

The **Minor in Electrical and Computer Engineering (ECE)** offers students majoring in disciplines other than ECE the opportunity to become familiar with principles and design practices used to meet the multidisciplinary needs of modern technology. Minor in ECE is a restricted program, available only to qualified students (typically with a GPA higher than 3.5) through an admission process. The Minor in ECE is offered by the faculty of the ECE program and is designed to serve students from other engineering disciplines as well as those students with majors outside of engineering. It is assumed that students who pursue the ECE minor will obtain a mathematics background that is comparable to that required for a major in engineering. The ECE minor stipulates 10 semester credit hours of required courses that provide a fundamental grounding in ECE knowledge and design. These courses include an introduction to digital circuit design, theory-based courses in both analog circuits and modern electronics. In addition to these fundamental courses, 3 elective courses assure the students an opportunity to emphasize a particular area of interest.

Required Courses*

1. **ECE 09.241** Introduction to Digital Systems
2. **ECE 09.203** Principles of Electric Circuit Analysis
3. **ECE 09.311** Electronics I

Elective Courses* Choose any three of the following.

1. **ECE 09.243** Computer Architecture
2. **ECE 09.321** Systems and Control I or **ME 10.343** Systems Dynamics and Control I
3. **ECE 09.341** Signals and Systems
4. **ECE 09.342** Embedded Systems
5. **ECE 09.351** Digital Signal Processing
6. **ECE 09.303** Electromagnetics
7. **ECE 09.312** Very Large Scale Integration (VLSI) Design
8. **ECE 09.433** Electrical Communications
9. **ECE 09.4XX**** An approved ECE elective
10. **ENGR 09.401/402***** Senior Clinic I or Senior Clinic II

* Students must ensure that they have the appropriate prerequisites for any of these classes. Prerequisites for each class can be found on Banner Course Catalog. Find the catalog entry for the course that you are interested in taking, scroll to the bottom of the page.

** Please see ECE Minor coordinator or ECE Department Head for determining which ECE electives offered in any given semester are approved for Minor.

*** If Senior Clinic I or II is used as one of the ECE electives, the clinic must be strictly an ECE project, with an ECE faculty member serving as the project manager. Only one semester of clinic experience may be used as an elective.

Mechanical Engineering Majors: If you are admitted to the Minor in ECE program, and complete **ECE 09.203 Principles of Electric Circuit Analysis** and **ECE 09.311 Electronics I**, you are not required to take **ECE 09.205 Principles and Applications of ECE for Nonmajors**.