

Name: \_\_\_\_\_

Exp. Grad.: Fall \_\_\_\_ / Spring \_\_\_\_

**Materials Science and Engineering**  
**Suggested Curriculum Course Plan for students entering Fall 2022 – Spring 2023**

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)		CHEM 106 (3) & CHEM 106L (1)		ENGR 110 (4)		CEMS 204 (4)	
ENGL 101 (4)*		ENGR 102 (2)		ENGR 204 (3)		CEMS 206 (3)	
ENGR 101 (2)		ENGR 104 (4)		ENGR 360 (0)		CEMS 207 (3)	
ENGR 117 (2)		ENGR 160 (0)		MATH 253 (4)		ENGR 360 (0)	
ENGR 160 (0)		MATH 152 (4)		PHYS 126 (4)		MATH 271 (3)	
MATH 151 (4)		PHYS 125 (4)		GenEd (2)		GenEd (3)	
		UNIV 101 (1)					
<b>Total (16)</b>		<b>Total (17)</b>		<b>Total (17)</b>		<b>Total (16)</b>	

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

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)		ENGR 202 (3)		CEMS 314 or CEMS 316 (3)		CEMS 446 (3)	
CEMS 322 (3)		CEMS 334 (3)		CEMS 336 (3)		ENGR 360 (0)	
CEMS 347 (2)		CEMS 344 (4)		CEMS 342 (4)		ENGR 480 (2)	
CEMS 349 (2)		ENGR 306 <sup>‡</sup> (2)		ENGR 360 (0)		°Elective (3)	
ELEC 221 or (ELEC 223 & ELEC 325) (4)		ENGR 360 (0)		ENGR 480 (2)		GenEd (4)	
ENGR 360 (0)		ENGR 395 <sup>‡</sup> (2)		°Elective (3)		GenEd (4)	
MECH 211 (3)		MECH 241 (3)					
<b>Total (18)</b>		<b>Total (17)</b>		<b>Total (15)</b>		<b>Total (16)</b>	

**Total Credits: 132**

°Six elective credits as defined below.

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

**Definition of Electives:**

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.

**Requirements:**

- AU Global Perspective
- AU Wellness & Physical Education
- SOE Minimum Credit Requirement of 128 credits
- SOE GPA requirement and 'D' policy
- 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 **three credits**), AU Wellness, Written Communication, and General/Arts (maximum of eight credits).
- Defense of Capstone Poster & submission of approved Thesis. (Thesis **ENGR 490 2+2** with the same instructor).

Complete SOE requirements are available in the AU Undergraduate Catalog [2022-2023](#).<https://alfred.edu/academics/undergrad-majors-minors/catalog.cfm>Degree Evaluation, including What-If, available at <https://banweb.alfred.edu/> or via DegreeWorks.