

Robotics Minor Course Progression Worksheet 2024–2026 Catalog

REQUIRED COURSEWORK

RBT 350	Gateway to Robotics	3 hours
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1 COURSE FROM AT LEAST 4 DIFFERENT CONTENT AREAS AND AT LEAST 2 OF THE 4 COURSES MUST BE FROM DEPARTMENTS OUTSIDE OF THE STUDENT'S MAJOR:

Hardware Courses:

M E 348E	Advanced Mechatronics I
M E 348F	Advanced Mechatronics II
M E 350R	Robot Mechanism Design

Programming Courses:

M E 369P	Application Programming for Engineers
C S 330F, 378, or 378H FI/10	Autonomous Driving
ECE 445L	Embedded Systems Design Laboratory
ECE 445M	Embedded and Real-Time Systems Laboratory
ASE 479W	Aerial Robotics

Modeling and Control Courses:

M E 364L	Automatic Control System Design
ASE 370C	Feedback Control Systems
ECE 362K	Introduction to Automatic Control
ASE 330M	Linear System Analysis
M E 354M	Biomechanics of Human Movement
M E 372J	Robotics and Automation
C S 330F, 378, or 378H FI/10	Autonomous Driving

Sensing, Perception, and Planning courses:

C S 330F, 378, or 378H FI/10	Autonomous Driving
M E 372J	Robotics and Automation
ASE 479W	Aerial Robotics
ECE 445L	Embedded Systems Design Laboratory
ECE 445M	Embedded and Real-Time Systems Laboratory
ECE 445N	Neural Engineering
C S 376	Computer Vision
ECE 371P or 379K	Introduction to Computer Vision

Machine Learning Courses:

C S 342	Neural Networks
C S 343 or 343H	Artificial Intelligence
C S 363M or 363H	Principles of Machine Learning I
COE 379L	Topic 1: Introduction to Machine Learning and Data Sciences
ECE 460J	Data Science Laboratory
ECE 361E	Machine Learning and Data Analytics for Edge Artificial Intelligence
ECE 374N	Neural Engineering
ECE 461P	Data Science Principles