

Do you want to enrich your education with an exploration of Biotechnology?

Minor in Applied Biotechnology



Why minor in Applied Biotechnology?

A minor in Applied Biotechnology allows you to explore the breadth of this exciting field, without the commitment of a major. Perhaps you're pursuing a major in a biological or biochemical field and want to add a new focus area to expand your career options. Or perhaps you're a Business or pre-Law student who enjoys science and sees the potential for a career in the business or legal aspects of this innovative, growing sector.

This minor focuses on the industrial uses of microbes and plants in manufacturing products like fermented foods and beverages and biologic pharmaceuticals.

For more information, contact the academic advisor:

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BOOST YOUR EDUCATION FOR WORKPLACE RELEVANCE

Focus on the industrial uses of microbes, especially in production of fermented foods and beverages

Do you want to learn how living cells or biological processes are used to develop products and technologies to feed and clothe a growing population and fight disease? In the Applied Biotechnology minor, you'll see how microbes and other organisms are used to answer some of the world's most pressing questions in the areas of food production, health, and sustainability. The Applied Biotechnology minor can help you enhance your bioscience knowledge and may be appropriate both for science majors and students aiming for a career in the business or legal aspects of the biotechnology industry.

The Applied Biotechnology minor is right for you if:

- you want to understand and analyze innovations using biotechnology.
- you're conscious of the growing human population and climate change and the need for practical solutions to ensure an abundant supply of sustainable food, renewable energy, medicines, and materials.
- you're a business major or pre-Law student interested in a career in the biotechnology industry or patent law.

APPLIED BIOTECHNOLOGY MINOR			18 Units total
Minor Core - take all courses	Course	Offered	10 Units
Principles of Microbiology	MIC 285R	SP	4
Introduction to Biotechnology	PLS 340	F	3
Fermented Food and Beverages (starting Spring 2022)	NSC 3XXR	SP	3
Core Electives - take 5-8 units	Course	Offered	5 Units
Principles of Microbiology Laboratory	MIC 285L	SP	1
Food Microbiology and Biotechnology	MIC 430	SP	3
Advanced Food Science & Microbiology Laboratory	MIC 430L	SP	2
Fundamentals of Food Science Lab	NSC 351L	F/SP	1
Fundamentals of Food Science	NSC 351R	F/SU	3
Fermented Foods and Beverages Laboratory	NSC 3XXL	SP	1
Biotechnology Laboratory	PLS 340L	SP	2
Plant Biotechnology	PLS 424R	SP	3
Industrial Biotechnology	PLS 434	F	3
Plant Biochemistry and Metabolic Engineering	PLS 448A	F	3
Other Electives - take 3 units from Core Electives or this list	Course	Offered	3 Units
<i>Choose additional course(s) from "Core Electives" list or from the list below</i>			
Plants, Genes, and Agriculture	PLS 245	SP	3
Evolution of Food Plants	PLS 307	SP (even yrs.)	3
Nutrition and Metabolism	NSC 308	F/SP/SU	3
Nutrition and Disease	NSC 310	F/SU	3
Plant and Animal Genetics	PLS 312	SP	4
Principles of Dairy Animal Milk Products and Processing	ACBS 320	SP	3
Microbial Physiology Laboratory	MIC 328L	SP	1
Microbial Physiology	MIC 328R	SP	3
Microbial Diversity	PLS 329A	F	3
Core Concepts in Molecular Microbiology	MIC 350	F	3
Plant Molecular Biology	PLS 358	SP	3
Plant Breeding and Genetics	PLS 415	SP	3
Microbiological Techniques	MIC 421B	F	5
Microbial Genetics Laboratory	PLP 428L	SP	2
Plant Genetics and Genomics	PLS 449A	Contact Dept.	3