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

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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.

Code	Title	Hours	Counts towards
Required Courses			
Select one of the following:		3	
MSE 200	Mechanical Properties of Structural Materials		
MSE 201	Structure and Properties of Engineering Materials		
MSE 300	Structure of Materials at the Nanoscale	3	
MSE 301	Introduction to Thermodynamics of Materials	3	
Elective Courses			
Select six credits of the following:		6	
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**	