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.

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

☐	BIOM 100	Overview of Biomedical Engineering	1	
Pick 1 ☐	BIOM 200	Fundamentals of Biomedical Engineering	2	LIFE 102; MATH 160
	CBE 205	Introduction to Biological Engineering	3	CBE 101; CBE 160; LIFE 102

**Note: students who have completed BIOM 101 will have BIOM 100 and either BIOM 200 or CBE 205 waived

Pick 1 ☐	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 1 ☐	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 421	Transport Phenomena in Biomedical Engineering	3	BMS 300; CBE 332 or MECH 344
	BIOM 422	Quantitative Systems and Synthetic Biology	3	BIOM 421 or CBE 320
	BIOM/ECE 431	Biomedical Signal and Image Processing	3	ECE 303; ECE311; PH142 (all with minimum grade of C)
	BIOM 441	Biomechanics and Biomaterials	3	CIVE 360; MECH 342; BMS 300 or conc.; MECH 324 or conc.; MECH 331 or conc.

6 Credits (minimum) Bioscience Electives: ☐ [Enter course taken here] ☐ [Enter course taken here]

BC 351	BIOM 476 A or B[1]	BMS300*	BMS 420	CHEM 341 or 345	HES 476	MIP 300
BIOM 300	BIOM 495[1]	BMS 301*	BMS 430	CHEM 344	LIFE 102	OT 215
BIOM 421	BIOM/MECH 525	BMS 325	BUS 205[2]	HES 207	LIFE 103	PHIL 205[2]
BIOM 422	BIOM/CIVE 533	BMS 345	BZ 310	HES 307	LIFE 210	PHIL 305E[2]
BIOM/ECE 431	BIOM/MECH 573	BMS 360*	CHEM 113	HES 403	MGT 420[2]	PSY 456[2]
BIOM 441	BIOM/MECH 574	BMS 405	CHEM 245	HES 420	MGT 440[2]	PSY 457[2]

5 Credits (minimum) Engineering Applications Electives: ☐ [Enter course taken here] ☐ [Enter course taken here]

BIOM 300	BIOM 441	BIOM/MECH 573	CBE 331	CIVE 261	ECE 341	MECH 331
BIOM 350A	BIOM 476A/B[1]	BIOM/MECH 574	CBE 332	ECE 202	MATH 340[1]	MECH 342
BIOM 421	BIOM 495[1]	CBE 201	CBE 406	ECE 204	MECH 237	MECH 324
BIOM 422	BIOM/MECH 525	CBE 210	CBE 430	ECE/STAT 303[1]	MECH 262	PH 245[1]
BIOM/ECE 431	BIOM/CIVE 533	CBE 320	CIVE 260	ECE 331	MECH 307	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.

NOTE: Space in BIOM 300 is typically limited and minor students can register beginning approximately 3 weeks after registration opens (registration is restricted to BME Dual Degree students until then). We cannot guarantee space in specific sections, so please have flexibility with your schedule.

Rev.10-24-2023