

Minor in Materials Engineering

For the minor, 14–19 semester hours are required, excluding prerequisite courses. Students who wish to minor in Materials Engineering must complete the following:

Prerequisite Courses

MATH 180	Calculus I	4
MATH 181	Calculus II	4
PHYS 141	General Physics I (Mechanics)	4
CHEM 122	General Chemistry I Lecture	5
& CHEM 123	and General Chemistry Laboratory I	
or CHEM 116	Honors and Majors General and Analytical Chemistry I	

Total Hours		17
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Some of these courses have prerequisites not included in the minor. Consult the *Course Descriptions* in the catalog or the *Schedule of Classes* for course prerequisites.

Required Courses

Select one of the following:	2-3
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CME 260	Properties of Materials
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CME 261	Materials for Manufacturing
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Select four of the following:	12-16
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BIOE 460	Materials in Bioengineering
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CHE 440	Non-Newtonian Fluids
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CHE 494	Selected Topics in Chemical Engineering (when topic is Design of Microelectronics Processing)
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CME 433	Fracture Mechanics and Failure Analysis I
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CME 460	Crystallography and X-Ray Diffraction
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CME 470	Physical and Mechanical Properties of Materials
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CME 471	Thermodynamics of Materials
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CME 480	Welding Metallurgy
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ECE 346	Solid State Device Theory
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ECE 347	Integrated Circuit Engineering
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ECE 449	Microdevices and Micromachining Technology
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ME 380	Manufacturing Process Principles
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PHYS 481	Modern Experimental Physics I
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Total Hours		14-19
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