

# ELECTRICAL ENGINEERING



Catalog Term: Fall 2020 Total hours: 124

Last updated: 10/2020

15 FRESHMAN		16	
FALL		SPRING	
ENGL 101 (3) College English I Grade of C- or better		ENGL 102 (3) College English II Grade of C- or better Prereq: ENGL 101 Grade C- or better	
MATH 242 (5) Calculus I Prereq: See Course Catalog		MATH 243 (5) Calculus II Prereq: MATH 242 Grade C or better	
CS 194 (4) Introduction to Digital Design Prereq: MATH 111 or equivalent Grade C- or better		PHYS 313 (4) Physics for Scientist I Coreq: MATH 243 Grade C or better	
First Year Seminar in FA/HU/SB (3) Note b		CS 211 (4) Introduction to Programming Prereq: MATH 111 or equivalent Grade C- or better	

17 SOPHOMORE		15	
FALL		SPRING	
COMM 111 (3) Public Speaking Grade C- or better		General Education FA/SB (3) Note c	
MATH 344 (3) Calculus III Prereq: Math 243 Grade C or better		MATH 555 (3) Differential Equations I Prereq: MATH 243 Grade C or better	
PHYS 314 (4) Physics for Scientist II Prereq: MATH 243 and PHYS 313 Grades C or better		CHEM 211 (5) General Chemistry I Prereq: CHEM 101, 103 or 110 Coreq: MATH 111, CHEM211L	
IME 255 (3) Engineering Economy Coreq: MATH 242 or 251		EE 284 (3) Circuits II Prereq: EE 282 and MATH 243 Coreq: MATH 555 Grades C- or better	
EE 282 (4) Circuits I Coreq: MATH 243		EE 285 L (1) Programming w/ MATLAB for EE/CE Prereq: CS 211 ; Grade C- or better Coreq: EE 284	

16 JUNIOR		14	
FALL		SPRING	
General Education SB/FA (3) Note c		PHIL 385 (3) Engineering Ethics Prereq: Junior or Senior standing	
EE 383 (3) Signals and Systems Prereq: EE 284, EE 285L & MATH 555 Grades C- or better		EE 493 (4) Electronic Circuits II or Technical Elec <b>OFFERED SPRING ONLY</b> Prereq: EE 492 Grade C- or better Note e	
EE 463 (3) Applied Engineering Electromagnetics <b>OFFERED FALL ONLY</b> Prereq: PHYS 314 and MATH 344 Grade C- or better		EE 488 (4) Electric Machines & Transformers <b>OFFERED SPRING ONLY</b> Prereq: EE 282 Grade C- or better	
MATH 511 (3) Linear Algebra Prereq: MATH 243 Grade C or better		EE 684 (3) Introductory Control System Concepts <b>OFFERED SPRING ONLY</b> Prereq: EE 282 & MATH 555 or EE 383 Grades C- or better	
EE 492 (4) Electronic Circuits I Coreq: EE 284 and EE 285L		Engineering + Requirement (2 of 3)	
Engineering + Requirement (1 of 3)			

15 SENIOR		16	
FALL		SPRING	
Technical Elective (3) Note a		Technical Elective (3) Note a	
IME 254 (3) Engineering Probability & Statistics I Prereq: MATH 243 or 252 Grade C or better		Technical Elective (4) Note a	
EE 688 (4) Power Electronics or Technical Elec <b>OFFERED FALL ONLY</b> Prereq: EE 383, 488 and 492 Grades C- or better Note e		EE 586 (4) Introduction to Communication Sys <b>OFFERED SPRING ONLY</b> Prereq: EE 383 and IME 254 Grades C- or better	
AE 223 (3) Statics Prereq: PHYS 313 Coreq: MATH 243		ME 398 (3) Thermodynamics I Prereq: MATH 243 and PHYS 313 Grades of C or better	
Senior Design Project I EE 585 (2) Prereq: Senior standing, CS 480 or EE 492 Coreq: PHIL 354 or 385 Grades C- or better		EE 595 (2) Senior Design Project II Prereq: EE 585 Grade C- or better	
Engineering + Requirement (3 of 3)			

NOTES: (a) At least 12 of the 14 Technical Elective hours **must be** from the EECS Dept. Up to 2 credit hours of Co-op courses can be used as **non-departmental** technical electives. (b) First Year Seminar **must not** be from MS. (c) One of the General Education courses listed must be from FA, the other from SB; both must be from an approved list of courses. (d) PHIL 385 fulfils HU requirement. (e) Students are required to take EE 493 or EE 688. If taking both, the second will count towards tech. elective hours. All prerequisites for EECS courses must be passed with a C- or better.

Legend: General Education: FA = Fine Arts, SB = Social and Behavioral Sciences, HU = Humanities, MS = Mathematics and Natural Sciences.  
Prereq = Prerequisite, Coreq = Corequisite.