

AREA 1: Analog/Digital Electronics				AREA 2: Control Systems				AREA 3: Communication Engineering				AREA 4: Power Engineering				AREA 5: Biomedical Engineering			
EEE	109	* Electronics II Prereq EEE 108, 108L, 117, 117L, WPJ	4	EEE	187	Robotics Prereq EEE 180	4	EEE	162	Applied Wave Propagation Prereq EEE 117, EEE 161	3	EEE	131	Electromechanics Lab Prereq EEE 117, EEE 130, WPJ; EEE 130 may be taken concurrently	1	EEE	120	Electronic Instrumentation Prereq EEE 108, EEE 117; EEE 108 may be taken concurrently	4
EEE	110	Advanced Analog IC Prereq 109 or Instructor Permission	3	EEE	188	Digital Control Systems Prereq EEE 180, WPJ	3	EEE	163	Traveling Waves Lab Prereq EEE 117, EEE 162; EEE 162 may be taken concurrently, WPJ	1	EEE	141	** Power System Analysis Prereq EEE 130; EEE 130 may be taken concurrently	3	EEE	122	Applied Digital Signal Processing Prereq EEE 117, EEE 180	3
EEE	111	Adv. Analog IC Lab Prereq 109; either EEE 110 or EEE 230 may be taken concurrently	1	EEE	189	Controls Lab Prereq EEE 184; may be taken concurrently, WPJ	1	EEE	165	Intro. to Optical Engr Prereq EEE 161, EEE 180 EEE 185; EEE 185 may be taken concurrently	3	EEE	142	Energy System Control Prereq EEE 130	3	EEE	124	Embedded Systems Fundamentals Prereq EEE 122, EEE 174	3
EEE	166	Physical Electronics Prereq EEE 108	3					EEE	167	Electro-Optical Engr. Lab Prereq EEE 161, EEE 165, EEE 180, WPJ; EEE 165 may be taken concurrently	1	EEE	143	** Power System Lab Prereq EEE 130, EEE 141, WPJ	1	EEE	126	Design of Devices & Systems for Market Appl Prereq EEE 120, EEE 122	3
CpE	138	Computer Network and Internet Prereq CSC 35, CSC 60, CSC 130	3					EEE	181	Intro. to Digital Signal Processing Prereq EEE 064, EEE 180	3	EEE	144	Electric Power Distrib. Prereq EEE 130	3				
CpE	151	CMOS & VSLI Prereq CpE/EEE 64, CpE/EEE 102 or EEE 108	3					EEE	182	Digital Signal Processing Lab Prereq EEE 180 EEE 181; EEE 181 may be taken concurrently	1	EEE	145	Power System Relay Protection Prereq EEE 130, EEE 141	3				
CpE	153	VLSI Design Prereq CpE 151	3					EEE	183	Digital Commun. Sys. Dsgn Prereq EEE 161, EEE 180, EEE 185; EEE 185 may be taken concurrently	3	EEE	146	Power Elect. Control Drives Prereq EEE 108, EEE 130	3				
CpE	166	Advanced Logic Design Prereq CpE 064, ENGR 17	4					EEE	186	Communication Sys Lab Prereq EEE 117, WPJ; Coreq EEE 185	1	EEE	148	Power Electronics Lab Prereq EEE 146; EEE 146 may be taken concurrently	1				
CpE	186	Computer Hardware Design Prereq CpE 185 or EEE 174	3				Phys 106		106	Intro. To Modern Physics Prereq Math 31; Phys 11A, 011B, 011C or Phys 05A, 05B	3								
CpE	187	Embedded Process. Syst. Design Prereq CpE 166, CpE 185, EEE 102, WPJ	2				Phys 130		130	Acoustics Prereq Math 030, Phys 11A, Phys 11B, Phys 11C	3								

EEE ELECTIVE: Must complete and additional 6 units of lecture from any of the above 4 areas - 4 unit courses = 3 units lecture/1 unit lab

*Students planning to complete [EEE 193A/EEE 193B](#) series may **not** use [EEE 109](#) to meet depth/elective requirement

Students planning to complete [EEE 192A/EEE 192B](#) series may **not use [EEE 141](#) and [EEE 143](#) to meet depth/elective requirement.

Required Lower Division Courses				Required Upper Division Courses				Required Design Project Series			
								POWER			
Chem	1A	General Chemistry I	5	EEE	108	Electronics I Prereq EEE 117; Coreq EEE 108L	3	EEE	141	Power System Analysis Prereq EEE 130; may be taken concurrently	3
EEE/ CpE	64	Intro. to Logic Design Prereq CSC 15 or CSC 25	4	EEE	108L	Electronics I Lab Prereq EEE 117, EEE 117L; Coreq EEE 108	1	EEE	143	Power System Laboratory Prereq EEE 130, EEE 141, WPJ	1
ENGR	1	Introduction to Engineering Prereq Algebra & Trigonometry or Instructor Permission	1	EEE	117	Network Analysis Prereq Engr 17, EEE 64; EEE 64 may be taken concurrently: Coreq EEE 117L	3	EEE	192A	Electrical Power Design Project I Prereq EEE 143 may be taken concurrently and any two of the following courses are needed: EEE 141, EEE 142, or EEE 144, WPJ	2
Engl	20	College Composition II Prereq Engl 1A or Engl 2	3	EEE	117L	Network Analysis Lab Coreq EEE 117	1	EEE	192B	Electrical Power Design Project II Prereq EEE 192A, EEE 142, EEE 144; EEE 142 or EEE 144 may be taken concurrently-- but not both	2
ENGR	17	Introductory Circuit Analysis Prereq Math 45, Phys 11C; either can be taken concurrent, but not both	3	EEE	130	Electromechanical Conversion Prereq EEE 117; may be taken concurrently	3				
ENGR	50	Computational Methods & Apps. Prereq Math 30, Phys 11A Coreq Phys 11A	3	EEE	161	Applies Eletromagnetics Prereq Math 32, Math 45, Phys 11C, Engr 17, and CSC 25 or ENGR 50	4	EEE	109	Electronics II Prereq EEE 108, EEE 108L, EEE 117, EEE 117L, WPJ	4
Math	30	Calculus I Prereq Math 29	4	EEE	174	Introduction to Microprocessors Prereq EEE 64; Junior status	4	EEE	193A	Product Design Project I Prereq EEE 108, EEE 109, EEE 130, EEE 161, EEE 174, EEE 180, WPJ	2
Math	31	Calculus II Prereq Math 30	4	EEE	180	Signals and Systems Prereq EEE 117; may be taken concurrently	3	EEE	193B	Product Design Project II Prereq EEE 193A	2
Math	32	Calculus III Prereq Math 31	4	EEE	184	Introduction to Feedback Systems Prereq EEE 180	3				
Math	45	Differential Equations Prereq Math 31	3	EEE	185	Modern Communication Systems Prereq EEE 180, Engr 120; Engr 120 may be taken concurrently	3				
Phys	11A	General Physics: Mechanics Prereq Math 30, Math 31	4	ENGR	120	Probability and Random Signals Prereq EEE 180; may be taken concurrently	3				
Phys	11C	General Physics: Electriciry & Magnet. Prereq Math 31, Phys 11A	4	ENGR	140	Engineering Economics Prereq ENGR 17 (EEE students do not need ENGR 30)	2				