MATERIALS SCIENCE AND ENGINEERING MINOR

A minor in the Department of Materials Science and Engineering allows interested students to explore the role of materials in modern technology and to gain understanding of the fundamental processes that govern materials behavior. The courses listed in the following table fulfill the requirements.

COURSES FULFILLING THE MINOR IN MATERIALS SCIENCE AND ENGINEERING

Core*: Choose one of the following*:		**Units**
ENGR 50	Introduction to Materials Science, Nantechnology Emphasis	4
ENGR 50M	Introduction to Materials Science, Biomaterials Emphasis	4
	Core total	4

(continued on the next page)

Materials Science and Engineering Minor, continued		
Electives:		
Any 6 courses taken from the list below		24
	Program total	28
Approved elective courses:		
MATSCI 151	Microstructure and Mechanical Properties	4
MATSCI 152	Electronic Materials Engineering	4
MATSCI 153	Nanostructure and Characterization	4
MATSCI 154	Solid State Thermodynamics	4
MATSCI 155	Nanomaterials Synthesis	4
MATSCI 156	Solar Cells, Fuel Cells, and Batteries: Materials for the Energy Solution	4
MATSCI 157	Quantum Mechanics of Nanoscale Materials	4
MATSCI 160	Nanomaterials Laboratory	4
MATSCI 161	Nanocharacterization Laboratory	4
MATSCI 162	X-Ray Diffraction Laboratory	4
MATSCI 163	Mechanical Behavior Laboratory	4
MATSCI 164	Electronic and Photonic Materials and Devices Laboratory	4
MATSCI 190	Organic and Biological Materials	4
MATSCI 192	Materials Chemistry	4
MATSCI 193	Atomic Arrangements in Solids	4
MATSCI 194	Thermodynamics and Phase Equilibria	4
MATSCI 195	Waves and Diffraction in Solids	4
MATSCI 196	Imperfections in Crystalline Solids	4
MATSCI 197	Rate Processes in Materials	4
MATSCI 198	Mechanical Properties of Materials	4
MATSCI 199	Electronic and Optical Properties of Solids	4