# Class of 2013
## Electrical Engineering Curriculum

### First Year
- **First Semester**
  - PHYS 211 (Classical & Modern Physics I)
  - MATH 201 (Calculus I)
  - ENGR 100 (Exploring Engineering)
  - Elective

- **Second Semester**
  - PHYS 212 (Classical & Modern Physics II)
  - MATH 202 (Calculus II)
  - ELEC 120 (Foundations of Electrical Engineering)
  - Elective

### Second Year
- **First Semester**
  - CHEM 201 (General Chemistry I)
  - MATH 211 (Calculus III)
  - CSCI 203 (Intro. to Computer Science I)
  - ELEC 225* (Circuit Theory I)
  - Elective

- **Second Semester**
  - MATH 212 (Differential Equations)
  - ENGR 221 (Mechanics)
  - ELEC 247 (Microcontroller System Design)
  - ELEC 226* (Circuit Theory II)
  - Elective (Science)

### Third Year
- **First Semester**
  - ENGR 240 (Science of Materials)
  - ELEC 350 (Electronics I)
  - ELEC 320 (Linear Systems & Signal Processing)
  - Elective

- **Second Semester**
  - ELEC 390 (Theory & App. of Electromagnetics)
  - ELEC 340 (Digital System Design)
  - ELEC 351 (Electronics II)
  - ENGR 138* (Written & Oral Communication) (W2)
  - Elective

### Fourth Year
- **First Semester**
  - ELEC 491 (Electromechanical Energy Conversion)
  - ELEC 480 (Electrical Control Systems)
  - ELEC 400* (Project Planning & Eng. Design) (W2)
  - ELEC 471 (Probability w/App. in Electrical Eng.)
  - Elective

- **Second Semester**
  - ELEC 420 (Electrical Engineering Design)
  - Elective
  - Elective
  - Elective

* Half-credit course; all others are one-credit courses.

The 10 elective courses shown above are distributed as follows:

- Five approved social science and humanities courses to meet the Engineering General Education Component requirement. These courses must satisfy the following requirements:
  - A minimum of two courses must be in the humanities; at least one must be an English course.
  - A minimum of two courses must be in the social sciences.
  - At least one course must satisfy the Global and Societal Perspectives requirement.

- One course at the 200 level or above in the natural sciences (physics and astronomy, chemistry, or biology) or BIOL 121, BIOL 122, GEOL 103, GEOL 150, or GEOL 301.

- At least one 400-level elective course in electrical engineering, except ELEC 495 and independent study courses.

- Three unrestricted elective courses in any department or program of the University. It is recommended that students intending to pursue graduate studies choose at least one of these courses: MATH 343, MATH 345, or MATH 362.

Three courses must fulfill the University writing requirement, which consists of one W1 course taken in the first year and two W2 courses taken at any time after the W1 course. Note that ENGR 138 and ELEC 400 satisfy the W2 requirement.

Electrical engineering students who wish to pursue graduate studies in bioengineering or who wish to acquire the biology and chemistry credits needed to prepare for work or further study in the life sciences are encouraged to minor in chemical and biological studies or in biomedical engineering. Students who minor in chemical and biological studies are excused from the ENGR 240 requirement.