Materials Science and Engineering (Minor)

The Materials Science and Engineering (MSE) Minor is a valuable addition to students’ undergraduate degrees in any engineering discipline, as well as those in chemistry, physics, and textiles. It provides a solid foundation in MSE principles, making students more attractive to employers in materials-related industries and enhancing students’ readiness for advanced study in the field.

To complete the MSE minor, students must earn a minimum of 15 credit hours, including 9 credits of required courses and at least 6 credits of electives. A minimum of 12 credits must be courses that start with the MSE prefix.

Admission

To be admitted to the program, a student must have a GPA of at least 2.0 and a C or better in MSE 200 (http://catalog.ncsu.edu/search/?search=mse+200) or MSE 201 (http://catalog.ncsu.edu/search/?search=MSE+201).

Application for admission to any University minor program is now available via MyPack Portal. Admission will be based on the student’s academic record, and in most cases no longer requires departmental review. Go to Add a Minor (https://studentservices.ncsu.edu/your-degree/coda-home/add-a-minor/) to apply. The minor must be completed no later than the semester in which the student expects to graduate from their degree program.

Contact Person

Ms. Hillary Stone
Academic Advisor
3002B Engineering Building 1, Centennial Campus
919.515.4683
hmstone2@ncsu.edu

MSE Website (https://www.mse.ncsu.edu/)

Effective Date: 1/2013
SIS Code: 14MTM

Plan Requirements

The Materials Science and Engineering Minor includes a three-hour introductory course, six hours of required courses and six hours of electives selected from a list of courses covering a wide variety of materials science and engineering topics. To apply for the MSE Minor, a minimum overall GPA of 2.0 is required. A grade of C or better is required in MSE 200 Mechanical Properties of Structural Materials or MSE 201 Structure and Properties of Engineering Materials, and a minimum cumulative GPA of 2.0 must be maintained in the Minor courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
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<tbody>
<tr>
<td>MSE 200</td>
<td>Mechanical Properties of Structural Materials</td>
<td>3</td>
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Elective Courses

Select six credits of the following:

- MSE 255 Experimental Methods for Structural Analysis of Materials
- MSE 320 Introduction to Defects in Solids
- MSE 335 Experimental Methods for Analysis of Material Properties
- MSE 355 Electrical, Magnetic and Optical Properties of Materials
- MSE 360 Kinetic Processes in Materials
- MSE 370 Microstructure of Inorganic Materials
- MSE 380 Microstructure of Organic Materials
- MSE/NE 409 Nuclear Materials
- MSE 455 Polymer Technology and Engineering
- MSE 460 Microelectronic Materials
- MSE 465 Introduction to Nanomaterials

Total Hours 15