

Degree Plan for Master in Robotics and Autonomous Intelligent Systems

First Semester					
Course #		Title	LT	LB	CR
AE	581	Introduction to Robotics & Autonomous Systems	3	0	3
COE	510	Programming Methods for Robotics	3	0	3
COE	512	Sensing and actuation for intelligent robots	3	0	3
ICS	520	Artificial Intelligence and Machine learning for Robotics	3	0	3
Credit Hours			12	0	12
Second Semester					
Course #		Title	LT	LB	CR
SCE	575	Applied Control for Robotic Systems	3	0	3
SCE	576	Path Planning and Navigation for Mobile Robot	3	0	3
COE	511	Multi-agent Robotic Networks	3	0	3
COE	619	Project	0	0	IP
Credit Hours			9	0	9
Summer Semester					
Course #		Title	LT	LB	CR
SCE	578	Human Robot Interaction	3	0	3
COE	619	Project (continued)	0	0	6
Credit Hours			3	0	9
Total Credit Hours					30

In case, concentration students join this program, the common courses between the two programs cannot be taken for credit for both programs. Therefore, those students should take instead elective courses from the approved list below, as follows: two courses from the core elective courses list and two from the free elective courses list.

Core Elective Courses:

Graduate	Undergraduate	Title	Prerequisites
SCE 564		Decision Making Under Uncertainty	Graduate Standing
	AE 449	Fundamentals of Unmanned Aerial Systems	MATH 202, PHYS 102
COE 526		Data Privacy	Graduate Standing
ICS-504		Deep Learning	Graduate Standing

Free Electives Courses:

Graduate	Undergraduate	Title	Prerequisites
MATH 517		Introduction to Data Science	Graduate Standing
SEC 511		Principles of Information Assurance and Security	Graduate Standing
SEC 521		Network Security	Graduate Standing
COE 543		Mobile Computing and Wireless Networks	Graduate Standing
COE 545		Wireless Sensor Networks	Graduate Standing
ICS 515	ICS 483	Computer Vision	