

BIOMOLECULAR ENGINEERING MINOR

This minor is for engineering and science students who desire knowledge of diverse biomedical and biotechnological applications encompassing biomolecular function, interactions and transport.

About this Program

- **College:** Herbert Wertheim College of Engineering (<http://catalog.ufl.edu/UGRD/colleges-schools/UGENG/>)
- **Credits:** 15-16 | Completed with minimum grades of C

Department Information

The work of the Department of Chemical Engineering is not restricted to the chemical industry, chemical changes or chemistry. Instead, modern chemical engineers are concerned with all the physical, chemical, and biological changes of matter that can produce an economic product or result that is useful to humankind.

Website (<https://www.che.ufl.edu/>)

CONTACT

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1030 Center Drive

CHEMICAL ENGINEERING STUDENT CENTER (CESC)

GAINESVILLE FL 32611-2030

Map (<http://campusmap.ufl.edu/#/index/0958>)

Curriculum

- Biomolecular Engineering Minor
- Chemical Engineering
- Combination Degrees

Prerequisites

To apply for the minor, students must have completed these eight engineering preprofessional courses with a 2.5 GPA and no course grade lower than C.

Code	Title	Credits
CHM 2045	General Chemistry 1	3
CHM 2046	General Chemistry 2	3
MAC 2311	Analytic Geometry and Calculus 1	4
MAC 2312	Analytic Geometry and Calculus 2	4
MAC 2313	Analytic Geometry and Calculus 3	4
MAP 2302	Elementary Differential Equations	3
PHY 2048	Physics with Calculus 1	3
PHY 2049	Physics with Calculus 2	3

Required Courses

Code	Title	Credits
ABE 2062 or BSC 2011	Biology for Engineers Integrated Principles of Biology 2	3
BME 3406	Introduction to Biomolecular Engineering	3
ECH 3023	Material and Energy Balances	4
Select two:		5-6
ABE 3000C	Applications in Biological Engineering	
ABE 4662	Quantification of Biological Processes	
ABE 5442	Advanced Agricultural Process Engineering	
BME 4220	Biomolecular Cell Mechanics	
BME 4321	Dynamics of Cellular Processes	
ECH 4905	Special Problems in Chemical Engineering ¹	
EGN 4912	Engineering Directed Independent Research ²	

Total Credits

15-16

¹ Nanoscale Transport and other approved electives.

2 Biomolecular Engineering Minor

2 Research problems related to biomolecular engineering.
