ELECTRICAL ENGINEERING CURRICULUM (4-Year Plan)

F Sp = Semester usually taught

Effective Fall 2021

Please note, prerequisites for electives are not shown

1	PHYS 1110 (4) General Physics 1	APPM 1350 (4) Calculus 1 (MATH 1300)	ECEN 1400 (3) Intro to Digital & Analog Electronics (1st Year Projects)	F ECEN 1100 (1) Exploring ECE	ELECTIVE (3) Lower-Division H&SS	15
2	PHYS 1140 (1) Experimental Physics	PHYS 1120 (4) General Physics 2	APPM 1360 (4) Calculus 2 (MATH 2300)	CSCI 1300 (4) Computer Science 1: Starting Computing	ECEN 2350 (3) Digital Logic	16
3		ECEN 2250 (3) Intro to Circuits and Electronics	APPM 2360 (4) Differential Equations with Linear Algebra	ECEN 2360 (3) Programming Digital Systems	ECEN 2XXX (3) Sophomore Elective *See Advising Website for Options	ELECTIVE (3) Lower-Division H&SS	16
4	ECEN 2260 (3) Circuits as Systems *Prerequisite: ECEN 2250 & APPM 2360*	ECEN 2270 (3) Electronics Design Lab	APPM 2350 (4) Calculus 3 (MATH 2400) Prerequisite: APPM 1360	ECEN 2370 (3) Embedded Software Engineering *Prerequisite: ECEN 2350*	ECEN 2XXX (3) Sophomore Elective *See Advising Website for Options		16
5		ECEN 3XXX (3) Advanced Analog Core Elective 1 *See Degree Audit for Options	ECEN 3810 (3) Probability *See Degree Audit for Options	ELECTIVE (3-5) General Science Elective *See Degree Audit for Options	ECEN 3XXX (3) Advanced Analog Core Elective 2 *See Degree Audit for Options	ELECTIVE (3) Lower-Division H&SS	15
6	*Technical Elective* (3) *See Advising Website for Options	*Technical Elective* (3) *See Advising Website for Options	ECEN 3XXX (3) Advanced Analog Core Elective 3 *See Degree Audit for Options	*Technical Elective* (3) *See Advising Website for Options	ELECTIVE (3) Free	Writing Course (3) *See Degree Audit for Options	18
7	ACE (3) *Electrical Elective* *See Advising Website for Options	ACE (3) *Electrical Elective* *See Advising Website for Options	F ECEN 4610 (3) Capstone Laboratory Part 1		ELECTIVE (5) Free	ELECTIVE (3) Upper-Division H&SS	17
8	ACE (3) *Electrical Elective* *See Advising Website for Options	ACE (3) *Electrical Elective* *See Advising Website for Options	Sp ECEN 4620 (3) Capstone Laboratory Part 2	*Technical Elective* (3) *See Advising Website for Options		ELECTIVE (3) Upper-Division H&SS	15

KEY: Prerequisite → Co-requisite ↔ First course if not taken as co-requisite ↔ Second course if not taken as co-requisite Recommended prerequisite ⇢

TOTAL: 128

Additional Graduation Requirements:

Minimum Academic Preparation Standards (MAPS) Requirement:

- Engineering MAPS Social Science
- Engineering MAPS Math
- Engineering MAPS Foreign Language
- Engineering MAPS English
- Engineering MAPS Natural Science

GPA Requirements:

- 2.250 Cumulative GPA
- 2.250 Major GPA

[Course Substitutions]

Writing Requirement:

- ENES 1010 - Engineering, Ethics and Society (first-year students only)
- ENLP 3100 - Complex Leadership Challenges (Instructor consent required for students not in Engineering Leadership)
- ENES 3100 - Seminar in Engineering, Ethics & Society
- WRTG 3030 - Writing on Science and Society
- WRTG 3035 - Technical Communication and Design
- PHYS 3050 - Writing in Physics

[Humanities & Social Science Electives]

General Science Electives:

- PHYS 2130 General Physics 3
- EBIO 1210 General Biology 1 (lab optional)
- MCDB 1150 Intro to Molecular Biology
  - Recommended for students interested in the Biomedical Engineering Minor
- IPHY 3410 Intro to Human Anatomy
- CHEN 1201 General Chemistry for Engineers
- CHEN 1211 Accelerated Chemistry for Engineers
- CHEM 1113 General Chemistry 1
  - This refers to transfer credit or Advanced Placement (AP) credit. Engineering students can't take CHEM 1113

[Sophomore Electives]

[Software Electives]

[Technical Electives (TE)]

[Advanced Concentration Electives (ACE)]