

# Minors

## Intelligent Robotic Systems (IRS) - Interdisciplinary

### - Minor

College of Engineering and Computer Science

Engineering, Room: 107

<http://www.cecs.ucf.edu>

Mr. Paul Edlen, Paul.Edlen@ucf.edu, 407-823-2455

#### Minor Admission Requirements

- None

#### Minor Requirements

- None

#### Prerequisite Courses (3 hrs)

##### Select 1: 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: 12 hrs

- 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	4 hrs
	or	
EEL 4750	Digital Signal Processing Fundamentals or	3 hrs
EEL 4818H	Honors Current Topics in Machine Learning	3 hrs
	I or	
EEL 4872	Engineering Applications of Intelligent	3 hrs
	Systems or	
EEL 5669	Introduction to Robotics and Autonomous	3 hrs
	Vehicles or	
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	3 hrs
	Controls or	
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.