

MSE 110: Introduction to Materials Science

<i>Course description:</i>	Introduction to the science and technology of metals, polymers, ceramics and composites
<i>Number of credits:</i>	2. This course is required.
<i>Course Coordinator:</i>	S. Bose
<i>Prerequisites by course:</i>	None
<i>Prerequisites by topic:</i>	None
<i>Postrequisites:</i>	None
<i>Textbooks/other required materials:</i>	None
<i>Course objectives:</i>	<ol style="list-style-type: none">1. To introduce students to a wide range of modern materials engineering topics through active learning projects.
<i>Topics covered:</i>	<ol style="list-style-type: none">1. Crystalline and amorphous structure of matter2. Defects in materials3. Metals4. Ceramics5. Electronic materials6. Polymers and composites7. Engineering roles in solving society problems
<i>Expected learning outcomes:</i>	<ol style="list-style-type: none">1. Demonstrating, through written communication skills, information literacy and critical thinking skills within the materials science and engineering field
<i>Class schedule:</i>	Two 50-minute lecture sessions per week, for one semester.
<i>Laboratory schedule:</i>	None, in class projects.
<i>Contribution to meeting the professional component:</i>	Engineering Topics

Relationship of course to student outcomes:

3 strongly supported; 2 supported; 1 minimally supported

Student Outcomes Pre-Fall 2018
(ABET EC2000)

Student Outcomes Fall 2018 forward
(ABET EC2019)

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	1	2	3	4	5	6	7	8	9	10	11
2							2		3									2			2	3			

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