

Computer Science - Computer Engineering Emphasis, A.A.S.

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Requirements

The program introduces the student to a wide range of computer systems hardware, software, device drivers and peripheral devices.

Total Program Credits: 63

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|---|-----------|---|---|
| General Education Requirements: | | 13 Credits | |
| A minimum of 16 credits of General Education requirements are required for graduation. Not all GE requirements are listed in this section (see Specialty Core requirements for more details). | | | |
| | ENGL 1010 | Introduction to Academic Writing | 3 |
| or | ENGH 1005 | Literacies and Composition Across Contexts (5) | |
| HUMANITIES/FINE ARTS/FOREIGN LANGUAGE ¹ | | 3 | |
| | COMM 2110 | Interpersonal Communication (Minimum grade of C- required) | 3 |
| BIOLOGY | | 3 | |
| or | PHYS 2210 | Physics for Scientists and Engineers I (4) (Minimum grade of C- required) | |
| PHYSICAL EDUCATION/HEALTH/SAFETY OR ENVIRONMENT ² | | 1 | |
| Discipline Core Requirements: | | 9 Credits | |
| Complete the following: | | | |
| | CS 1400 | Fundamentals of Programming (Minimum grade of C- required) | 3 |
| | CS 2600 | Computer Networks I (Minimum grade of C- required) | 3 |
| | CS 2810 | Computer Organization and Architecture (Minimum grade of C- required) | 3 |
| Emphasis Requirements: | | 28 Credits | |
| Complete the following (minimum grade of C- required): | | | |
| | ECE 1000 | Introduction to Electrical and Computer Engineering | 3 |
| | ECE 2250 | Circuit Theory | 3 |
| | ECE 2255 | Circuit Theory Lab | 1 |
| | ECE 2700 | Digital Design I | 3 |
| | IT 1510 | Introduction to System Administration--Linux/UNIX | 3 |
| | MATH 1210 | Calculus I (fulfills GE requirement) | 5 |
| | CS 1410 | Object-Oriented Programming | 3 |
| | CS 2370 | C plus plus Programmin WE | 3 |
| | CS 2420 | Introduction to Algorithms and Data Structures | 3 |
| | ECE 2705 | Digital Design I Lab | 1 |
| Emphasis Elective Requirements: | | 13 Credits | |

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| Complete 10 credits from the following courses (minimum grade of C- required). (Must be approved by CSE Department. See CSE Advisor): | | 10 |
| CS 2300 | Discrete Mathematical Structures I (3) | |
| CS 2450 | Software Engineering (3) | |
| CS 2550 | Web Programming I (3) | |
| MATH 1220 | Calculus II (5) | |
| PHYS 2215 | Physics for Scientists and Engineers I Lab (1) | |
| Complete 3 credits of any CS or ECE course 1000 or higher. | | 3 |

Graduation Requirements:

1. Completion of a minimum of 63 semester credits.
2. Overall grade point average of 2.0 (C) or above.
3. Residency hours -- minimum of 20 credit hours through course attendance at UVU.

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| Footnote: |
| ¹ COMM 1020 and COMM 1025 recommended |
| ² HLTH 1100 or PES 1097 recommended |

Computer Science - Computer Engineering Emphasis, A.A.S.

Computer Science - Computer Engineering Emphasis, A.A.S. Graduation Plan

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in [Wolverine Track](#).

Milestone courses (pre-requisites for a course in one of the subsequent semesters) are marked in red and italicized.

| Semester 1 | Course Title | Credit Hours |
|--|------------------------|---|
| | <i>CS 1400</i> | Fundamentals of Programming 3 |
| | <i>MATH 1210</i> | Calculus I 5 |
| | ENGL 1010 or ENGH 1005 | Introduction to Academic Writing or Literacies and Composition Across Context 3 |
| | COMM 2110 | Interpersonal Communications 3 |
| | General Education | Physical Education/Health/Safety or Environmental (HLTH 1100 or PES 1097 recommended) 1 |
| | | Semester total: 15 |
| Semester 2 | Course Title | Credit Hours |
| | <i>CS 1410</i> | Object Oriented Programming 3 |
| | <i>CS 2810</i> | Computer Organization & Architecture 3 |
| | <i>ECE 1000</i> | Introduction to Electrical and Computer Engineering 3 |
| | Biology or PHYS 2210 | Physics for Scientists and Engineers 3 |
| | CS/ECE Elective | Choose from CS/ECE Electives list 3 |
| | | Semester total: 15 |
| Notes: CS/ECE Electives: CS 2300; CS 2450; CS 2550; CS 3520; MATH 1220; Phys 2215 | | |
| Semester 3 | Course Title | Credit Hours |
| | <i>CS 2420</i> | Introduction to Algorithms & Data Structures 3 |
| | <i>CS 2600</i> | Computer Networks I 3 |
| | <i>ECE 2700*</i> | Digital Design I 3 |
| | <i>ECE 2705</i> | Digital Design I Lab 1 |
| | CS/ECE Elective | Choose from CS/ECE Electives list 3 |
| | CS/ECE Elective | Choose from CS/ECE Electives list 3 |
| | | Semester total: 16 |
| *ECE 2700 has a pre-requisite of MATH 1050 and must be taken in a previous semester. | | |
| Notes: CS/ECE Electives: CS 2300; CS 2450; CS 2550; CS 3520; MATH 1220; Phys 2215 | | |
| Semester 4 | Course Title | Credit Hours |
| | <i>ECE 2250</i> | Circuit Theory 3 |

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| ECE 2255 | Circuit Theory Lab | 1 |
| ECE 2370 | C plus plus Programming WE | 3 |
| IT 1510* | Introduction to Systems Administration Linux/UNIX | 3 |
| CS/ECE Elective | Choose from CS/ECE Electives list | 1 |
| COMM 1020 and COMM 1025 | Public Speaking and Public Speaking Lab | 3 |
| | Semester total: | 14 |
| Notes: *IT 1510 has a pre-requisite of INFO 1120 and must be taken in a previous semester. | | |
| Notes: CS/ECE Electives: CS 2300; CS 2450; CS 2550; CS 3520; MATH 1220; Phys 2215 | | |
| Note: If contemplating BS degree, comply with BS pre-req requirements | | |
| | Degree total: | 63 |