRED ACTION



EMPLOYMENT RATE

95.8%

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

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

MEDIAN SALARY

\$70,000

The median annual wage for Biology occupations in May 2022.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Biology occupations, at <u>link.mnsu.edu/biology-salary</u>

PROGRAM WEBSITE



cset.mnsu.edu/biotechnology

BIOTECHNOLOGY, BS

First Year (Fall)	First Year (Spring)		
BIOL 105 General Biology I (4) MATH 121 Calculus I (4) General Education Course (4) General Education Course (3)	BIOL 106 General Biology II (4) MATH 122 Calculus II (4) OR STAT 154 Elementary Statistics (4) General Education Course (3) General Education Course (4)		
Second Year (Fall)	Second Year (Spring)		
BIOL 211 Genetics (4) CHEM 201 General Chemistry I (5) PHYS 211 Priniciples of Physics I (4) General Education Course (2)	BIOL 270 Microbiology (4) CHEM 202 General Chemistry II (5) PHYS 212 Principles of Physics II (4) General Education Course (2)		
Third Year (Fall)	Third Year (Spring)		
BIOL 320 Cell Biology (4) CHEM 322 Organic Chemistry I (5) General Education Course (3) General Education Course (3)	BIOL 452 Biological Instrumentation (3) BIOL 479 Molecular Biology (4) CHEM 360 Principles of Biochemistry (4) General Education Course (4)		
Fourth Year (Fall)	Fourth Year (Spring)		
BIOL 453 Biological Engineering Analysis I (4) BIOL 474 Immunology (4) Captstone Experience (3) General Education Course (3)	BIOL 454 Biological Engineering Analysis II (4) BIOL 476 Microbial Physiology and Genetics (5) Captstone Experience (3) General Education Course (3)		

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

LEARN MORE

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NOTES		