

COMPUTER ENGINEERING MINOR

Program Description

A Computer Engineering minor combines selected topics from our Computer Science and Electrical Engineering majors to provide you with skills to work at the interface between computer software and computer hardware. It also allows you to explore computer engineering as a second discipline.

Entering and Completing the Minor

In order to earn a degree, you must complete at least one academic major. Minors are not required except for students in the Professional Studies (BA). SPU encourages students to explore various academic paths, including minors, so if you change your mind about a minor or want to include an additional minor, you are able to do so as outlined below.

Note that the University encourages you to enter your chosen minor(s) as soon as you have determined it and are eligible to join it, especially by the start of your junior year. Students who transfer as juniors and seniors should enter a minor within their first two quarters at SPU.

- If this is your first quarter at SPU, request entrance to your minor in Banner by following these instructions (<https://spu.atlassian.net/l/cp/Th4S0jCE/>).
- If you are an SPU student with an SPU cumulative GPA of 2.0 or better, follow these instructions (<https://spu.atlassian.net/l/cp/Th4S0jCE/>) to enter a minor in this department.
- The University requires a grade of C- or better in all classes that apply to a minor; however, programs may require higher minimum grades in specific courses. You may repeat an SPU course only once for a higher grade.
- To advance in this program, meet with your faculty advisor regularly to discuss your grades, course progression, and other indicators of satisfactory academic progress. If your grades or other factors indicate that you may not be able to successfully complete the minor, your faculty advisor can work with you to explore options, which may include choosing a different minor.
- You must complete the minor requirements that are in effect in the SPU Undergraduate Catalog for the year you enter the minor.

Computer Engineering Minor

55 Credits Minimum, Including 15 Upper Division (UD)

| Code | Title | Credits |
|--------------------------|---|---------|
| Core Requirements | | |
| CSC 1230 | Problem Solving and Programming | 5 |
| CSC 2430 | Data Structures I | 5 |
| CPE 3280 | Microcontroller System Design | 5 |
| CPE 3760 | Computer Organization and Assembly Language | 5 |
| CPE 4750 | Computer Networks ¹ | 5 |
| or EE 4770 | Fundamentals of Advanced Embedded Systems | |
| EE 1210 | Introduction to Logic System Design | 5 |
| EE 2726 | Electric Circuits I | 5 |
| MAT 1234 | Calculus I | 5 |

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|--------------------------|--------------|----|
| MAT 1235 | Calculus II | 5 |
| MAT 1236 | Calculus III | 5 |
| Section Credits Required | | 50 |

Electives

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|--------------------------|-----------------------------------|---|
| CSC 3150 | Systems Design | |
| CSC 3220 | Applications Programming | |
| CSC 3221 | Netcentric Computing | |
| CSC 3310 | Concepts in Programming Languages | |
| CSC 3350 | Operating Systems Programming | |
| CSC 3430 | Algorithm Design and Analysis | |
| Section Credits Required | | 5 |

Total Credits 55

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The other course can be applied to the Electives category.