

CAREER PATHS: ELECTRICIAN OR LOW VOLTAGE TECHNICIAN



What does an electrician do? Electricians install, connect, test, and maintain electrical systems for a variety of purposes including power, lighting, climate control, security, communications, and electronic controls for machinery. Electricians work with blueprints and digital construction platforms, follow the National Electrical Code (NEC), and must comply with state and local building requirements. They increasingly work with innovations in smart and green technologies. Although most electricians specialize in either construction or maintenance, a growing number do both. Their working environment varies, depending on the type of job; to avoid injuries, they follow strict safety procedures.



What does a low voltage technician do? Low voltage technicians test, service, and maintain low voltage electronic and control systems equipment. Technicians are often divided into two categories: Voice Data Video technicians (or VDV techs) and Fire Life Safety (FLS) technicians, who work on proprietary systems related to fire, life, and safety.

Electricians and low voltage technicians today are at the forefront of emerging technologies that require their skilled knowledge to plan and install solar electric systems, electric car charging stations, smart buildings and homes, and consult about energy efficiency. They work on commercial construction, public projects, and in residential settings and find themselves in many working conditions.

Many electricians or low voltage technicians work for electrical contractors or own electrical contracting businesses themselves. The median wage in 2024 for electricians in California was \$86,525 annually, or \$41.60 hourly. Electricians in competitive markets such as the Bay Area, Los Angeles, San Diego, and other in-demand metros may command over double that hourly rate. The median wage in 2023 for electricians in Arizona was \$53,207 annually, or \$23 hourly. The median wage in 2024 for electricians in Utah was \$58,000 annually, or approximately \$28 hourly. The median wage in 2024 for low voltage technicians/security and fire alarm installers in California was \$70,986 annually, or approximately \$34 hourly. (Sources: California Employment Development Department, Arizona at Work, Utah Department of Workforce Services)

Career Resources

Contact us at 877-444-9322.

Visit us online at [GOWECA.COM](https://www.goweca.com) for more information about the electrician career path.

Visit a [WECA training facility](#). Register to attend one of our regular open houses or similar events at the WECA training facility nearest to you to see our labs and classrooms, and meet instructors and staff.

Why consider the electrician or low voltage technician career path? The electrician or low voltage technician career path can be a successful and rewarding choice. Career training is affordable -- or completely sponsored -- and should not require taking on student debt. For those who enjoy working with both their heads and their hands, prefer new environments to going into an office, and have good spatial abilities, it could be a great fit.



Careers in the trades: a career as an electrician or a low voltage technician is a respected and needed profession in our modern and increasingly connected world. Many in the skilled trades are retiring, and demand is high for a new generation of highly skilled and trained women and men to replace them.

Electricians and low voltage technicians make good salaries for their skilled training and experience. Many work for contractors and others own contracting businesses themselves. They in turn provide employment and on-the-job training for employees and apprentices. Electricians and low voltage technicians play an important role in building their communities.



The electrician or low voltage technician path can be a rewarding and secure option compared to other careers or traditional four-year degrees.



How does someone become a skilled electrician? In California, those interested in pursuing the electrician career path must complete an Electrician Trainee program, or have entered and completed a formal apprenticeship program. They are then required to take the California State Electrician Certification exam. In Arizona, electricians are encouraged to complete an apprenticeship program. In Utah, electricians must complete an apprenticeship program and take and pass a Certification Exam.

How long does it take? Depending on the education path a person takes, as an electrician trainee or an apprentice, and the type of electrician work they want to specialize in, a WECA student can graduate in three to five years.

How much does it cost? WECA's electrician education programs are affordable. For example, tuition paid for WECA's apprenticeship programs are paid by the apprentice's employer. WECA's electrician trainee tuition is approximately \$1,558 per year, comparable to a year's tuition and fees at a California, Arizona, or Utah community college. Compare that to an average of \$6,084 to \$45,324 per semester for in-state tuition in California, \$11,748 to \$35,796 per year for in-state tuition in Arizona, and \$23,436 to \$39,164 per year for in-state tuition in Utah. *Sources: California State University, University of California, Arizona State University, University of Arizona, Utah State University, University of Utah.*

What is WECA? Western Electrical Contractors Association, Inc. is a nonprofit organization serving merit shop electrical contractors, their employees, and the industry in the American West. WECA offers federal and state-approved electrician education apprenticeship and training programs. Visit **GOWECA.COM** to learn more.

WECA Electrician Trainee Program WECA's Electrician Trainee Certificate Program, offered in California, provides an electrician education that's flexible, convenient, and effective. Electrician trainees who undertake their education at WECA can choose from three ways to complete WECA GetWired courses, which make up the path to the WECA Electrician Trainee Program Certificate. Most GetWired courses are conducted online over instructor-led webcast in the evenings. Students can choose courses which offer either hands-on electrical labs at WECA's modern training facilities (typically one Saturday per course), or opt instead for interactive online guided lab experiences with their instructors. Students who prefer to progress on their own time, at their own pace, can opt for the self-paced online format. Electrician trainees can complete their coursework program in four years, while independently gaining on-the-job hours necessary to sit for the certification exam.

Apprenticeship Programs Apprenticeship is a system of learning in the classroom and receiving on-the-job training while earning wages. WECA's apprentices attend classes in an accelerated and intensive format consisting of full-time classroom and lab instruction for two consecutive weeks every six to seven months. Each two-week session is equal to one semester.

An apprentice's tuition is paid for by a WECA member contractor whom they are working for as an apprentice. WECA offers three apprenticeship programs: Commercial Inside Wireman, Residential Wireman, and Low Voltage (Voice/Data/Video and Fire/Life/Safety, Sound and Communications Systems) Installer.

WECA Training Facilities

CA HQ (Rancho Cordova, CA)

AZ HQ (Phoenix, AZ)

UT HQ (Woods Cross, UT)

Fresno, CA

Riverside, CA

San Diego, CA