

# MINOR IN CHEMICAL AND BIOLOGICAL ENGINEERING

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The Minor in Chemical and Biological Engineering provides students with a strong foundation in applying engineering principles to solve problems at the interface of chemistry, biology, and materials science. This interdisciplinary program is designed to complement majors in engineering, natural sciences, and related fields by equipping students with knowledge and skills that support careers in biotechnology, pharmaceuticals, energy, environmental engineering, and advanced materials.

The minor emphasizes problem-solving, quantitative analysis, and interdisciplinary collaboration, preparing students for advanced study or careers in industries and research areas where chemistry and biology intersect with engineering.

## Learning Objectives

Upon successful completion of this minor, students will be able to:

1. Understand the fundamental chemical and biological processes and their integration in engineered systems.
2. Describe and explain core concepts in thermodynamics, transport phenomena, reaction engineering, and bioprocessing.
3. Apply practical skills in chemical and biological engineering to address challenges in health, sustainability, and technology development.