Curriculum

Classification	Subject No.	Subject Name	Lecture:Lab: Credit (Homework)	Semester	Remark
Mandatory General Course	CC010	Special Lecture on Leadership	1:0:0(0)	Fall	
	CC020	Ethics and Safety I	1AU	Spring/Fall	
	CC500	Scientific Writing	3:0:3(4)	Spring/Fall	
	CC510	Introduction to Computer Application	2:3:3(10)	Spring/Fall	
	CC511	Probability and Statistics	2:3:3(6)	Spring/Fall	
	CC512	Introduction to Materials and Engineering	3:0:3(3)	Spring/Fall	
	CC513	Engineering Economy and Cost Analysis	3:0:3(6)	Fall	
	CC522	Introduction to Instruments	2:3:3(8)	Fall	
	CC530	Enterpreneurship and Business Strategies	3:0:3(6)	Fall	
Elective Essential Course	RE510	Intelligent Robot Design Lab	1:6:3(6)	Spring	
	EE581	Linear Systems	3:0:3(6)	Spring	*MAE561
	EE683	Robot Control	3:0:3(6)	Spring	
	CS510	Computer Architecture	3:0:3(6)	Spring	
	MAE553	Robot Dynamics	3:0:3(6)	Spring/Fall	
	MAE655	Robotics Engineering	3:1:3(6)	Spring	
Elective Major Course	RE502	Sensor & Sensing	3:0:3(4)	Fall	
	RE530	Sensor-based Mobile Robots	1:6:3(6)	Spring	
	RE540	Robot Vision and Sensing	3:0:3(6)	Fall	
	RE610	Network-based Robotics	3:0:3(6)	Spring	
	RE710	Artificial Life	3:0:3(6)	Spring	
	RE720	Humanoid Robot	3:0:3(6)	Fall	
	RE722	Robot Vision and Digital Image System	3:0:3(4)	Fall	
	RE730	Micro/Nano Robotics	3:0:3(6)	Spring	
	RE740	Evolutionary Robotics	3:0:3(6)	Fall	
	RE887	Special Topics on Robot Technology	3:0:3(6)	Fall	
	GT508	Green Air Transportation System and Green Aviation	3:0:3	Spring	
	MAS565	Numerical Analysis	3:0:3(6)	Spring	
	IE561	Advanced Information System Engineering	3:0:3(6)	Fall	
	IE761	Cognitive Systems Engineering	3:0:3(6)	Fall	
	ID506	Media Interaction Design	3:0:3(3)	Fall	
	ID706	Theory of Interface Design	3:0:3(3)	Fall	
	EE414	Embedded Systems	3:1:3(6)	Fall	
	EE481	Intelligent Systems	3:0:3(6)	Spring	
	EE512	System Programming	3:0:3(6)	Fall	
	EE516	Embedded Software	1:6:3(6)	Fall	
	EE525	Networking Technology and Applications	1:6:3(6)	Spring	
	EE531	Statistical Learning Theory	3:0:3(6)	Fall	
	EE533	Digital Speech Processing	3:0:3(6)	Spring	
	EE535	Digital Image Processing	3:0:3(6)	Spring	
Elective	EE538	Neural Networks	3:0:3(6)	Spring	

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Major Course	EE573	Introduction to VLSI Systems	3:0:3(6)	Spring	
	EE582	Digital Control	3:1:3(6)	Spring	
	EE594	Power Electronics Systems	3:0:3(6)	Fall	
	EE681	Nonlinear Control	3:0:3(6)	Fall	
	EE682	Intelligent Control Theory	3:0:3(6)	Fall	
	EE686	Optimization Theory	3:0:3(6)	Fall	
	EE688	Optimal Control Theory	3:0:3(6)	Fall	
	EE734	Image Understanding	3:0:3(6)	Spring	
	EE735	Computer Vision	3:0:3(6)	Fall	
	EE737	Medical Imaging Technology	3:0:3(6)	Spring	
	EE739	Cognitive Information Processing	3:0:3(6)	Spring	
	EE774	VLSI Design Methodology	3:0:3(6)	Fall	
	EE788	Robot Cognition and Planning	3:0:3(6)	Fall	
	EE837	Special Topics in Signal Processing	3:0:3(6)	Spring/Fall	
	EE838	Special Topics in Image Engineering	3:0:3(6)	Fall	
	EE887	Special Topics in Robotics	3:0:3(6)	Spring	
	CS470	Introduction to Artificial Intelligence	3:0:3(8)	Spring	
	CS520	Theory of Programming Languages	3:0:3(6)	Fall	
	CS530	Operating System	3:0:3(6)	Spring/Fall	
	CS540	Network Architecture	3:0:3(9)	Spring/Fall	
	CS543	Distributed Systems	3:0:3(3)	Fall	
	CS570	Artificial Intelligence	3:0:3(6)	Spring/Fall	
	CS572	Intelligent Robotics	3:0:3(6)	Spring/Fall	
	CS576	Computer Vision	3:0:3(8)	Spring/Fall	
	CS580	Interactive Computer Graphics	3:1:3(5)	Spring	
	CS600	Graph Theory	3:0:3(6)	Fall	
	CS610	Parallel Processing	3:0:3(8)	Spring	
	CS655	System Modeling and Analysis	3:0:3(6)	Spring	*EE612
	CS670	Fuzzy and Intelligent System	3:0:3(6)	Spring	
	CS672	Reinforcement Learning	3:0:3(2)	Spring/Fall	
	CS676	Pattern Recognition	3:0:3(3)	Fall	*EE634
	CS770	Topics in Computation Theory	3:0:3(8)	Spring/Fall	
	CS774	Topics in Artificial Intelligence	3:0:3(6)	Spring/Fall	
	CS776	Topics in Cognitive Science	3:0:3(6)	Spring/Fall	
	CS780	Topics in Interactive Computer Graphics	2:3:3(10)	Spring/Fall	
	CE551	Soft Computing Techniques for Engineering Design	3:0:3	Spring	
	CE558	Introduction to Civil Robotics	3:0:3	Spring	
	MAE453	Introduction to Robotics Engineering	3:0:3(6)	Fall	
	MAE505	Measurement Instrumentation	3:1:3(6)	Fall	
Elective Major Course	MAE550	Advanced Dynamics	3:0:3(6)	Fall	
	MAE562	Digital System Control	3:0:3(6)	Spring	
	MAE563	Microprocessor Application	2:3:3(6)	Fall	

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	MAE585	Mechanics and Control of Human Movement	3:0:3(6)	Spring	
	MAE597	Spacecraft Attitude Dynamics and Control	3:0:3	Spring	
	MAE600	Mechanical System Design Project 1	0:9:3(0)	Spring	
	MAE601	Mechanical System Design Project 2	0:9:3(0)	Fall	
	MAE654	Noise Control	3:0:3(6)	Fall	
	MAE655	Robotics Engineering	3:1:3(6)	Fall	
	MAE662	Design of Precision Actuation System	3:0:3(6)	Spring	
	MAE683	Human Robot Interaction: Haptics	3:0:3(6)	Fall	
	MAE694	Discrete Event Systems and Applications	3:0:3(6)	Fall	
	MAE761	Nonlinear System Control	3:0:3(6)	Spring	
	BiS571	BioElectroMechanics	3:0:3(6)	Spring	
	BiS651	Hearing and Auditory Model	3:0:3(6)	Spring	
	BiS652	Human Visual Model	3:0:3(6)	Fall	
	BiS653	Biomedical Imaging System	3:0:3(6)	Spring	
	BiS673	Bioelectronic Devices	3:0:3(6)	Spring	
	OSE543	Dynamics and Control of Ocean Vehicles	3:0:3	Spring/Fall	
	OSE643	Ocean Robotics: Techniques and Application	3:0:3	Fall	
Research	RE960	Thesis Research(Master)		Spring/Fall	
	RE966	Seminar(Master)	1:0:1	Spring	*EE966
	RE980	Thesis Research(Doctoral)		Spring/Fall	
	RE986	Seminar(Doctoral)	1:0:1	Spring	*EE986

※ Note: * stands for substitutable courses