

Name: _____

Exp. Grad.: Fall _____ / Spring _____

Biomaterials Engineering
Suggested Curriculum Course Plan for students entering Fall 2023 – Spring 2024

Semester 1		Semester 2		Semester 3		Semester 4	
Course (cr. hr.)	X	Course (cr. hr.)	X	Course (cr. hr.)	X	Course (cr. hr.)	X
CHEM 105 (3) & CHEM 105L (1)		BIOL 150 (4)**		ENGR 204 (3)		BIOL 211 (4)	
ENGL 101 (4)*		CHEM 106 (3) & CHEM 106L (1)		ENGR 110 (4)		CEMS 204 (4)	
ENGR 101 (2)		ENGR 160 (0)		ENGR 360 (0)		CEMS 206 (3)	
ENGR 117 (2)		MATH 152 (4)		MATH 253 (4)		CEMS 207 (3)	
ENGR 160 (0)		PHYS 125 (4)		PHYS 126 (4)		ENGR 360 (0)	
MATH 151 (4)		UNIV 101 (1)		GenEd (3)		MATH 271 (3)	
WELL (2)							
Total (18)		Total (17)		Total (18)		Total (17)	

*ENGL 101 if required; otherwise ENGR 110 or student choice of GenEd (2-4).

** Students who have taken any college level BIOL course should consult with the Chair of Biology to determine if that course substitutes for BIOL 150.

Semester 5		Semester 6		Semester 7		Semester 8	
Course (cr. hr.)	X	Course (cr. hr.)	X	Course (cr. hr.)	X	Course (cr. hr.)	X
CEMS 304 (4)		CEMS 334 (3)		Elective° (3)		CEMS 344 (4)	
CEMS 368 (3)		CEMS 460 (3)		CEMS 336 (3)		ENGR 360 (0)	
ENGR 202 (3)		CHEM 310+ (3)		CEMS 342 (4)		ENGR 480 (2)	
ENGR 360 (0)		ENGR 102 (2)		CEMS 464 (3)		ENGR 486 (4)	
GenEd (4)		ENGR 360 (0)		CEMS 468 (3)		°Elective+ (3)	
MECH 211 (3)		GenEd (3)		ENGR 360 (0)		Gen Ed (2)	
		°Elective+ (3)		ENGR 480 (2)			
Total (17)		Total (17)		Total (18)		Total (15)	

Total Credits: 137

+ CHEM 315 (4) and CHEM 316 (4) may substitute for CHEM 310 (3) and 5 credits of BME Electives.

°Definitions of Electives for BME (9 total credits):

BME Program Specific Electives (6): BIOL 302, BIOL 308, BIOL 402, BIOL 405, BIOL 420, BIOL 422, non-required CEMS 36x or 46x.

Electives (3): (A) Most 300- and 400-level courses designated CEMS, CHEM, ELEC, ENGR, MATH, MECH, PHYS, or RNEW. Exceptions include: CHEM 343, MATH 331, MECH 320, and Topics courses unless approved by the Dean. (B) One of FIN 348 or MGMT 328, (C) COOP 385.

Requirements:

- AU Global Perspective
- AU Wellness & Physical Education: Well (ATHT 111, 190, 215, 222, BIOL 105, 120, DANC 120, 200, 222, 223, 224, 226, PSYC 251, 322, 351, WELL 100, 101, WGST 351, PFIT: Varsity sport for one season, physical fitness test, any course with PFIT designation which includes some Equestrian, Dance, and ROTC courses.
- SOE Minimum Credit Requirement of 128 credits
- SOE GPA requirement of 2.0 and no more than 7 credits of D or D+ in engineering required courses
- SOE Seminar requirement
- SOE General Education Requirement of 60 credits comprising: Quantitative Reasoning, Humanities (minimum of six credits with at least two different acronyms, Natural Science, Social Science (minimum of four credits), AU Wellness, Written Communication, and General/Arts (maximum of eight credits).
- Defense of Capstone Poster & submission of approved Thesis. (Project ENGR 490 2+2 with the same instructor).

Complete SOE requirements are available in the AU Undergraduate Catalog 2023-2024.

<https://alfred.edu/academics/undergrad-majors-minors/catalog.cfm>

Degree Evaluation, including What-If, available at <https://banweb.alfred.edu/> or via DegreeWorks.