

Biomedical Engineering Interdisciplinary Minor

All students pursuing the Biomedical Engineering undergraduate minor are required to take introductory courses in Biomedical Engineering, a physiology course, and an upper division biomedical engineering course. Further, students will also complete elective courses in biosciences and engineering applications.

Requirements:

- Minimum of 21 credits total with a minimum of 12 upper division credits.
- **NO** courses may double count in two categories.

Pick one of the following:	Prerequisites
☐ BIOM 200: Fundamentals of Biomedical Engineering (2)	LIFE 102; MATH 160
☐ CBE 205: Introduction to Biological Engineering (3)	CBE 101; CBE 160; LIFE 102

Pick one of the following:	Prerequisites
☐ BMS 300: Principles of Human Physiology (4)	BZ 101 or BZ 110 or LIFE 102; CHEM 103 or CHEM 107 or CHEM 111
☐ BMS 301: Human Gross Anatomy (5)	BZ 110 or LIFE 102
☐ BMS 360: Fundamentals of Physiology (4)	BZ 110 or LIFE 102; CHEM 245 or CHEM 341 or concurrent registration

Pick one of the following:	Prerequisites
☐ BIOM 300: Problem-Based Learning Biomedical Engineering Lab (4)	BIOM 101 or BIOM 200 or (BIOM 100; CBE 205; MECH 262); MATH 340 or MATH 345
☐ BIOM 422: Quantitative Systems and Synthetic Biology (3)	CBE 320
☐ BIOM/ECE 431: Biomedical Signal and Image Processing (3)	ECE 303; ECE311; PH142 (all with minimum grade of C)
☐ BIOM 440: Computational Statistics for Bioengineering (3)	BIOM 422, CBE 320, and CBE 340 or STAT 315
☐ BIOM 441: Biomechanics and Biomaterials (3)	CIVE 360; MECH 342; BMS 300 or conc.; MECH 324 or conc.; MECH 331 or conc.
☐ Any 500-level BME course	Check prerequisites for each course

6 Credits (minimum) Bioscience Electives:

☐ BC 351	☐ BIOM/CIVE 533	☐ BMS 301	☐ BZ 310	☐ HES 307	☐ MGT 440 ²
☐ BIOM 476 A or B ¹	☐ BIOM/ECE 431	☐ BMS 430	☐ CHEM 113	☐ HES 403	☐ MIP 300
☐ BIOM 300	☐ BIOM/MECH 573	☐ BMS 325	☐ CHEM 245	☐ HES 420	☐ OT 215
☐ BIOM 495 ¹	☐ BIOM 441	☐ BUS 205 ²	☐ CHEM 341 or 345	☐ LIFE 102	☐ PHIL 205 ²
☐ BIOM 440	☐ BIOM/MECH 574	☐ BMS 345	☐ CHEM 344	☐ LIFE 103	☐ PHIL 305E ²
☐ BIOM/MECH 525	☐ BMS300	☐ BMS 360	☐ HES 476	☐ LIFE 210	☐ PSY 456 ²
☐ BIOM 422	☐ BMS 420	☐ BMS 405	☐ HES 207	☐ MGT 420 ²	☐ PSY 457 ²

6 Credits (minimum) Engineering Applications Electives:

☐ BIOM 300	☐ BIOM 476A/B ¹	☐ BIOM/MECH 574	☐ CBE 406	☐ ECE/STAT 303 ¹	☐ MECH 307
☐ BIOM 350A	☐ BIOM 495 ¹	☐ CBE 201	☐ CBE 430	☐ ECE 331	☐ MECH 331
☐ BIOM 440	☐ BIOM/MECH 525	☐ CBE 210	☐ CIVE 260	☐ ECE 341	☐ MECH 342
☐ BIOM 422	☐ BIOM/CIVE 533	☐ CBE 320	☐ CIVE 261	☐ MATH 340	☐ MECH 324
☐ BIOM/ECE 431	☐ BIOM/MECH 573	☐ CBE 331	☐ ECE 202	☐ MECH 237	☐ PH 245 ¹
☐ BIOM 441		☐ CBE 332	☐ ECE 204	☐ MECH 262	☐ STAT 315 ¹

¹ A maximum of 1 course may be selected from non-engineering and independent study/practicum courses; a maximum of 3 credits of BIOM 495 may be counted toward the minor.

² A maximum of 1 course may be selected from non-technical courses.