

**UC Davis Minor in Biomedical Engineering (EBIM)  
Offered by the Department of Biomedical Engineering**

The minor in BME is restricted to enrolled College of Engineering students. The intent is to build upon the existing core strengths in other engineering majors by adding expertise in biomedical applications. This additional training makes students more attractive to employers in the medical device industry, and positions students for graduate training in health related applications of engineering.

The minor requires two life sciences courses not typically required for engineering students, one at the cellular (BIM102) and the other at the physiological level (NPB101 or BIM116).

The remaining 12 units are to be selected in consultation with an advisor from this list of upper division BIM courses. Students will be advised to select courses that complement their existing curricula.

Successful completion of the minor will result in the transcript notation-“Minor: Biomedical Engineering”

Successful completion of the minor requires the following:

- Completing 21 units of minor coursework. All courses must be taken for a letter grade.
- Minimum overall GPA of 2.000 and no grade lower than a C- for coursework completed in the minor.
- No more than 1 course counted towards both the student’s major and the minor.**

**Required Courses (9 units)**

|                               |   |
|-------------------------------|---|
| NPB 101 or BIM 116 Physiology | 5 |
| BIM 102 Cellular Dynamics     | 4 |

**Elective Courses (12 units)**

Choose any 12 units from upper division BIM courses, in consultation with the academic advisor, Rosalind Christian ([rchristian@ucdavis.edu](mailto:rchristian@ucdavis.edu)).

| Electives |   |  |
|-----------|---|--|
| BIM 140   | 4 | Protein Engineering  |
| BIM 141   | 4 | Cell and Tissue Mechanics  |
| BIM 142   | 4 | Principles and Practices of Biomedical Imaging                     |
| BIM 143   | 4 | Biomolecular Systems Engineering: Synthetic Biology                |
| BIM 143L  | 2 | Synthetic Biology Laboratory                                       |
| BIM 144   | 4 | Principles of Biophotonics   |
| BIM 152   | 4 | Molecular Control of Biosystems                                    |
| BIM 154   | 4 | Computational Genomics   |
| BIM 161A  | 4 | Biomolecular Engineering   |
| BIM 162   | 4 | Introduction to the Biophysics of Molecules & Cells                |
| BIM 163   | 4 | Bioelectricity, Biomechanics, & Signaling Systems                  |
| BIM 171   | 4 | Clinical Applications for Biomedical Device Design                 |
| BIM 172   | 2 | Introduction to Neuroengineering Lab                               |
| BIM 173   | 4 | Cell & Tissue Engineering  |
| BIM 189A  |   | Topics in Biomedical Engineering: Cellular & Molecular Engineering |
| BIM 189B  |   | Topics in Biomedical Engineering: Biomedical Imaging               |
| BIM 189C  |   | Topics in Biomedical Engineering: Biomedical Engineering           |