

Required and Suggested Courses and Technical Electives

Course	Semester	Description	Electrical Engineering			Computer Engineering
			Bioengineering	Electronics and Communications	Power Systems	
CIS 450	F,S	Computer Arch and Operations (3)				•
CIS 525	F	Telecomm and Data Comm Systems (3)				•
CIS 551	F	Intro to Computer and Information Security (3)				•
ECE 441	F,S	Design of Digital Systems (3)		•		Δ
ECE 530	F,S	Control Systems Design (3)				•
ECE 542	F	Computer Networking (3)		•		Δ
ECE 571	S	Intro to Biomedical Engineering	Δ			
ECE 624	F	Power Electronics (3)			Δ	
ECE 628	Demand	Electronic Instrumentation (3)	•			
ECE 631	S	Microcomputer System Design (3)	•	Δ ^{D1}		Δ ^D
ECE 636	Demand	Intro to Computer Graphics (3)				•
ECE 641	S	Advanced Digital Design using Logic Synthesis (3)		•		•
ECE 643	F	CMPEN Design Lab (3)				Δ ^D
ECE 645	S	Digital Electronics (3)		•		Δ
ECE 647	F	Digital Signal Processing (3)	•	Δ		•
ECE 648	F	Multimedia Compression (3)				•
ECE 649	F,S	Computer Design 1 (3)		•		Δ
ECE 660	S	Communication Systems 1 (3)	•	Δ	•	•
ECE 662	Every 3rd sem.	Design of Communication Circuits (3)	•	Δ ^{D1}		
ECE 670	F	Engineering Applications of Machine Intelligence (3)			•	•
ECE 681	F	Wind and Solar Engg. (3)			•	
ECE 684	S	Power Lab (3)			Δ	
ECE 685	F	Power Systems Design (3)			Δ ^D	
ECE 686	S	Power Systems Protection (3)			•	
ECE 694	F	Optoelectronics (3)		•		
ECE 696	Every 3rd sem.	Integrated Circuit Design (3)		Δ ^{D1}		
ECE 715	F	Electroacoustics (3)	•	•		
ECE 722	S	Audio Engineering (3)	•	•		
ECE 724	S	Analog Electronics (3)	•	•		
ECE 728	Demand	Mixed Signal Measurements (3)	•	•		
ECE 730	Demand	Control Systems Analysis and Design (3)	•		•	
ECE 731	Demand	Advanced Microcomputer System Design (3)				•
ECE 733	Demand	Real-Time Embedded Systems Design (3)	•			•
ECE 736	Demand	Discrete-Time and Computer-Control Systems (3)				•
ECE 746	Demand	Fault Diagnosis in Digital Systems (3)				•
ECE 747	Demand	Advanced Digital Filtering (3)	•	•		•
ECE 749	F	Computer Design 2 (3)				•
ECE 760	S	Wireless Communications (3)	•	•		
ECE 764	Every 3rd sem.	Design of Microwave Circuits (3)		Δ ^{D1}		
ECE 772	F	Theory and Tech of Bioinstrumentation (2)	Δ			
ECE 773	F	Bioinstrumentation Design Lab (1)	Δ ^D			

Δ = Required • = Recommended ¹ = Choose at least 1 course D = Denotes design course

Technical electives may also be taken from other departments and colleges. See DARS report for complete list.