

EE 4400: Directed Study in Electrical Engineering

Variable 1 to 4 credit hours Credit Hours

Prerequisite: Approval of instructor and department chair

This course covers special topics and seminars of an advanced nature, external to regular course offerings that allow a student to work individually with an instructor. A Directed Study may include original research projects and/or practicum experiences. Repeatable two times for credit.

EE 4490: Special Topics

3 Credit Hours

Special topics course for Electrical Engineering majors.

EE 4605: Electromagnetic and Microwave Applications

3 Credit Hours

Prerequisite: EE 3605 and Engineering Standing

In this course students will develop an understanding of the fundamental concepts of propagation, waveguides and radiation of electromagnetic waves. Students will apply basic electromagnetic concepts to the design of transmission lines, antenna systems, radars, and satellite communication.

EE 4701: Professional Practice

3 Credit Hours

Prerequisite: EE 3401 and Engineering Standing

This course covers the historical, social and economic considerations of the electrical engineering discipline. It includes studies of professional conduct, risks, and liabilities, and intellectual property relative to the electrical engineering profession. Electrical Engineering case studies will be used. Further the study of professional ethics, electrical code fundamentals (i.e. NEC), laws governing the practice of electrical engineering, contractual relationships, the licensure process for professional engineers are all undertaken in this course.