

### Electrical/ Power Engineer



*Median average salary: \$94,210*

Electrical power and energy engineers work to ensure that electric energy is generated and delivered reliably and efficiently while advancing environmental quality improvements. They help customers use electric energy to meet their needs economically. Electrical power and energy engineers are also driving the technologies of the future, making possible the greater use of wind, solar, and other new generating technologies.

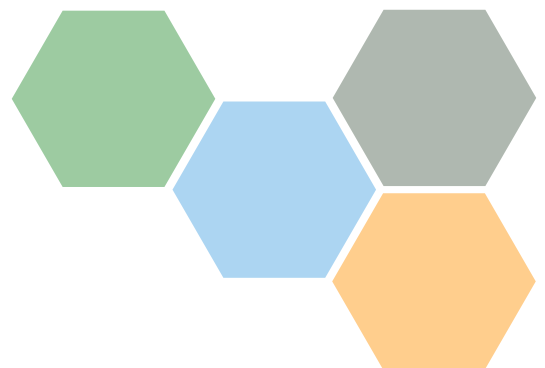
#### **What does it take to be an electrical/power engineer?**

Power and energy engineers need to develop specific skills in order to do their job well, and many of these are STEM skills. For example, electrical/power engineers must be able to:

- Work with technology related to electricity generation, delivery, and use
- Turn the goals and concerns of others into clear problem statements that can be solved using technology
- Communicate effectively verbally and through writing
- Identify and solve problems in a systematic way

Being a power and energy engineer means that you have the opportunity to grow in your career. You may start as a helper or assistant and work your way up to a service specialist or supervisor. At each level, it is important to develop and strengthen more skills. Some of these advanced skills are:

- Project planning
- New project design
- Development of short- and long-term plans
- Communication skills
- Supervisory skills
- Leadership skills



## **What does an electrical/power engineer do?**

An electrical/power engineer's responsibilities change as their career grows. Below are examples of tasks for different stages of an electrical/power engineer career.

### **Entry Level**

*Education Required: Associate's Degree*

- Perform entry-level engineering analysis
- Design, plan, review, and inspect small to medium projects
- Apply professional engineering concepts, principles, practices, and methods to a broad range of engineering activities in a variety of work environments
- Work under guidance of an experienced engineer

### **3+ Years**

- Lead others in performing engineering analysis
- Design, plan, review, and inspect moderately complex or major projects
- Resolve new and unusual problems and recommend solutions to unique circumstances and situations
- Communicate with those in leadership positions to influence and motivate others to achieve project objectives

### **5-10 Years**

- Serve as team leader in performing engineering analysis
- Design, plan, review, and inspect complex projects among varying disciplines
- Manage multiple projects at one time

