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 Appllications 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 aslo be taken from other departments and colleges. See DARS report for complete list.

Technical Electives
for Electrical and Computer Engineering students

Department	Acceptable Courses	Maximum Hours
ARTS AND SCIENCES		
• *Biochemistry*	Above 499	No limit
• *Biology*	Above 197	No limit
• *Chemistry*	Above 230 [A]	No limit
• *Geology*	Any course	No limit
• *Mathematics*	Any course with MATH 221 as a prerequisite and 551	No limit
• *Physics*	Above 515	No limit
• *Statistics*	Above 499 except 702	No limit
BUSINESS *ADMINISTRATION*		
• *Accounting*	Any course	
• *Finance*	Any course	6 total from the four depts. listed
• *Management*	Any course	
• *Marketing*	Any course	
ENGINEERING		
• *Biological and Agricultural*	510 or above	No limit
• *Architectural*	411 or above	No limit
• *Construction Science*	500 or above	No limit
• *Chemical*	350 or above	No limit
• *Civil*	300 or above [B]	No limit
• *Computer and Information Sciences*	300 or above [C]	No limit
• *Electrical and Computer*	[D]	No limit
• *General*	[E]	No limit
• *Industrial and Manufacturing Systems*	241 or above	No limit
• *Mechanical*	ME 212 or above [F]	No limit
• *Nuclear*	Above NE 385	No limit
VETERINARY MEDICINE		
	Any course	No limit

Technical Electives for Electrical and Computer Engineering students must be chosen to satisfy degree requirements.

[A] CHM 230 is acceptable for B.S. degree in Computer Engineering.

[B] If CE 333 and ME 512 are both taken, credit will be given for CE 530 along with 3 hours of technical elective credit. Taking CE 333 or ME 512 alone will not count for CE 530 credit.

[C] CIS 200 and 308 are acceptable for a maximum of two credit hours for EE students.

[D] ECE 441, 571 and 600 or above are acceptable for B.S. degree in Electrical Engineering. ECE 502, 526, 530, 571, 581, and 600 or above are acceptable for B.S. degree in Computer Engineering.

[E] Any course except applicable Humanities and Social Sci. Electives, DEN 201, and DEN 202.

[F] Except for those courses not open to engineering majors.