An Electrical Engineer is responsible for utilizing sophisticated technology to service, install, repair, and design electrical systems.
Employer: Anderson Electric Corporation

Education: BS, University of Illinois: Champaign-Urbana

I have always liked solving problems and building things out of Legos®. I guess that sparked my interest in engineering. It didn’t hurt that my best subjects in school were math and science. I majored in electrical engineering in college and had a job lined up before I graduated.

I perform a number of different tasks in my current position. I’m responsible for preparing electrical drawings, specifications, calculations, charts, and graphs. I determine cost estimates and manpower requirements for proposals. I oversee the installation, maintenance, and repair of new and existing electrical systems. I make sure electrical systems meet design specifications. I use computers and other technologies to create and test electrical equipment. I also ensure that our work is in compliance with local, state, and national electrical codes.

I am asked in many other ways to contribute to the goals of the company. For example, I assist in developing and reviewing electrical programs and procedures for the company. I provide technical direction and on-the-job training to drafters, designers, and less experienced engineers. Furthermore, I cooperate with supply management, sales, marketing, manufacturing, and quality assurance to optimize designs for cost, quality, and manufacturability.

I really enjoy what I do. In addition to finding my job challenging, I take pride in knowing that I’m competent.
Electrical Engineer

**overview**

An electrical engineer is responsible for utilizing sophisticated technology to service, install, repair, and design electrical systems.

**suggested high school courses**

agricultural mechanics, physical science, and mathematics

**experience needed**

Participate in a school-sponsored competition related to engineering. Plan and implement a related Supervised Agricultural Experience (SAE) Program.

**degree(s) required**

A bachelor’s degree in electrical, industrial, mechanical, or agricultural engineering is required. An MS degree in an engineering or scientific discipline provides opportunity for further advancement.

**potential employers**

farm equipment manufacturers, grain milling operations, meat processing companies, research firms, some state and government agencies

**salary range**

$51,875 to $102,616

**employment outlook and trends**

The future outlook for electrical engineers is projected to be good to excellent depending on skills, specialties, and location.

**professional organizations**

Farm Equipment Manufacturers Association [www.farmequip.org/](http://www.farmequip.org/)
Institute of Electrical and Electronics Engineers [www.ieee.org/index.html](http://www.ieee.org/index.html)
National Society of Professional Engineers [www.nspe.org/index.html](http://www.nspe.org/index.html)

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Want to Learn More?

- [www.agcareers.com](http://www.agcareers.com)
- [www.mycaert.com/career-profiles](http://www.mycaert.com/career-profiles)
- [www.career.ag.iastate.edu/](http://www.career.ag.iastate.edu/)
- [www.eresumes.com/](http://www.eresumes.com/)

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