



# Train for a hands-on career as an electrician

# Electrical Technology



## **SJVC's Electrical Technology (ET) program provides a framework of electrical knowledge and skills that can be adapted in the electrical trade industry.**

The Electrical Technology program 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.

This program meets the standards set forth by the California Department of Industrial Relations (DiR) towards the current California Electrician Certification Program. Graduates of this program are eligible to take the California General Electrician's Certification Exam, administered by the California Department of Industrial Relations. 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: <https://www.dir.ca.gov/dlse/ECU/ElectricalTrade.html>





## Hands-On Training

### Students Learn:

- Electrical conduit bending
- Electric circuitry and residential, commercial, and industrial wiring
- Electrical blueprint reading
- OSHA Standards for the construction industry
- PLC and motor controls



## Credential and Professional Certifications

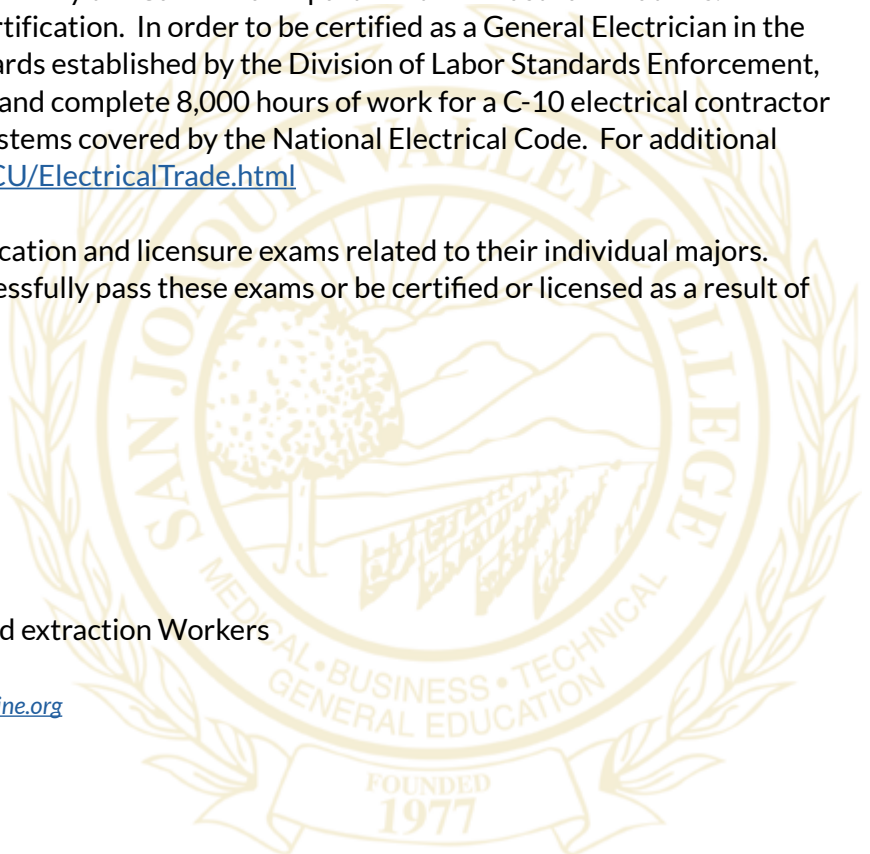
Graduates earn a Certificate of Completion or an Associate of Science Degree and are eligible to take the California General Electrician's Certification Exam, administered by the California Department of Industrial Relations. Students also earn OSHA 10 and CPR/First Aid certification. In order to be 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: <https://www.dir.ca.gov/dlse/ECU/ElectricalTrade.html>

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.

Graduates can find employment in these fields:

- Electrician
- Security and Fire Alarm System Installers
- Signal and Track Switch Repairers
- First-Line Supervisors of Construction Trades and extraction Workers

Source: Occupational Information Network (O\*Net), [www.onetonline.org](http://www.onetonline.org)





## Job Related Skills

Electricians work to supply the power needed for everyday life in commercial, industrial and residential environments. The following is an example of key components of what electricians do:

- Assist skilled construction or extraction personnel
- Create construction or installation diagrams
- Direct construction or extraction personnel
- Inspect electrical or electronic systems for defects
- Install electrical components, equipment, or systems
- Order construction or extraction materials or equipment
- Repair electrical equipment
- Test electrical equipment or systems to ensure proper functioning
- Thread wire or cable through ducts or conduits

Source: Occupational Information Network (O\*Net), [www.onetonline.org](http://www.onetonline.org)



## 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.



## Course Listing\*

### Core Course Requirements

Course ID	Course Name	Credit Units
ELEC 100	OSHA Standards for the Construction Industry	3.0
ELEC 110	Electrical Conduit Bending	2.0
ELEC 120	Blueprint Reading 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
<b>Certificate Total</b>		<b>40.0</b>

### General Education Courses

Course ID	Course Name	Credit Units
ENG 121	Composition and Reading – Part A	3.0
ENG 122	Composition and Reading – Part B	3.0
MTH 121	College Algebra – Part A	3.0
MTH 122	College Algebra – Part B	3.0
NSC 1	Introduction to the Natural Sciences	3.0
PHIL 1C	Ethics	3.0
PSY 1	General Psychology	3.0
SOC 1	Introduction to Sociology	3.0
<b>A.S. Degree Total</b>		<b>64.0</b>

\*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), 985 Atlantic Avenue, Suite 100, 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.

### California State Approval

SJVC is a private institution and is approved to operate as an accredited institution by the California Bureau of Private Postsecondary Education (BPPE). Approval to operate means that SJVC has been found in compliance with the standards set forth in the California Private Postsecondary Education Act of 2009 (as amended) and Title 5, Division 7.5, - Private Postsecondary Education of the California Code of Regulations. As a prospective student, you are encouraged to review the catalog prior to signing an enrollment agreement. You are also encouraged to review the School Performance Fact Sheet, which must be provided to you prior to signing an enrollment agreement.

### Consumer Information

San Joaquin Valley College publishes important consumer information for all programs and campus locations. For comprehensive consumer information, visit <https://www.sjvc.edu/admissions/consumer-information>.

*The Electrical Technology program on the Hesperia campus is new and pending laboratory site approval from the Electrician Certification Curriculum Committee with the State of California Department of Industrial Relations.*

### SJVC Locations

<b>ATASCADERO</b> 805.470.7130	<b>FRESNO</b> 559.448.8282	<b>HESPERIA</b> 760.948.1947	<b>MODESTO</b> 209.542.8800	<b>RANCHO CORDOVA</b> 916.638.7582	<b>TEMECULA</b> 951.296.6015
<b>BAKERSFIELD</b> 661.834.0126	<b>FRESNO - TRADES EDUCATION CENTER</b> 559.453.0123	<b>LANCASTER</b> 661.974.8282	<b>ONTARIO</b> 909.948.7582	<b>RANCHO MIRAGE</b> 442.305.7701	<b>VISALIA</b> 559.651.2500
<b>DELANO</b> 661.778.1145	<b>HANFORD</b> 559.584.8840	<b>MADERA</b> 559.302.2155	<b>PORTERVILLE</b> 559.853.4114	<b>SANTA MARIA</b> 805.608.3104	Program availability varies by campus location. Please see the catalog for details.