

2. ***Elective Fields of Emphasis:***

a. ***Digital Electronics: (10 credit hours)***

ELEC 306	Electronics I
ELEC 313	Electronics Laboratory
ELEC 311	Digital Logic and Circuits
ELEC 330	Digital Systems Engineering

**OR**

b. ***Control Systems: (13 credit hours)***

ELEC 206	Computer Applications for Electrical Engineers
ELEC 309	Signals and Systems
ELEC 301	Linear Circuits Laboratory
ELEC 312	Systems I
ELEC 407	Systems II

3. ***Plan of Study:***

Prerequisites and corequisites for each of the above courses are as presented in the course descriptions below. (Exception: ELEC 104 and ELEC 105 are waived as course prerequisites for the student pursuing a minor in electrical engineering.)

Total Credit Hours Required — 17 (Digital Electronics Track)  
20 (Control Systems Track)

**Electrical Engineering Course Descriptions**

ELEC 104     *Engineering Fundamentals I*     One Credit Hour

Required of electrical engineering freshmen. Meets the first year seminar requirement.

An introduction to the engineering profession, branches and functions of engineering, professional ethics, and the role of engineers in society. Fundamentals of engineering problem solving and the use of calculators and computers as tools to aid in problem solving. This course also covers first year seminar topics including academic skills and lifestyle issues related to success in college.

Lecture: one hour. Laboratory: one hour.

ELEC 105     *Engineering Fundamentals II*     Two Credit Hours

Required of electrical engineering freshmen.

A continuation of Engineering Fundamentals I to include subject areas common to most engineering disciplines, such as the introduction to the engineering design process and teamwork through a design project, engineering laboratory skills, report writing, engineering economics, material balance, and drafting.

Lecture: two hours.