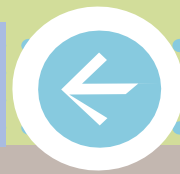


# ELECTRICAL ENGINEERING



Catalog Term: Fall 2024

Last updated: 04/2024

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
ECE 194 (4) Introduction to Digital Design Prereq: MATH 111 or equivalent		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
ECE 115 (0) ECE Freshman Seminar (Recommended but not required)		

17+	SOPHOMORE	15+
FALL		SPRING
COMM 111 (3) Public Speaking Grade C- or better		General Education (3) FA/SB 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 or Departmental Consent
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
IME 255 (3) Engineering Economy Coreq: MATH 242 or 251		ECE 284 (3) Circuits II Prereq: ECE 282 and MATH 243 Coreq: MATH 555 Grades C- or better
ECE 282 (4) Circuits I Coreq: MATH 243		ECE 285 L (1) Programming w/ MATLAB for ECE/CE Prereq: CS 211 Grade C- or better Coreq: ECE 284

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

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

NOTES: (a) At least 9 of the 11 Technical Elective hours **must be** ECE. 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 ECE 493 or ECE 688. If taking both, the second will count towards tech. elective hours. All prerequisites for ECE 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.