# Computer Engineering Major

## 4-Year Plan

The following is a sample 4-year plan. Please note that student-specific plans may differ. Consult with your academic advisor for your specific plan.

For more information on major requirements and technical elective courses, go to catalog.usu.edu and select “Degree Maps.”

<table>
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<th>ACADEMIC YEAR</th>
<th>2019-20</th>
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## Freshman Fall
- **ECE 1400** Computer Programming 1 (4 credits, Fall, Spring, Summer)
- **MATH 1210** Calculus 1 (4 credits, Fall, Spring, Summer)
- **GENERAL EDUCATION** Breadth Course (BHU) (3 credits, Fall, Spring, Summer)
- **GENERAL EDUCATION** Breadth Course (BAI) (3 credits, Fall, Spring, Summer)
- **GENERAL EDUCATION** Breadth Course (BCA) (3 credits, Fall, Spring, Summer)

| **TOTAL CREDITS** | 17 |

## Freshman Spring
- **CS 1410** Computer Programming 2 (3 credits, Fall, Spring, Summer)
- **MATH 1220** Calculus 2 (4 credits, Fall, Spring, Summer)
- **ECE 2700** Digital Circuits (4 credits, Fall, Spring, Summer)
- **PHYS 2210** Physics 1 (4 credits, Fall, Spring, Summer)
- **PHYS 2215** Physics 1 Lab (1 credit, Fall, Spring, Summer)

| **TOTAL CREDITS** | 17 |

## Sophomore Fall
- **ECE 2420** Algorithms & Data Structures (3 credits, Fall, Spring, Summer)
- **ECE 2250** Electrical Circuits 1 (3 credits, Fall, Spring, Summer)
- **ENGL 2010** Intermediate Writing (3 credits, Fall, Spring, Summer)
- **MATH 2270** Linear Algebra (3 credits, Fall, Spring, Summer)
- **PHYS 2220** Physics 2 (4 credits, Fall, Spring, Summer)
- **PHYS 2225** Physics 2 Lab (1 credit, Fall, Spring, Summer)

| **TOTAL CREDITS** | 17 |

## Sophomore Spring
- **ECE 3700** Digital System Design (3 credits, Fall, Spring, Summer)
- **ECE 2290** Electrical Circuits 2 (3 credits, Fall, Spring, Summer)
- **MATH 2280** Differential Equations (3 credits, Fall, Spring, Summer)
- **ECE 3710** Digital System Design (3 credits, Fall, Spring, Summer)
- **ECE 2290** Electrical Circuits 2 (3 credits, Fall, Spring, Summer)
- **GENERAL EDUCATION** Breadth Course (BLS) (3 credits, Fall, Spring, Summer)

| **TOTAL CREDITS** | 15 |

## Junior Fall
- **ECE 3620** Continuous Time Systems (3 credits, Fall, Spring, Summer)
- **ECE 3710** Microcontrollers (4 credits, Fall, Spring, Summer)
- **ECE 5720** Comp. Sys. Programming (3 credits, Fall, Spring, Summer)
- **MATH 3310** Discrete Mathematics (3 credits, Fall, Spring, Summer)
- **GENERAL EDUCATION** Depth Course (DSS) (3 credits, Fall, Spring, Summer)

| **TOTAL CREDITS** | 16 |

## Junior Spring
- **ECE 3410** Microelectronics 1 (4 credits, Spring, Summer)
- **ECE 3810** Engineering Professionalism (1 credit, Fall, Spring, Summer)
- **ENGR 3080** Technical Communication (3 credits, Fall, Spring, Summer)
- **STAT 3000** Statistics for Scientists (3 credits, Fall, Spring, Summer)
- **TECHNICAL ELECTIVE** Coding Intensive Elective (3 credits, Fall, Spring, Summer)

| **TOTAL CREDITS** | 14 |

## Senior Fall
- **ECE 4820** Computer Engr. Design 1 (1 credit, Fall, Spring, Summer)
- **ECE 4830** Engineering Comm. 1 (1 credit, Fall, Spring, Summer)
- **ECE 5600** Intro. to Computer Networks (3 credits, Fall, Spring, Summer)
- **TECHNICAL ELECTIVE** High Level Elective (3 credits, Fall, Spring, Summer)
- **TECHNICAL ELECTIVE** Coding Intensive Elective (3 credits, Fall, Spring, Summer)
- **TECHNICAL ELECTIVE** Core Comp. Engr. Elective (3 credits, Fall, Spring, Summer)
- **GENERAL EDUCATION** Breadth Course (BSS) (3 credits, Fall, Spring, Summer)

| **TOTAL CREDITS** | 17 |

## Senior Spring
- **ECE 4840** Computer Engr. Design 2 (2 credits, Fall, Spring, Summer)
- **ECE 4850** Engineering Comm. 2 (1 credit, Fall, Spring, Summer)
- **TECHNICAL ELECTIVE** High Level Elective (3 credits, Fall, Spring, Summer)
- **TECHNICAL ELECTIVE** Core Comp. Engr. Elective (3 credits, Fall, Spring, Summer)
- **TECHNICAL ELECTIVE** High Level Elective (3 credits, Fall, Spring, Summer)
- **GENERAL EDUCATION** Depth Course (DHA) (2 credits, Fall, Spring, Summer)

| **TOTAL CREDITS** | 14 |

## Total Credits Required
- **TOTAL CREDITS** 126

## University Requirements
- English 1010 is a University requirement and is a prerequisite for English 2010. An English ACT score of 29+ or an SAT verbal score of 640+ will fulfill the English 1010 requirement.

## Pre-Professional Program (PPRU) Requirements
- Complete courses marked with an asterisk (*)
- No more than three total repeats for PPRU courses
- Minimum 2.8 PPRU GPA
- Minimum grade of C- for PPRU courses

## Pre-Professional Program (PPRU) Requirements
- No more than three total repeats for Professional Program courses
- Minimum 2.0 Professional GPA
- Up to 10 “D” credits are allowed (all other grades must be a C- or better)

*Abbreviations: (CR) Credits • (SEM) Semester • (F) Fall • (Sp) Spring • (Su) Summer
Any discrepancy between this chart and the 2019-20 General Catalog is resolved in favor of the General Catalog.

* Required for admission to Professional Program.
~ Apply for Professional Program after Year 2