

Course Planning Specifics: Electrical and Computer Engineering

Students considering ECE as a major should begin their science courses with physics (PH1110/1111 and PH1120/1121) and complete the calculus sequence (MA 1021-1024) in the first year. This can be through a combination of AP or transfer credit, as well as WPI courses and credit exams. So, if you received AP credit for courses early in the sequence, you can start at the next course in the sequence. [Click here](#) for the degree requirements for Electrical and Computer Engineering.

Students considering ECE as a major can enroll in [ECE 1799](#) (Frontiers and Current Issues of Electrical and Computer Engineering). This 1/6 unit class meets once a week for one hour during A & B terms. The course demonstrates the breadth of activities, career choices and technologies of ECE. The Seminar is taken **in addition to** your three courses per term.

We recommend taking [CS 1004](#) (offered in A & C terms) during your first year if you do not have any programming background. Students who plan on taking CS 2102 should consider CS 1101 instead.

The Electrical and Computer Engineering (ECE) program begins with the introductory courses [ECE 2010](#), Introduction to Electrical and Computer Engineering. Many students take [ECE 2010](#) and [ECE 2029](#) in consecutive terms once they have completed Calculus I and II and Physics I and II. [ECE 2019](#), Sensors Circuits, and Systems can also follow ECE 2010. Students with programming background who have been able to take CS 2301 can follow ECE 2010 with ECE 2049, Embedded Computing in Engineering Design.

Example of a typical course schedule for your first two terms

| <u>A term</u> | <u>B term</u> |
|-----------------------------------|---------------|
| PH1110/1111 | PH1120/1121 |
| MA | MA |
| GPS/HU/SS | GPS/HU/SS |
| ECE1799 (optional 1/6 unit class) | |
| PE (optional) | PE (optional) |

Course Planning Worksheet: ECE

Math Placement Test Result: _____ AP/IB/Transfer Credit: _____

Abbreviation Key for Course Planning Tracker:

- **GPS** = Great Problems Seminar
- **HU**= Humanities Course (includes AB, AR, CN, EN, GN, HI, HU, INTL, ISE, MU, PY, RE, SP, TH, WR)
- **SS** = Social Science Course (includes ECON, ENV, GOV, PSY, SD, SOC, SS)
- **BB** = Biology Course
- **PH**= Physics Course
- **CH**= Chemistry Course

Any courses marked with an asterisk (*) are optional programs, and can be taken in addition to the three courses.

Please Note: The Great Problems Seminars are a two term sequence course. They are also **linked**. This means that when registering for a GPS course in A term, you must register for its second half in B term.

| <u>A Term Selections</u> | <u>(Include CRN)</u> | <u>B Term Selections</u> | <u>(Include CRN)</u> |
|---|----------------------|---|----------------------|
| PH 1110/1121 | | PH 1120/1121 | |
| Math | | Math | |
| GPS, HU, SS | | GPS, HU, SS | |
| ECE 1799 (1/6 unit two-term long course) | | | |
| *Physical Education (1/12 credit unit) | | *Physical Education (1/12 credit unit) | |
| *Military Science (Must be affiliated with an ROTC unit) | | *Military Science (Must be affiliated with an ROTC unit) | |
| Back-ups | | Back-ups | |