

# ELECTRICAL TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE



## Program Information

Have you considered a hands-on skill that is very much in demand throughout the Houston region? San Jacinto College's Electrical Technology program is the answer. Homeowners, builders, and businesses rely on skilled electricians for repairs and new installations. A career as a journeyman or master electrician puts you in demand. Our programs help you master everything from simple residential wiring to complex commercial and industrial power and controls for the area's petrochemical plants and business infrastructure.

The San Jacinto College Electrical Technology program:

- Uses a curriculum that prepares students to fill entry-level positions in residential, commercial, and industrial electrical fields;
- Prepares students for jobs in maintenance, design, marketing, estimating, and other electrical-related industries;
- Offers daytime and evening courses that enable apprentices to start accumulating the required on-the-job experience; and
- Prepares students for journeyman and master electrical exams.

## Additional Information

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.

## Career Opportunities

According to the US Department of Labor, employment of electricians is expected to increase faster than average for all occupations through the year 2022. Increases in population and economy will provide a demand for more electricians to install and maintain electrical devices and wiring in homes, factories, offices, and other structures.

Experienced electricians can advance to jobs as:

- Supervisors,
- Project managers,
- Construction superintendents,
- Estimators,
- Electrical inspectors,

- Electrical contractors, and
- Master electricians.

## Earning Potential

Electrician: \$57,487 per year<sup>1</sup>

<sup>1</sup> Source: Texaswages.com (<http://Texaswages.com>), median salary Gulf Coast region, 2019

For more information, students may contact Central campus, 281-478-2799; or North campus, 281-998-6150, x7346.

## Campuses

Central Campus

North Campus

## Information

The Electrical Technology curriculum is designed to provide basic training for students to fill entry-level positions in the fields of construction, maintenance, design, marketing, residential, industrial, commercial, and other electrical-related industries.

The program will also allow electrical workers to upgrade their skills as they gain on-the-job experience.

## Plan of Study

### Central and North Campuses

3ELEC

First Term		Credits
ELPT 1215	Electrical Calculations I	2
CETT 1302	Electricity Principles	3
ELPT 1325	National Electric Code I	3
ELPT 1429	Residential Wiring	4
ENGL 1301	Composition I	3
<b>Credits</b>		<b>15</b>
Second Term		Credits
ELPT 1345	Commercial Wiring	3
ELPT 1351	Electrical Machines	3
ELPT 1441	Motor Control	4
ELPT 2215	Electrical Calculations II	2
MATH 1332 or MATH 1314	Contemporary Mathematics (Quantitative Reasoning) (or higher) or College Algebra	3
<b>Credits</b>		<b>15</b>
Summer Year One Term		Credits
ELPT 2325	National Electrical Code II	3
<b>Credits</b>		<b>3</b>
Third Term		Credits
ELPT 2343	Electrical System Design	3
ELPT 1357	Industrial Wiring	3
ELPT 2305	Transformers and Motors	3
ELPT 2337	Electrical Planning and Estimating	3

Social and Behavioral Sciences or Government/Political Science or American History	3
<b>Credits</b>	<b>15</b>
<b>Fourth Term</b>	
ELPT 2319 Programmable Logic Controllers I	3
ELPT 2301 Journeyman Electrician Exam Review or ELPT 2364 or Practicum-Electrical and Power Transmission Installation/Installer, General	3
Speech	3
Language, Philosophy, and Culture (Humanities) or Creative Arts (Fine Arts)	3
<b>Credits</b>	<b>12</b>
<b>Total Credits</b>	<b>60</b>

**Capstone Experience:** ELPT 2301 Journeyman Electrician Exam Review or ELPT 2364 Practicum-Electrical and Power Transmission Installation/Installer, General