

B.S. Computer Engineering

Program Admissions Requirements

Including the university's General Education Requirements (a minimum of 36 credits--see the General Education Requirements in the Academic Information section of this catalog), the program of study for the Bachelor of Science in Computer Engineering degree totals a minimum of 120 credits as follows:

General Education

The listing below includes program requirements that also fulfill General Education requirements.

| Code | Title | Credits |
|---|-----------------------------------|-----------|
| Objective 1- | ENGL 1101, ENGL 1102 ¹ | 6 |
| Objective 2- | COMM 1101 | 3 |
| Objective 3- | MATH 1170 | 4 |
| Objective 4 | | 6 |
| Objective 5- | PHYS 2211, CHEM 1111, CHEM 1111L | 9 |
| Objective 6 | | 6 |
| Students must fulfill Objective 7 or Objective 8 | | 3 |
| | Objective 7-CS 1181 | |
| | Objective 8 | |
| Objective 9 | | 3 |
| Total Credits | | 40 |

¹ "P" courses are equivalent to the original course.

Major Requirements

All required courses for the B.S. Computer Engineering major must be completed with a grade of C- or higher.

| Code | Title | Credits |
|------------|---|---------|
| CHEM 1111 | General Chemistry I (Partially Fulfills General Education Objective 5) | 4 |
| CHEM 1111L | General Chemistry I Lab (Partially Fulfills General Education Objective 5) | 1 |
| CS 1181 | Computer Science and Programming I (Fulfills General Education Objective 7) | 3 |
| ENGL 3307 | Professional and Technical Writing | 3 |
| MATH 1170 | Calculus I (Fulfills General Education Objective 3) | 4 |
| MATH 1175 | Calculus II | 4 |
| MATH 2240 | Linear Algebra | 3 |
| MATH 3360 | Differential Equations | 3 |
| PHYS 2211 | Engineering Physics I (Partially satisfies General Education Objective 5) | 4 |
| PHYS 2212 | Engineering Physics II | 4 |
| CS 1187 | Applied Discrete Structures | 3 |
| CS 1337 | Computer Organization and Architecture | 3 |
| CS 2235 | Data Structures and Algorithms | 3 |

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|----------------------|--|-----------|
| CS 3309 | Advanced Object-Oriented Programming | 3 |
| CS 3337 | Secure Systems and Networks | 3 |
| CS 4461 | Secure Operating Systems | 3 |
| ECE 1100 | Foundations of Electrical and Computer Engineering | 1 |
| ECE 2200 | Electrical Circuits I | 3 |
| ECE 2200L | Electrical Circuits I Laboratory | 1 |
| ECE 2250 | Introduction to Digital Systems | 3 |
| ECE 2250L | Introduction to Digital Systems Laboratory | 1 |
| ECE 3320 | Introduction to Electronics | 3 |
| ECE 3300 | Electrical Circuits II | 3 |
| ECE 3300L | Electrical Circuits II Laboratory | 1 |
| ECE 3310 | Signals and Systems | 3 |
| ECE 4450 | Advanced Digital Logic Design | 3 |
| ECE 4411 | Applied Engineering Methods | 3 |
| ECE 4460 | Advanced Computer Architecture | 3 |
| ECE 4460L | Advanced Computer Architecture Laboratory | 1 |
| ECE 4451 | Embedded Systems Engineering | 2 |
| ECE 4451L | Embedded Systems Engineering Laboratory | 1 |
| ECE 4420 | Advanced Electronics | 3 |
| ECE 4420L | Advanced Electronics Laboratory | 1 |
| ECE 4470 | Digital Signal Processing | 3 |
| ECE 4495 | Capstone Design Project I | 3 |
| ECE 4496 | Capstone Design Project II | 3 |
| Total Credits | | 96 |

Degree Totals

| Code | Title | Credits |
|----------------------|--|------------|
| | Program Admission Requirements | 0 |
| | General Education | 40 |
| | Major Requirements (Required General Education credits removed.) | 80 |
| | Upper Division Free Electives | 0 |
| | Free Electives | 0 |
| Total Credits | | 120 |