

BIOMOLECULAR ENGINEERING MINOR

for the Undergraduate Minor in Biomolecular Engineering

Biomolecular Engineering is a broad, interdisciplinary field with the main goal of engineering value-added biomolecules and biomolecular systems for applications in the medical, chemical, agricultural and food industries. Its practice ranges from the fundamental study of biomolecules and biomolecular systems to the design of cellular factories and artificial organs. The Biomolecular Engineering minor is designed to better prepare non-chemical engineering students for careers in the food, pharmaceutical, personal care, and biotechnology industries. This minor is not open to students majoring in chemical engineering. Those students should instead take the biomolecular engineering concentration if they are interested in biomolecular engineering coursework.

Students may fulfill the requirements for a minor in biomolecular engineering by completing the following course sequence. For more information, please contact the academic advisors in the School of Chemical Sciences.

For more information regarding to the Biomolecular Engineering minor, contact the academic advisors in the School of Chemical Sciences at scs-advising@illinois.edu

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Code	Title	Hours
Minor Course Requirements		
CHBE 221	Principles of CHE	3
CHEM 232	Elementary Organic Chemistry I	3
MCB 450	Introductory Biochemistry	3
Biomolecular Engineering Electives		9
Choose 3 from the following: CHBE 471, CHBE 472, CHBE 473, CHBE 474, CHBE 475, CHBE 476, CHBE 478, CHBE 497, CHBE 499		
Technical Electives		3
Choose 1 from the following: ABE 436, ABE 483, ABE 488, BIOE 414, BIOE 415, BIOE 476, ECE 467, ECE 480, MSE 470, MSE 473, MSE 474, TAM 461		
Total Hours		21

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Upon completing this minor, students are expected to be able to:

1. Identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. Acquire and apply new knowledge as needed, using appropriate learning strategies.
3. An ability to analyze the chemistry and metabolism of macromolecules in biological processes and their relation to the

regulation and processes of organisms, cells, and subcellular components.

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Chemical & Biomolecular Engineering (<https://chbe.illinois.edu/>)

Chemical & Biomolecular Engineering Faculty (<http://chbe.illinois.edu/directory/>)

SCS Academic Advising (<https://scs.illinois.edu/academics/advising/>)

College of Liberal Arts and Sciences

Overview of College Admissions & Requirements: Liberal Arts & Sciences (<http://catalog.illinois.edu/schools/las/academic-units/>)