

ELECTRICAL INSTALLER, ICLC



Power Up Your Future

The Electrical Technology program delivers hands-on training for entry into residential, commercial, and industrial electrical fields. Students develop skills in wiring, power systems, controls, design, estimating, and maintenance across diverse environments. Coursework is paired with flexible scheduling options to accommodate apprentices as they accumulate on-the-job experience. Graduates are equipped to pursue licensure as journeyman or master electricians or move into related roles in design, inspection, or project management.

Career Opportunities and Income

Visit the Department Website (<https://www.sanjac.edu/programs/areas-of-study/manufacturing/electrical-tech/>) for information regarding career opportunities and potential earnings in the Greater Houston region.

Learning & Career Pathway

This learning pathway — a series of related and “stacked” certificates and degrees — includes the following awards. You can start at any point on the path and earn certificates on your way to completing the degree.

- Electrical Installer, ICLC (p. 1) (3 months)
- Electrical Technology, Occupational Certificate (<https://publications.sanjac.edu/areas-study/construction-industry-manufacturing-transportation/electrical-technology-occupational-certificate/>) (3 months)
- Electrical Technology, Certificate of Technology (<https://publications.sanjac.edu/areas-study/construction-industry-manufacturing-transportation/electrical-technology-certificate-technology/>) (1.5 years)
- Electrical Technology, Level 2 Certificate (<https://publications.sanjac.edu/areas-study/construction-industry-manufacturing-transportation/electrical-technology-level-2-certificate/>) (1.5 years)
- Electrical Technology, Associate of Applied Science Degree (<https://publications.sanjac.edu/areas-study/construction-industry-manufacturing-transportation/electrical-technology-aas/>) (2 years)

San Jacinto College works with many Houston-area and Texas universities that offer bachelor's degrees that are a great next step after earning the Associate of Applied Science in Electrical Technology. The MAPS tab above shows transfer plans for these universities.

Learning Outcomes and Career Skills

A student completing the last award in the pathway will be able to:

- Troubleshoot electrical components and electrical systems.
- Apply mathematical concepts to solve electrical circuit design and troubleshooting problems.
- Design an electrical system meeting all requirements of the National Electrical Code (NEC) when provided plans and specifications.
- Produce material lists, panel schedules, and written procedures to perform specific tasks.
- Explain wiring methods required for hazardous location classifications.
- Install industrial, residential, and/or commercial wiring in a manner consistent with the NEC.
- Use appropriate personal protective equipment (PPE) and apply safe work practices.

Licensure or Certification

The Texas Department of Licensing and Regulation (TDLR) requires an apprentice to have 8,000 hours of on-the-job experience to take the journeyman exam. A master electrician candidate must have 12,000 hours of verifiable experience.

External Learning Experiences

This program includes external learning experiences outside of the classroom, e.g., an internship, externship, clinical, practicum, or cooperative learning experience. Those experiences are typically on-site at a business or organization.

All students participating in external learning experiences are required to comply with the immunization requirements and policies of the external learning sites. Some learning sites outside the college have their own vaccination requirements. These rules come from those facilities and are not mandated from the college. Failure to meet those immunization requirements may limit a student's ability to complete the program and/or may delay the student's graduation date. San Jacinto College does not process exemptions, and students should address potential vaccination exemptions directly with the external learning site.

Locations

- Central (<https://www.sanjac.edu/about/locations/central/>)
- North (<https://www.sanjac.edu/about/locations/north/>)