## Intelligent Robotic Systems (IRS) - Interdisciplinary

### Minor

**College of Engineering and Computer Science**

**Engineering, Room: 107**

[http://www.cecs.ucf.edu](http://www.cecs.ucf.edu)

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### Minor Admission Requirements

- None

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- None

#### Prerequisite Courses

**3 hrs**

- A high-level programming language class (like the following or its equivalent) is required for the minor.
  - COP 3223C  Introduction to Programming with C or 3 hrs
  - EGN 3211  Engineering Analysis and Computation 3 hrs

#### Required Courses

**6 hrs**

- EGN 4060C  Introduction to Robotics 3 hrs
- EEL 4660  Robotic Systems 3 hrs

#### Restricted Electives

**12 hrs**

Select 4:

- Note: Courses with equivalent content cannot both be counted toward the electives.
  - CAP 4053  AI for Game Programming or 3 hrs
  - CAP 4453  Robot Vision or 3 hrs
  - CAP 4630  Artificial Intelligence or 3 hrs
  - CAP 5415  Computer Vision or 3 hrs
  - CAP 5512  Evolutionary Computation or 3 hrs
  - CAP 5610  Machine Learning or 3 hrs
  - COP 3503C  Computer Science II or 3 hrs
  - EEL 3657  Linear Control Systems or 3 hrs
  - EEL 4612C  Introduction to Modern and Robust Control or 4 hrs
  - EEL 4750  Digital Signal Processing Fundamentals or 3 hrs
  - EEL 4818H  Honors Current Topics in Machine Learning 3 hrs
  - EEL 4872  Engineering Applications of Intelligent Systems or 3 hrs
  - EEL 5669  Introduction to Robotics and Autonomous Vehicles or 3 hrs
  - EEL 5173  Linear Systems Theory or 3 hrs
  - EEE 5513  Digital Signal Processing Applications or 3 hrs
  - EEL 5625  Applied Control Systems or 3 hrs
  - EEL 5630  Digital Control Systems or 3 hrs
  - EEL 5820  Image Processing or 3 hrs
  - EEL 5825  Pattern Recognition or 3 hrs
  - EGN 3321  Engineering Analysis-Dynamics or 3 hrs
  - EML 3217  Engineering Mechanics - Dynamics or 3 hrs
  - EML 3262  Kinematics of Mechanisms or 3 hrs
  - EML 4225  Introduction to Vibrations and Controls or 3 hrs
  - EML 4312C  Feedback Control or 3 hrs
  - EML 4313  Intermediate System Dynamics and Controls or 3 hrs
  - EML 4264  Vehicle Dynamics or 3 hrs
  - EML 4804C  Digital Control in Mechatronics or 3 hrs
  - EML 5311  System Control or 3 hrs
  - EML 5290  Introduction to MEMS and Micromachining 3 hrs

### Foreign Language Requirements

- None

### Total Semester Hours Required

- 18

### Other Requirements

- A minimum GPA of 2.0 is required in all the courses used to satisfy the minor.
- No credit by exam (TSD, Military credit) may be used.
- Internship, Co-op, or Independent Study credit cannot be used toward the minor.