

Name: _____

Exp. Grad.: Fall _____ / Spring _____

Biomaterials Engineering
Suggested Curriculum Course Plan for students entering Fall 2021 – Spring 2022

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)**		CEMS 214 or ENGR 204 (3)		BIOL 211 (4)	
ENGL 101 (4)*		CHEM 106 (3) & CHEM 106(1)		ENGR 102 (2)		CEMS 207 (3)	
ENGR 101 (2)		ENGR 160 (0)		ENGR 110 (4)		CEMS 216/CEMS 206 (3)	
ENGR 117 (2)		MATH 152 (4)		ENGR 360 (0)		CEMS 235/CEMS 204 (4)	
ENGR 160 (0)		PHYS 125 (4)		MATH 253 (4)		ENGR 360 (0)	
MATH 151 (4)				PHYS 126 (4)		MATH 271 (3)	
UNIV 101 (1)							
Total (17)		Total (16)		Total (17)		Total (17)	

*ENGL 101 if required, otherwise 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 237/CEMS 304 (4)		CEMS 251/CEMS 208 (3)		Elective° (3)		CEMS 344 (4)	
CEMS 368 (3)		CEMS 334 (3)		CEMS 336 (3)		ENGR 360 (0)	
ENGR 306† (2)		CEMS 460 (3)		CEMS 342 (4)		ENGR 480 (2)	
ENGR 360 (0)		CHEM 310+ (3)		CEMS 465/CEMS 464 (3)		Elective°+ (3)	
GenEd (4)		ENGR 305/ENGR 202 (3)		CEMS 468 (3)		Elective°+ (3)	
GenEd (3)		ENGR 360 (0)		ENGR 360 (0)		GenEd (4)	
		ENGR 395† (2)		ENGR 480 (2)		Gen Ed (2)	
Total (16)		Total (17)		Total (18)		Total (18)	

Total Credits: 136

°Nine credits of electives as defined below with a minimum of 6 credits of BME electives.

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

†ENGR 486 (4) may be substituted for ENGR 306 (2) and ENGR 395 (2).

Requirements:

1. AU Global Perspective
2. AU Wellness & Physical Education
3. SOE Minimum Credit Requirement of 128 credits
4. SOE GPA requirement and 'D' policy
5. SOE Seminar requirement
6. SOE General Education Requirement of 60 credits comprising: Quantitative Reasoning, Humanities (minimum of two courses with different subjects), Natural Science, Social Science (minimum of one course), AU Wellness, Written Communication, and General/Arts (maximum of eight credits).
7. Defense of Capstone Poster & submission of approved Thesis (Thesis 480 2+2 with the same instructor).

Complete SOE requirements are available in the AU Undergraduate Catalog 2020-2021.

<https://alfred.edu/academics/undergrad-majors-minors/catalog.cfm>Degree Evaluation, including What-If, available at <https://banweb.alfred.edu/> or via *DegreeWorks*.**Definitions of Electives:****BME Electives:** BIOL 302, BIOL 308, BIOL 402, BIOL 405, BIOL 420, BIOL 422, non-required CEMS 36x or 46x**Electives:** (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.