

# 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/IssueTracker/Th4S0jCE/>).
- If you are an SPU student with an SPU cumulative GPA of 2.0 or better, follow these instructions (<https://spu.atlassian.net/IssueTracker/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
<b>Core Requirements</b>		
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 <sup>1</sup>	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

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

### Electives

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
--------------------------	--	---

<b>Total Credits</b>		<b>55</b>
----------------------	--	-----------

1

The other course can be applied to the Electives category.