



University Bulletin

Undergraduate Degree Programs

Electrical Engineering (E E)

E E 007S Adventures in Electrical Engineering (1) Exploration of electrical engineering through several hands-on activities that cover a broad spectrum of applications and fundamental concepts.

E E 007S Adventures in Electrical Engineering (1) (FYS)

What engineering discipline should I major in? This is perhaps one of the most important decisions that students in the College of Engineering must make within their first two years of study. Unfortunately, many students often make this decision based on limited knowledge of the various engineering disciplines offered at Penn State.

Adventures in Electrical Engineering is a fifteen week expedition that answers two questions. First, what type of problems do electrical engineers solve? Second, what tools do electrical engineers use to find solutions? These questions are addressed by highlighting various areas of electrical engineering including electronic circuits, semiconductor devices and fabrication, optical communications, feedback control systems, and digital image processing. Most topics are drawn from senior technical electives so that students obtain a broad view of electrical engineering.

Adventures in Electrical Engineering is a hands-on course that requires the design, construction, and testing of several projects. Each project emphasize a different subdiscipline of electrical engineering. In addition to exploring fundamental concepts of electrical engineering, students work with instrumentation and computer software frequently used by electrical engineers.

General Education: None

Diversity: None

Bachelor of Arts: None

Effective: Fall 1999

Note : Class size, frequency of offering, and evaluation methods will vary by location and instructor. For these details check the specific course syllabus.

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