# Multidisciplinary Minor in Robotics

## Tracks at a Glance

All tracks require a multidisciplinary senior design project.

### CSSE with Controls
- Intro to Robotics Programming
- Mechatronics
- DC + AC Circuits or Elec Sys + EEE
- Dynamical Systems
- Mobile Robotics
- Robotics Elective

### CSSE with Hardware
- Intro to Robotics Programming
- Mechatronics
- DC + AC Circuits or Elec Sys + EEE
- Robotics Engineering
- Artificial Intelligence
- Robotics Elective

### CSSE with Mechanics
- Intro to Robotics Programming
- Mechatronics
- Conservation of Accounting Principles
- Mechanical Systems
- Kinematics
- Robotics Engineering
- Robotics elective

### Computer Engineering
- Intro to Robotics Programming
- Mechatronics
- Linear Control Systems
- Data Structures and Analysis
- Statics & Mechanics of Materials I
- Mobile Robotics
- Robotics Elective

### EE with Programming
- Intro to Robotics Programming
- Mechatronics
- Object-oriented Software Dev
- Data structures and analysis
- Robotics Engineering
- Mobile Robotics
- Robotics Elective

### ECE with Sensors
- Intro to Robotics Programming
- Mechatronics
- Optical Sensors
- Microsensors
- Image Processing or Wireless Systems
- Mobile Robotics
- Robotics Elective

### ECE with Mechanics
- Intro to Robotics Programming
- Mechatronics
- Conservation and Acctg Principles
- Mechanical Systems
- Kinematics
- Mobile Robotics
- Robotics Elective

### ME with Electronics
- Intro to Robotics Programming
- Kinematics
- Introduction to Logic Design
- Electronic Device Modeling
- Robotics Engineering
- Digital Systems

### ME with Programming
- Intro to Robotics Programming
- Kinematics
- Object-oriented software development
- Data Structures and Analysis
- Robotics Engineering
- Mobile Robotics

Revised: 1/17/12
Robotics Electives

- Artificial Intelligence (CSSE 413)
- Computer Vision (CSSE 461)
- Image Recognition (CSSE 463)
- Swarm Intelligence (CSSE 490)
- Teamwork and Robotics (CSSE 290)
- Linear Controls (ECE 320)
- Signals and Systems (ECE 300)
- Wireless Systems (ECE 414)
- Mobile Robotics (ECE 425)
- Advanced Dynamics (EM 502)
- Intelligent Control Methods (ME 597)
- Kinematics of Machinery (ME 403)
- Control Systems (ME 406)
- Robotics Engineering (ME 435)
- Advanced Control Sys (ME 506)
- Advanced Kinematics (ME 518)
- Microsensors (EP 408)
- Image Processing (ECE 480/PH 437)
- Advance Image Processing (ECE 582/PH 537)

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