



Construction Trades II

# Career Explorations:

# Electrician

May 6, 2020



## 10-12/ Construction Trades II

### Career Explorations/Electrician: [May 6, 2020]

#### **Objective/Learning Target:**

Students will explore the possibility of becoming an electrician as a career path.

# Electrician Career Info

Electricians work on all aspects of electrical systems installed in homes, businesses, and industrial spaces. They may install, repair, and inspect wiring or other electrical components. The minimum educational requirements for pursuing an apprenticeship or training program at a college or technical school is a high school diploma. Aspiring electricians should also be aware in advance that safety precautions must be followed carefully when working with electricity.

**Watch The  
Video:**

[How to Become an  
Electrician](#)

# What does it take to become an electrician

<b>Education</b>	High school diploma or equivalent
<b>Training</b>	Electrician training programs can be found at technical schools and colleges
<b>Licensure</b>	Required in most states; requirements vary from state to state
<b>Experience</b>	4-year apprenticeship program; formal education may provide credit toward training
<b>Key Skills</b>	Critical thinking, customer-service, managerial, troubleshooting, and computer skills
<b>Job Outlook*</b>	14% growth
<b>Average Annual Salary (2019)*</b>	\$60,370

*Sources: U.S. Bureau of Labor Statistics, O\*Net OnLine*

# How can I become an electrician

## Getting started:

High school graduates can prepare for careers as electricians through college or vocational programs. For example, many colleges and technical schools offer certificate programs for aspiring electricians. Once enrolled, they study various aspects of electrical work, such as theory and electrical code standards. Though practical experience is still required for an electrician's license, employers often start graduates of these programs at more advanced levels.

## **Success Tip:**

Prepare for an apprenticeship program with course choices. Generally, one year of algebra is required to enter apprenticeship programs. Students in postsecondary training programs may consider taking additional math courses since they may be useful.

## **Apprenticeship Program**

The traditional career path for electricians is through apprenticeship programs, which provide an education and a monetary stipend. In addition to a high school diploma or GED, applicants over 18 years of age must pass an aptitude and drug test. Apprenticeship programs typically last four years and include 2,000 hours of paid work experience and 144 hours of classroom instruction. As graduates of apprenticeship programs, electricians are given the designation of journey-workers and are qualified to work without supervision.

## **Success Tip:**

Become familiar with common tools of the trade. Apprentices should learn to use a variety of tools under the supervision of experienced electricians. They can also seek out opportunities to gain experience with common computer programs used in the trade.

## Licensing

In most states, electricians must be licensed. Requirements vary for each state, but commonly include a licensing exam. Other's requirements include varying levels of experience or a combination of education and experience. Electricians should consult their state electrical licensing board to determine specific requirements. Generally speaking, an electrician's license must be renewed every two years. Electricians should make sure to keep track of any upcoming and relevant license renewal information.

## Let's Review

Electricians need a high school diploma or its equivalent to qualify for an apprenticeship, college, or vocational training program and enter a field that's expected to grow by a much faster than average rate through 2024. The average yearly salary for an electrician in May 2019 was \$60,370.

# **Electrician fun facts**

**1. An electrician works on all aspects of electrical systems installed in homes, businesses, and industrial spaces?**

- True
- False

**Answer: True**

## **2. The average salary for an electrician according to the Bureau of Labor and Statistics is?**

- \$30,000 - \$40,000 annually
- \$40,000 - \$50,000 annually
- \$50,000 - \$60,000 annually
- \$60,000 - \$70,000 annually

**Answer: \$60,000  
- \$70,000**

According to the Bureau of Labor and  
Statistics the average income for an  
electrician in May of 2019 was \$60,370

### **3. The job outlook for electrician's entering the field from 2014-2024 should show a \_\_\_\_\_ increase?**

- 10%
- 12%
- 14%
- 18%
- 20%

# **Answer: 14%**

The U.S. Bureau of Labor and Statistics estimates a 14% increase in available jobs between 2014 and 2024

**4. You must attend a 4-year university in order to receive the certification required to become an electrician?**

- True
- False

# Answer: False

These guidelines are set at the state level and often only require a high school diploma and the completion of an apprenticeship program OR completion of course work at a trade school or 4-year college.

## **5. The apprenticeship program in this area often lasts.**

- 1 year
- 2 years
- 3 years
- 4 years
- None of the Above

# **Answer: 4 years**

Apprenticeships, which generally take 4 years to complete, offer on-the-job training along with classroom instruction.

## **6. How old do you have to be to start an apprenticeship program?**

- 17
- 18
- 19
- 20

# **Answer: 18**

18, a U.S. citizen and have high school graduate.

**7. During the four-year apprenticeship a student will receive approximately \_\_\_\_\_ hours of classroom instruction and \_\_\_\_\_ hours of paid technical training in the field?**

- 100/1000
- 144/2000
- 231/2300
- 311/2700

# **Answer: 144/2000**

During the four-year apprenticeship program the trainee will complete at least 144 hours of classroom instruction and 2000 hours of paid technical training in the field.

**8. A journeyman electrician is qualified to work on the job as long as they are supervised.**

- True
- False

# **Answer: False**

As graduates of apprenticeship programs, electricians are given the designation of journeyman and are qualified to work without supervision.

# Credit

- x Bureau of Labor and Statistics
- x Study.com