MSE 110: Introduction to Materials Science

Course description: Introduction to the science and technology of metals, polymers, ceramics and composites

Number of credits: 2. This course is required.

Course Coordinator: S. Bose

Prerequisites by course: None
Prerequisites by topic: None

Postrequisites: None

Textbooks/other required materials: None

Course objectives: 1. To introduce students to a wide range of modern materials engineering topics through active learning projects.

Topics covered: 1. Crystalline and amorphous structure of matter
2. Defects in materials
3. Metals
4. Ceramics
5. Electronic materials
6. Polymers and composites
7. Engineering roles in solving society problems

Expected learning outcomes: 1. Demonstrating, through written communication skills, information literacy and critical thinking skills within the materials science and engineering field

Class schedule: Two 50-minute lecture sessions per week, for one semester.

Laboratory schedule: None, in class projects.

Contribution to meeting the professional component: Engineering Topics
**Relationship of course to student outcomes:**
3 strongly supported; 2 supported; 1 minimally supported

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*Prepared by:* Andrea Butcherite and Dr. Susmita Bose  
*Date:* May 30, 2018