THE UNIVERSITY OF RHODE ISLAND
COLLEGE OF ENGINEERING

Bliss Hall, Suite 420, Kingston, RI 02881
401-874-5985

# Minor in Materials Engineering

Materials form the basis of modern life. A Minor in Materials Engineering will provide students with the skills necessary to design, manufacture, and characterize the next generation of high-performance materials, including plastics, polymers, composites, ceramics, metals, and/or emerging biological materials. Students receiving this minor will be well-situated to enter manufacturing and engineering careers and to pursue advanced research and development opportunities. The minor is intended for engineering students as well as non-engineering students with a strong science background.

1. Undergraduate students may declare a Minor in Materials Engineering by completing a minimum of 18 credit hours, at least half of which must be earned at The University of Rhode Island. Up to 6 credits can double count towards a major and students must earn a minimum grade point average of 2.00 in these courses. Students are responsible for meeting the prerequisite requirements for individual courses, as applicable.
2. Students must complete the Materials Engineering minor form and have it signed by the Coordinator, Dr. Irene Andreu.
3. Application for the Minor in Materials Engineering must be filed in the College of Engineering Dean's Office.

Name:_____ Expected Grad Date:_____

Student ID:_____ Email:_____

Major:_____ Phone:_____

**Required Courses (9 credits)**
CHM 101 General Chemistry Lecture 1 **or** CHM 103 **or** 191
PHY 204 Elementary Physics II
CHE 232 Materials Science and Engineering **or** CHE 333 Engineering Materials

**Supporting Courses (9 credits)**
BME 466/CHE 466 Biomaterials
CHE 476/MCE 476 Mechanics of Materials in Nuclear Applications
CHE 491/2 Special Problems (3 credits maximum)**
CHE 530 Polymer Chemistry
CHE 531 Polymer Engineering
CHE 532 Ceramic Engineering
CHE 539 Electron and Light Microscopy of Solids
CHE 560 Fabrication Engineering at the Micro and Nanoscale
CHE 580 Surface Microanalysis
MCE 440 Mechanics of Composite Materials
MCE 576 Fracture Mechanics
PHY 580 Condensed Matter Physics I

*Students may take either CHE 232 or CHE 333. For engineering majors, this course must correspond with your major curriculum.

**Students must complete a research project related to materials engineering under the guidance of a faculty member and get prior permission from the Materials Engineering Minor Coordinator, Dr. Irene Andreu.

Created September 2023

| Approved Courses | Credits | Grade | Course |
|---|---|---|---|
| CHM 101, 103, or 191 | 3 | _____ | _____ |
| CHE 232 or 333 | 3 | _____ | _____ |
| PHY 204 | 3 | _____ | |
| _____ | _____ | _____ | |
| _____ | _____ | _____ | |
| _____ | _____ | _____ | |

*Minor Coordinator Signature* *Date*

*Assistant Dean of Engineering Signature* *Date*