

Minor in Electrical and Computer Engineering

For students who are not ECE majors and are interested in broadening their exposure to and understanding of electrical and computer engineering, the ECE department offers a Minor. The Minor in Electrical and Computer Engineering provides an exciting opportunity to acquire a solid knowledge of electrical and computer engineering as needed in today's diverse and technology driven society.

Successful candidates for the ECE Minor must complete a minimum of two units of work while meeting the following requirements:

1. **Required** course: Either ECE2011 or ECE3601.
2. At least **three** courses from the following list:

ECE2022, ECE2111, ECE2112, ECE2201, ECE2311, ECE2312, ECE2801, either CS2301 or CS2303, or any ECE course at the 3000 or 4000 level exclusive of ECE3601.
2. At least **two** ECE courses at the 3000-level or above, exclusive of ECE3601, which are thematically related. The thematically related courses can be areas of concentration such as *Analog and RF Electronics*, *Control and Power Engineering*, *Computer Engineering*, or *Communications and Signals*. Examples of thematically related 3000 and 4000 level courses are:
 - a. ECE3311, ECE4304, ECE4703 (Communications and Signals)
 - b. ECE3801, ECE3803, ECE4801 (Computer Engineering)
 - c. ECE3204, ECE3113, ECE4902 (Analog and RF Electronics)
 - d. ES3011, ECE3501, ECE3503 (Control and Power Engineering)
4. A **capstone experience** through an ISP or an ECE course at 3000-level or above, exclusive of ECE3601. The ISP can replace one of the courses required under item 3.

The above thematically arranged courses represent four examples of important ECE sub-disciplines; additional area of concentration, for example in *Robotics* or *Biomedical Engineering*, can be made in consultation with relevant ECE faculty members. Students seeking an ECE Minor should complete the ECE Minor form available in the ECE office and submit it to the ECE office as early in the program of study as possible. The ECE curriculum committee will be responsible for review and approval of all ECE Minor requests.

WPI policy requires that no more than one unit of course work can be double counted toward other degree requirements.

Application for Electrical & Computer Engineering Minor

Last Name: _____ First Name: _____

Student Number: _____ - _____ - _____ Major Department: _____

Anticipated Graduation Date: _____ Email: _____ @ wpi.edu

A. Indicate successful completion of **ONE** of the following **required courses**:

		TERM/GRADE	Indicate double-counted courses (≤ 1 unit)
{	<input type="checkbox"/> <i>ECE 2011</i> <i>Intro to Electrical and Computer Engineering</i> <div style="text-align: center;"><i>OR</i></div> <input type="checkbox"/> <i>ECE 3601</i> <i>Intro to Digital Circuits and Computer Engineering</i>	_____ / _____ _____ / _____	<input type="checkbox"/> <input type="checkbox"/>

B. Indicate which **introductory courses** you are using for this minor (**at least three**).

		TERM/GRADE	
	<input type="checkbox"/> ECE 2022 Intro to Digital Circuits & Computer Engineering	_____ / _____	<input type="checkbox"/>
	<input type="checkbox"/> ECE 2111 Physical Principles of ECE Applications	_____ / _____	<input type="checkbox"/>
	<input type="checkbox"/> ECE 2112 Electromagnetic Fields	_____ / _____	<input type="checkbox"/>
	<input type="checkbox"/> ECE 2201 Microelectronic Circuits I	_____ / _____	<input type="checkbox"/>
	<input type="checkbox"/> ECE 2311 Continuous-Time Signal and System Analysis	_____ / _____	<input type="checkbox"/>
	<input type="checkbox"/> ECE 2312 Discrete-Time Signal and System Analysis	_____ / _____	<input type="checkbox"/>
	<input type="checkbox"/> ECE 2801 Foundations of Embedded Computer Systems	_____ / _____	<input type="checkbox"/>
	<input type="checkbox"/> _____ _____	_____ / _____	<input type="checkbox"/>
	<input type="checkbox"/> _____ _____	_____ / _____	<input type="checkbox"/>
{	<input type="checkbox"/> <i>CS 2301</i> <i>Systems Programming for Non-Majors</i> <div style="text-align: center;"><i>OR</i></div> <input type="checkbox"/> <i>CS 2303</i> <i>Systems Programming Concepts</i>	_____ / _____ _____ / _____	<input type="checkbox"/> <input type="checkbox"/>

C. Indicate which **thematically related upper-level courses** you are using for this minor (at least two).

	COURSE #	COURSE NAME	TERM/GRADE	
	<input type="checkbox"/> _____	_____	_____ / _____	<input type="checkbox"/>
	<input type="checkbox"/> _____	_____	_____ / _____	<input type="checkbox"/>
	<input type="checkbox"/> _____	_____	_____ / _____	<input type="checkbox"/>

D. Indicate which course (or ISP) you took to satisfy the capstone requirement (must be the last course taken).

Course: _____ Term/Grade: _____ / _____

Have you discussed your application for the ECE minor with your academic advisor? Yes _____ No _____

Minor Approval: _____ Date: _____
 For ECE Curriculum Committee