EE 4800: Senior Project

4 Credit Hours

Prerequisite: EE 4701 and Engineering Standing

This course is designed to be the culmination of the undergraduate electrical engineering education. Under the guidance of the professor, students will form small design teams, choose a proposed or ongoing project and research and redesign the project. Working as independent teams with guidance from the lead professor the capstone projects will be completed and the results presented for review to a panel of faculty, students, and others such as staff and Industrial Advisory Board members.

ENGR 1000: Introduction to Engineering

1 Credit Hours

This course explains the engineering education pathways in the Southern Polytechnic College of Engineering and Engineering Technology. The course introduces University and College resources as well as an overview of career opportunities, available campus facilities and student organizations. The course also covers advising and course planning, and some of the skills necessary for various Engineering disciplines. Students will learn basic skills in problem solving, computation, design, and communication that is needed for future engineering courses.

ENGR 1100: Survey of Engineering Applications from Mathematics

4 Credit Hours

Prerequisite: MATH 1113 Concurrent:

or MATH 1190

The objective of this course is to increase student retention, motivation, and success in engineering through an application-oriented introduction to engineering mathematics. This course does not replace other math courses, but provides a survey of the most significant math topics used in the core freshman and sophomore-level engineering courses. These include basic descriptions of engineering applications using algebraic manipulation of engineering equations, trigonometry, vectors and complex numbers, systems of equations and matrices, differentiation, integration and differential equations. All these fundamental math topics will be presented within the context of engineering applications, and reinforced through examples of their use in the core engineering courses.