

The Department of Electrical Engineering Presents **EE151 Introductory Electronic Projects**

The Department of Electrical Engineering offers a fun and informative freshman course, EE151 - Introductory Electronic Projects. If, as a student you have never assembled any kind of electronic project and are considering Engineering as a course of study and a career, this course was designed just for you!

Through the assembly of several interesting “hobby - type” electronic projects students will acquire useful career related experiences in using hand tools and working with electronic components. Particular focus of the course, EE151, is the hands on experiences in using popular electronic fabrication topologies currently employed in instruction, research, and industry. These topologies include interconnection techniques involving soldering with point to point wiring, soldering on printed circuit boards, use and applications of solderless prototyping systems, wire wrapping, finish packaging and an introduction to electronic schematic symbol reading.

Students will work in teams of two and each team keeps the working devices that they construct. Some examples of current projects are: an LED sequential flasher, A Battery Powered Emergency Strobe Light, A Light Wave Transmitter and Receiver, A Digital Thermometer, and a Digital Clock.

Projects constructed in EE151 are not just “Kits” bought from the local electronic store. Each project has been selected from “hobby” and “industry” magazine articles or designed by EE department staff. Projects have been designed in an attempt to stress the use of alternative low cost non-traditional materials, the cost effective use of parts, and a variety of wiring and packaging topologies that make the projects different and thought provoking. Many of our past students insist that these skills and positive encouragement have proven helpful in later laboratory course work.

Since inception in 1994, over 160 students have participated in EE151 course experience. The class is available in the Spring and Fall Semesters and has consistently been scheduled Monday afternoons 4:00pm through 7:00pm. Enrollment is limited to 20 students.

EE151 is taught as a pass/fail course and there are no tests, quizzes, and no homework.. Emphasis in this course is placed on practical hands on experiences and project completion, not technical proficiency.

Preparation talks are designed to include an introduction to electronic vernacular and electronic schematic symbols as they apply to the weekly project. On occasion regular faculty or graduate students may drop by to speak to the class on materials of special interest as it may apply to the class topic.

This brochure and more continuously updated information about EE151 activities can be found on our web page: www.ee.wustl.edu/class/ee151.

Direct all questions to: Paul L. Discher pld@ee.wustl.edu

