

Add-On Major/Minor for Electrical/Computer Engineering Students

Electrical Engineering (EE) or Computer Engineering (CPE) students have the options to add or receive the following majors/minors besides BSEE and/or BSCPE:

1. Double majors in Electrical Engineering and Computer Engineering
2. Mathematics minors after BSEE/BSCPE requirements are met.
3. Computer Science minor
4. Physics Minor
5. Mathematics major

For detailed information, please visit <http://pfw.edu/ece> - - > [ECE Documents/Resources](#) (the most right tab)

1. Double majors in Electrical Engineering and Computer Engineering

Value: provides a background in both Electrical Engineering and Computer Engineering areas and gives students better chances to find job opportunities in either Electrical Engineering or Computer Engineering.

Details: There is significant overlap between BSEE and BSCPE requirements. Students in both programs take the same courses in their freshman and sophomore years. In the junior and senior years, some ECE courses are required by both programs. A course required in one program also serves as a technical elective for the other program.

2. Mathematics minor

Students are eligible to receive a mathematics minor after completing all course requirements for BSEE or BSCPE. ECE 30200 can satisfy the Mathematics minor requirement. Students must apply to add the Mathematics minor to their records and contact the Math department for a MyBlueprint audit before graduation.

3. Computer Science minor

Value: Provide more programming knowledge to ECE students

Details: ECE 22900 and ECE 36800 can satisfy the requirements for a CS minor. MA 17500 is either an elective for BSEE or required for BSCPE. Students only need to take CS 16000, CS 16100, and one more 300-level or higher CS course, which could be a technical elective for BSCPE or BSEE.

4. Physics minor

Value: Provide more knowledge in physics area

Details: ECE 31100 is cross-listed with PHYS 31200. Many physics classes are group 2 technical electives.

5. Mathematics major

Value: Provide very strong mathematics background for ECE students.

Details: Students pursuing BSEE or BSCPE can add a mathematics major, as many mathematics requirements, such as foreign language requirements, can be waived. For details, please visit <http://pfw.edu/ece>.

Primary major	Add-on major/minor	value
EE or CPE	Double major in EE and CPE	provides a background in both Electrical Engineering and Computer Engineering areas and gives students better chances to find job opportunities in either Electrical Engineering or Computer Engineering.
EE or CPE	Mathematics minor (no additional requirements)	
EE or CPE	CS minor	Provide more programming background and knowledge
EE or CPE	Physics Minor	Provide more background in physics area
EE or CPE	Mathematic major	Provide very strong mathematics background for BSEE or BSCPE students.