

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:

Code	Title	Hours
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

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.

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