ROBOTICS, MINOR IN

The minor in robotics consists of a minimum of 20 credits and successful completion of the following courses:

Course	Title	Hours
Required Courses		
EGRE 354	Introduction to Feedback Control Systems	3
EGMN 427	Robotics	3
Computing elective		
Choose one of the following courses:		2-4
CLSE 115	Introduction to Programming for Chemical and Life Science Engineering	
CMSC 254	Introduction to Problem-solving	
EGRB 215	Computational Methods in Biomedical Engineering	
EGRE 246	Advanced Engineering Programming	
EGMN 210	Computational Methods	
Restricted electives		
Choose 4 of the following courses:		12-15
CMSC 302	Introduction to Discrete Structures	
CMSC 436	Artificial Intelligence	
CMSC 438	Machine Learning	
CMSC 531	3D Computer Vision for Robot Navigation	
EGRB 308	Biomedical Signal Processing	
EGRB 315	Device Design Methods	
EGRB 423	Rehabilitation Engineering and Prostheses	
EGRE 335	Signals and Systems	
EGRE 364	Microcomputer Systems	
EGRE 455	Control Systems Design	
EGRE 512	Intelligent Autonomous Systems	
EGRE 553	Industrial Automation	
EGRE 554	Advanced Industrial Automation	
EGMN 201	Dynamics and Kinematics	
EGMN 315	Process and Systems Dynamics	
EGMN 416	Mechatronics	
EGMN 568	Robot Manipulators	
MATH 310	Linear Algebra	
Total Hours		**20**

Students must receive credit for prerequisite courses or permission from the instructor prior to enrolling in the minor courses.

All courses used to fulfill the minor must be completed with a minimum grade of C.

A maximum of eleven credits of comparable course work may be substituted with approval of the program director or department chair.