Electrical engineering teaches students basic engineering principles and technical skills in the research, development, and application of electricity, and a wide variety of electrical, electronic, and telecommunications devices and systems. This also includes the use of lasers and other optical equipment for commercial or research purposes. The program includes instruction in electrical circuitry, prototype development and testing, systems analysis and testing, systems maintenance, instrument calibration, and report preparation, as well as laser and optical principles, testing and maintenance procedures, and safety precautions.

Sample Coursework
- Calculus
- Chemistry
- Circuit Design
- Computer Architecture
- Control Theory
- Digital Systems
- Electromagnetic Field Theory

Possible Career Opportunities
- Aerospace Engineer
- Army National Guard
- Avionics Technician
- Navy (Officer)
- Network Engineer
- Power Plant Engineer

Employment and Graduate School Information

Employment Outlook
According to the Occupational Outlook Handbook (2008-09) slower than average growth is expected through 2016 due to international competition and the use of engineering services performed in other countries. There will be strong demand for electrical devices—including electric power generators, wireless phone transmitters, high-density batteries, and navigation systems, which will stimulate job growth.

Salary Expectations
Examples of national median annual salaries of careers that can be obtained with an Electrical Engineering degree are (O*NET, 12/2013): Aerospace Engineer $103,720, Avionics Technician $55,350, Electrician $49,840, Quality Assurance Engineer $81,140, and Power Plant Engineer $66,130.

(This section is intended for informational purposes, not predication of actual salary. Salary information is based on national salary ranges which are greatly impacted by location and relative cost of living.)

Graduate/Professional School Opportunities
Electrical Engineering graduates may choose to pursue advanced degrees in one of the following areas: Business Management, Electronic Engineering, Other Engineering Fields, Law or Health-related fields, and Computer and Info Sciences.

Where Could I Work?
- Electrical or electronics engineers
- Managerial
- Executive or administrative occupations
- Computer engineers

Where Can I Get More Information?
Purdue School of Engineering and Technology
Office: SL 160 Phone: (317) 274-9723
http://engr.iupui.edu/

Institute of Electrical & Electronic Engineers
www.ieeeusa.org

American Society for Engineering Education
www.bio.org

Institute of Electrical & Electronic Engineers
www.ieeeusa.org

American Society for Engineering Education
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Interest Code
Investigative
Realistic
Enterprising