



Computer Engineering Degree 2018-2019

To schedule an appointment with an academic advisor, please visit us at ECE.utah.edu/advising.
ALL MAJOR CLASSES MUST BE LETTER GRADED | CR/NC IS **NOT** AN OPTION

Pre-Computer Core: 27 credits

ECE 1240 (4.0) – Introduction to ECE Design
ECE 1245 (0.5) – Introduction to ECE Design Lab
ECE 1050 (0.5) – MATLAB
PHYS 2210 (4.0) – Physics for Engineers I
CS 1410 (4.0) – Object-oriented Programming
CS 2420 (4.0) – Algorithms
WRTG 2010 (3.0) – Intermediate Writing
Must be completed with a “C-” or higher

MATH 1210/1310 (4.0) – Calculus I
MATH 1220/1320 (4.0) – Calculus II
Must be completed with a “C” or higher

ADMISSION: Students should apply for admission to the B.S. Electrical Engineering program when they are taking their final pre-Electrical course(s) by submitting an online application at ece.utah.edu/admissions
Pre-major GPA: 3.0 or higher
Cumulative GPA: 2.8 or higher

TRANSFER CREDIT: Students who have transfer credit that may fulfill a B.S. Electrical Engineering requirement may petition for equivalency at ECE.utah.edu/transfer

Writing Core: 3 credits

ECE 3030 (3.0) – Technical Communications
Will accept Honor 3200

Math/Science Core: 17-18 credits

If students take MATH 1310/1320, then choose one:

Math 3140 (4.0) – PDEs and Vector Calculus
Math 5600 (4.0) – Survey of Numerical Analysis
CS 3200 (3.0) – Scientific Computing
PHYS 3740 (3.0) – Quantum Theory
CHEM 1210 (4.0) – General Chemistry
BIOL 1210 (4.0) – General Biology

If students take MATH 1210/1220, then:

Math 2210 (3.0) – Calculus III

All students must complete:

MATH 2250 (4.0) – Differential Equations/Linear Algebra
PHYS 2220 (4.0) – Physics for Engineers II
CS 2100 (3.0) – Discrete Structures
ECE 3530 (3.0) – Engineering Probability & Statistics

Major Requirements: 39 credits

LEAP 1501 (3.0) – Ethics in Engineering
CS 1410-040 (4.0) – Object-oriented Programming
ECE 1900 (1.0) – Freshman Seminar
ECE 2240 (4.0) – Circuits
ECE 2280 (4.0) – Electronics Fundamentals
CS 3500 (3.0) – Software Practice
CS 4400 (4.0) – Computer Systems
CS/ECE 3700 (4.0) – Digital System Design
CS/ECE 3710 (4.0) – Computer Design Lab
CS/ECE 5780 (4.0) – Embedded System Design
CS/ECE 3810 (4.0) – Computer Organization

Capstone Experience: 7-9 credits

CS/ECE 3991 (1.0) – Junior Seminar
CS/ECE 3992 (3.0) – Pre-Thesis/Clinic

CS/ECE 4710 (3.0) – Senior Project
or
CS/ECE 4991 (2.0) – Senior Thesis I
CS/ECE 4992 (3.0) – Senior Thesis II
or
ECE 4900 (2.0) – Senior Clinic I
ECE 4910 (3.0) – Senior Clinic II

Advanced Technical Electives: 18 credits

Select CS/ECE 3xxx or higher courses totaling 18 credits
EAE classes are **not** permitted

General Education: 18-24 credits

American Institutions

ECON 1740, HIST 1700 or POLS 1100

Fine Arts 1 (FF)

Fine Arts 2 (FF)

Humanities 1 (HF)

Humanities 2 (HF)

Behavioral Science 1 (BF)

Satisfied by LEAP 1501 (3.0)

Behavioral Science 2 (BF)

Diversity (DV)

International Requirement (IR)

At least two General Education courses must be 3xxx-level or higher

Departmental Requirements

2.5 Cumulative GPA (all U of U courses)
2.5 Technical GPA (all U of U ECE and CS courses)
Total degree hours: 127-136