Electrical Technology

Course Listing*

CORE COURSE REQUIREMENTS

COURSE ID	COURSE NAME	CREDIT UNITS
ELEC 111	Electrical Conduit Bending & Raceway Systems	5.0
ELEC 121	Blueprint Reading & Safety for Electricians	5.0
ELEC 130	Technical Math and Electric Circuits	10.0
ELEC 200	Residential Wiring	5.0
ELEC 211	Commercial Wiring	5.0
ELEC 212	Industrial Wiring	5.0
ELEC 220	Programmable Logic Controllers/ Industrial Electronics	5.0
CERTIFICATE TOTAL		40.0

Continue Your Education

Graduates of the Electrical Technology certificate program who wish to continue their education can pursue an associate degree in which affords excellent opportunities for professional growth and development providing instruction in general education coursework designed to produce the competencies of higher education that employers expect of college graduates.

An Associate of Science in Electrical Technology is offered at the Phoenix, Sacramento, and San Leandro locations. An Associate of Science in Trades Studies is offered at the Bakersfield and Fresno Trades Education Center (TEC) locations. For information related to these degree pathways please see the academic catalog.

* Course listings are subject to change. Reference the SJVC College Catalog for the most current program information.

Institutional Accreditation

San Joaquin Valley College is accredited by the WASC Senior College and University Commission (WSCUC), 1080 Marina Village Parkway, Suite 500, Alameda, CA 94501, (510)748-9001 (https://www.wscuc.org). The WSCUC is an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U.S. Department of Education.

Accreditation and Approvals

For comprehensive information on SJVC's accreditation and approvals, visit https://www.sjvc.edu/about/accreditation/.

Consumer Information

San Joaquin Valley College publishes important consumer information for all programs and campus locations. For comprehensive consumer information, visit <u>consumerinfo.sjvc.edu</u>.

 $\label{program} \mbox{Program availability varies by campus location. Please see the catalog for details.}$

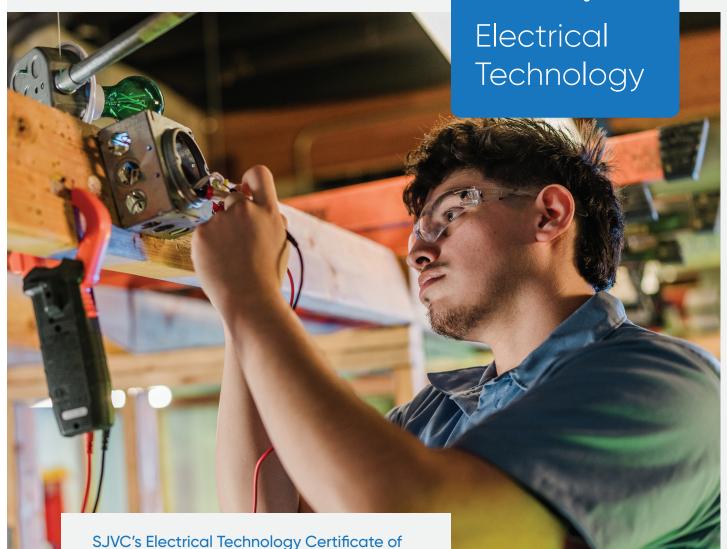
READY TO ENROLL?
GET STARTED HERE:

sjvc.edu/program/electrical-technology

sjvc.edu 📵 🗗 🗗



Train for a rewarding career in



Completion program provides a framework of electrical knowledge and skills that can

be adapted in the electrical trade industry.

The Electrical Technology Certificate of Completion program is 40 weeks in length and provides a framework of electrical knowledge and skills that can be adapted in the electrical trade industry. The program prepares students for employment in numerous electrical and related trades. Upon completion of the Electrical Technology program, the student should be able to install, maintain, and repair electrical equipment and systems in a safe, competent, and professional manner.



Your trusted source for hands-on training.

SJVC excels at in-person, hands-on learning in high tech laboratory environments that will enable you to transition to a career with real-world experience.





Program Student Learning Outcomes

Upon completion of this program, the successful student

- 1. Discuss theories of electrical circuitry and relate these concepts to practical applications.
- 2. Apply proper procedures for the installation, operation, maintenance and repair of residential, commercial, and light industrial wiring, electrical equipment and systems.
- 3. Demonstrate proper usage of the basic tools of the trade.
- 4. Demonstrate the basic use and application of the National Electrical Code and be prepared to successfully pass the California Electrician Certification Exam.
- 5. Create effective reports and documents, electronically and in writing.
- 6. Apply advanced electrical concepts and critical thinking skills to interpret and create blueprint drawings for residential, commercial and light industrial facilities.
- 7. Relate and apply concepts of communication, reasoning, critical analysis, ethical behavior and appropriate interpersonal interaction to situations in his or her career and personal life.
- 8. Demonstrate the social skills, professional appearance, attitudes and behavior that employers expect of all SJVCgraduates.
- 9. Adhere to national, state, and local safety practices used by technicians working in the electrical industry.

At SJVC, we value:

Integrity Family **Professionalism** Communication **Diversity** Success

Credential and **Professional Certifications**

Graduates earn a Certificate of Completion in Electrical Technology, and have the opportunity to earn OSHA 10-Hour Construction and CPR certifications.

For California residents: This program meets the standards set forth by the California Department of Industrial Relations towards the current California Electrician Certification Program. Graduates from California locations are eligible to take the California General Electrician's Certification Exam, administered by the California Department of Industrial Relations (DIR). In order to be certified as a General Electrician in the State of California, pursuant to certification standards established by the Division of Labor Standards Enforcement, an applicant must pass a certification examination and complete 8,000 hours of work for a C-10

electrical contractor installing, constructing or maintaining electrical systems covered by the National Electrical Code. For additional details, please visit: dir.ca.gov/dlse/ECU/ ElectricalTrade.html.

Graduates from Arizona locations looking to work in Arizona are generally not required to achieve licensure to begin entrylevel Electrical Technology employment. Advanced positions may require licensure with the Arizona Registrar of Contractors. Details are available at https://roc.az.gov/licenseclassification-requirements.

Admissions Requirements

- ☐ High School diploma or equivalent
- ☐ Wonderlic SLE assessment score of 14 or higher
- □ Valid California driver license

Applicants must have reliable plans for transportation, child care and time to devote to school work outside of scheduled class hours.

See the SIVC College Catalog for additional information on institutional admission requirements.

SJVC prepares students to take appropriate certification and licensure exams related to their individual majors. The College does not guarantee students will successfully pass these exams or be certified or licensed as a result of completing the program.

Career Opportunities

The following job categories are considered in-field to calculate the graduate employment rates required by the state of California for graduates of the Electrical Technology program. Detailed information for each Standard Occupational Classification (SOC) can be found at onetonline.org.

- Electricians (47-2111.00)
- Electric Motor, Power Tool, and Related Repairers (49-2092.00)
- Electrical and Electronics Repairers, Commercial and Industrial Equipment (49-2094.00)
- Electrical and Electronic Engineering Technologists and Technicians (17-3023.00)
- Helpers Electricians (47-3013.00)
- Helpers, Construction Trades, All Other (47-3019.00)
- Helpers Installation, Maintenance, and Repair Workers (49-9098.00)
- Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products (41-4011.00)
- Security and Fire Alarm System Installers (49-2098.00)
- Solar Thermal Installers and Technicians (47-4099.02)
- Signal and Track Switch Repairers (49-9097.00)
- First-Line Supervisors of Construction Trades and Extraction Workers (47-1011.00)

GET MORE INFO ON **ENROLLMENT:**



