

ELECTRICAL & COMPUTER ENGINEERING CURRICULUM (4-Year Plan)

Effective
Fall 2024

1

PHYS 1110 (4)
General Physics 1

APPM 1350 (4)
or **MATH 1300**
Calculus 1

ECEN 1400 (3)
Intro to Digital & Analog
Electronics
(1st Year Projects)

ECEN 1100 (1)
Exploring ECE

**Humanities/
Social Science
Elective (3)**
Lower-Division

15

2

PHYS 1140 (1)
Experimental Physics
Coreq: PHYS 1120

PHYS 1120 (4)
General Physics 2
Prereq: PHYS 1110, Calc 1
Coreq: Calc 2

APPM 1360 (4)
or **MATH 2300**
Calculus 2
Prereq: Calc 1

ECEN 1310 (4)
C Programming for
ECE

**Humanities/
Social Science
Elective (3)**
Lower-Division

16

3

ECEN 2250 (3)
Intro to Circuits and
Electronics
Prereq: PHYS 1120, Calc 2
Coreq: APPM 2360

APPM 2360 (4)
Differential Equations
with Linear Algebra
Prereq: Calc 2

ECEN 2350 (4)
Digital Logic
Prereq: ECEN 1310

CSCI 2270 (4)
Data Structures
Prereq: ECEN 1310, Calc 1

**Humanities/
Social Science
Elective (3)**
Lower-Division

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4

ECEN 2270 (3)
Electronics Design Lab
Coreq: ECEN 2260

ECEN 2260 (3)
Circuits as Systems
Prereq: ECEN 2250, APPM 2360

APPM 2350 (4)
or **MATH 2400**
Calculus 3
Prereq: Calc 2

ECEN 2360 (3)
Programming Digital
Systems
Prereq: ECEN 2350

Sophomore Elective (3)
ECEN 2XXX
[ECEE Sophomore Electives](#)

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**General Science
Elective (3)**
[ECEE General Science Electives](#)

**Advanced Analog
Core Elective (3)**
ECEN 3250, 3300,
or 3400

ECEN 3810 (3)
Probability
Prereq: Calc 3

ECEN 2370 (3)
Embedded Software
Engineering
Prereq: ECEN 1310
Coreq: ECEN 2360

ECEN 2703 (3)
Discrete Mathematics
for Computer Engineers
Prereq: ECEN 1310, Calc 2

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**Technical
Elective (3)**
3000 or higher
[ECEE Technical Electives](#)

**Technical
Elective (3)**
[ECEE Technical Electives](#)

ECEN 3593 (3)
Computer Organization
Prereq: ECEN 2360

ECEN 3753 (3)
Real-Time Operating
Systems
Prereq: ECEN 2370, CSCI 2270

Free Elective (3)

Writing Course (3)

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**Advanced
Concentration
Elective (3)**
[Approved ACE Courses](#)

**Technical
Elective (3)**
3000 or higher
[ECEE Technical Electives](#)

ECEN 4610 (3)
Capstone Lab, Part 1
Prereqs: all classes in **bold**

Free Elective (3)

**Humanities/
Social Science
Elective (3)**
Upper-Division

15

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**Advanced
Concentration
Elective (3)**
4000 or higher
[Approved ACE Courses](#)

**Technical
Elective (3)**
3000 or higher
[ECEE Technical Electives](#)

ECEN 4620 (3)
Capstone Lab, Part 2
Prereq: ECEN 4610

Software Elective (3)
[Approved Software Electives](#)

**Humanities/
Social Science
Elective (3)**
Upper-Division

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Requisites Key:

Prerequisite
must be completed beforehand
→

Corequisite
must be completed before or concurrently
↔

Recommended Prerequisite
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**These courses must be completed prior
to starting ECEN 4610 Capstone 1**

Please Note: Requisites for elective courses
are not shown here. Refer to the Class Search
page and the catalog for the most up-to-date
information.