Multidisciplinary Minor in Robotics
Tracks at a Glance

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

All tracks require a multidisciplinary senior design project

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)