

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

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

**Materials Science and Engineering**  
**Suggested Curriculum Course Plan for students entering Fall 2020 – Spring 2021**

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 106(1))		CEMS 214 or ENGR 204 (3)		CEMS 215 or CEMS 207 (3)	
ENGL 101 (4)*		ENGR 102 (2)		ENGR 104 (2)		CEMS 216 or CEMS 206 (3)	
ENGR 101 (2)		ENGR 160 (0)		ENGR 360 (0)		CEMS 235 or CEMS 204 (4)	
ENGR 117 (2)		MATH 152 (4)		MATH 253 (4)		ENGR 360 (0)	
ENGR 160 (0)		PHYS 125 (4)		PHYS 126 (4)		MATH 271 (3)	
MATH 151 (4)		ENGR 110 (4)		GenEd (2)		GenEd (3)	
UNIV 101 (1)							
<b>Total (17)</b>		<b>Total (18)</b>		<b>Total (15)</b>		<b>Total (16)</b>	

\*ENGL 101 if required; otherwise 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 237 or CEMS 304 (4)		CEMS 251 or CEMS 208 (3) or MECH 211 (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)		ELEC 221 or ELEC 223/225 (4)		ENGR 360 (0)		Elective° (3)	
ENGR 305 or ENGR 202 (3)		ENGR 395 <sup>‡</sup> (2)		ENGR 480 (2)		GenEd (4)	
ENGR 306 <sup>‡</sup> (2)		ENGR 360 (0)		Elective° or MECH 241 (3)		GenEd (4)	
ENGR 360 (0)		Elective° (3)					
<b>Total (16)</b>		<b>Total (19)</b>		<b>Total (15)</b>		<b>Total (16)</b>	

°Nine elective credits as defined below (6 if MECH 211/241)

**Total Credits: 132**

‡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:**

**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.