

MASTER OF SCIENCE IN ROBOTICS

The MS in Robotics will be an interdisciplinary program offered collaboratively by six schools in the Colleges of Computing, Engineering and Sciences:

- Aerospace Engineering
- Biomedical Engineering
- Electrical and Computer Engineering
- Interactive Computing
- Mechanical Engineering
- Physics

Students may apply to enter the program through any one of the participating units, the choice of which usually reflects that student's intended area of specialization and general background. Students with diverse and eclectic backgrounds are encouraged to apply, including those with previous work experience.

General Guidelines:

- All courses must be completed letter-grade
- Minimum GPA 3.0 required
- A maximum of six (6) credit hours of 4000-level courses may be applied to the program requirements

Non-Thesis Option

Code	Title	Credit Hours
AE/BMED/ CS/ECE/ME 7785	Introduction to Robotics Resesarch	3
AE/BMED/ CS/ECE/ME/ PHYS 7741	Robotics Professional Preparation	1
AE/BMED/ CS/ECE/ME/ PHYS 7742	Robotics Professional Preparation 2	1
AE/BMED/ CS/ECE/ME/ PHYS 7743	Robotics Professional Preparation 3	1
Foundation Courses		9
AE 6210	Advanced Dynamics I	
AE 6530	Multivariable Linear Systems and Control	
AE 6721	Evaluation of Human Integrated Systems	
BMED 8813 Special Topics (Robotics)		
CS 6601	Artificial Intelligence	
CS 6476	Introduction to Computer Vision GR	
CS 7633	Human-Robot Interaction	
CS 7492	Simulation of Biological Systems	
ECE 6550	Linear Systems and Controls	
ME 6401	Linear Control Systems	
ME 6406	Machine Vision	
ME 6407	Robotics	
ME 6441	Dynamics of Mechanical Systems	

PHYS 6101 Classical Mechanics I		
Robotics Elective Courses		9
Open Electives		6
Robotics Internship		
AE/BMED/ CS/ECE/ME/ PHYS 8741	Robotics Capstone Project	6
Total Credit Hours		36
Thesis Option		
Code	Title	Credit Hours
AE/BMED/ CS/ECE/ME 7785	Introduction to Robotics Resesarch	3
AE/BMED/ CS/ECE/ME/ PHYS 7741	Robotics Professional Preparation	1
AE/BMED/ CS/ECE/ME/ PHYS 7742	Robotics Professional Preparation 2	1
AE/BMED/ CS/ECE/ME/ PHYS 7743	Robotics Professional Preparation 3	1
Foundation Courses		9
AE 6210	Advanced Dynamics I	
AE 6530	Multivariable Linear Systems and Control	
AE 6721	Evaluation of Human Integrated Systems	
BMED 8813 Special Topics (Robotics)		
CS 6601	Artificial Intelligence	
CS 6476	Introduction to Computer Vision GR	
CS 7633	Human-Robot Interaction	
CS 7492	Simulation of Biological Systems	
ECE 6550	Linear Systems and Controls	
ME 6401	Linear Control Systems	
ME 6406	Machine Vision	
ME 6407	Robotics	
ME 6441	Dynamics of Mechanical Systems	
PHYS 6101 Classical Mechanics I		
Robotics Elective Courses		9
Open Electives		3
Robotics Internship		
Thesis Hours ^{1,2}		9
Total Credit Hours		36

¹ Students will register for MS thesis hours through the home unit of their thesis advisor using the course numbers CS 7000/AE 7000/ME 7000/BMED 7000/ECE 7000/PHYS 7000.

² Students who wish to pursue the thesis option should receive approval from their home unit to do so.