THE UNIVERSITY OF RHODE ISLAND
COLLEGE OF ENGINEERING

Bliss Hall, Suite 420, Kingston, RI 02881
401-874-5985

Minor in Biochemical Engineering

The Biochemical Engineering minor introduces students to the fundamental chemistry and physics underlying biological processes. It focuses on the use of biological (natural or organic) materials, such as organisms, cells and certain molecules, to develop products and processes. This minor helps prepare engineering students as well as non-engineering students for industrial and research positions in the biotechnology, biopharmaceuticals, biomedical, and food and beverage fields.

1. Undergraduate students may declare a Minor in Biochemical Engineering by completing a minimum of 18 credit hours, at least half of which must be earned at The University of Rhode Island. Up to 6 credits can double count towards a major and students must earn a minimum grade point average of 2.00 in these courses. Students are responsible for meeting the prerequisite requirements for individual courses, as applicable.
2. Students must complete the Biochemical Engineering minor form and have it signed by the Coordinator, Mr. James Dean Vogel, P.E.
3. Application for the Minor in Biochemical Engineering must be filed in the College of Engineering Dean's Office.

Name:_____ Expected Grad Date:_____

Student ID:_____ Email:_____

Major:_____ Phone:_____

Required Fundamental Science Courses (6 credits)
CHM 112 General Chemistry Lecture II
BIO 110 Fundamentals of Biology

Required Biochemical Engineering Fundamentals Courses (6 credits)
CHE 574 Biochemical Engineering I
CMB 311 Introductory Biochemistry

Supporting Courses (6 credits)
BME 466/CHE 466 Biomaterials
CHE 491/2 Special Problems (3 credits maximum)*
CHE 548 Separations for Biotechnology
CHE 553 Bionanotechnology
CHM 441 The Chemistry of Biological Systems
CMB 210 Biochemical Aspects of Nutrition and Physiology
CMB 341 Principles of Cell Biology
CMB 421 Physical Biochemistry
CMB 426 Structural Biochemistry
CMB 482 Proteins and Enzymes
CVE 472 Biosystems in Environmental Engineering
PHY 430 Modern Biological Physics

*Students who take CHE 491/2 must complete a research project related to biochemical engineering under the guidance of a faculty member and get prior permission from the Biochemical Engineering Minor Coordinator.

Minor Coordinator: Mr. James Dean Vogel, P.E., Adjunct Faculty of Chemical Engineering, jvogel@uri.edu.

Created December 2024

Approved Courses	Credits	Grade	Course
CHM 112	3	_____	_____
BIO 110	3	_____	_____
CHE 574	3	_____	
CMB 311	3	_____	
_____	_____	_____	
_____	_____	_____	

_____ _____

Minor Coordinator Signature *Date* *Assistant Dean of Engineering Signature* *Date*