

ELECTRICAL TECHNOLOGY, LEVEL 2 CERTIFICATE



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 7 percent from 2021 to 2031. 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: \$57,569 per year¹

¹ Source: Texaswages.com (<http://Texaswages.com>), median salary Gulf Coast region, 2022

For more information, students may contact Central campus, 281-478-2799; or North campus, 281-998-6350, 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.

Students enrolling into San Jacinto College programs with external learning experiences (i.e., clinical, practicum, externship, cooperative, etc.) will be required to comply with the immunization requirements and policies of the clinical/external learning sites to engage in all clinical/external learning experiences. Vaccination requirements at clinical/external learning sites are implemented pursuant to the independent authority of such facilities and are not mandated by San Jacinto College. Failure to meet the immunization requirements mandated by clinical/external learning sites 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 clinical/external learning site.

Plan of Study

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| First Term | | Credits |
|----------------|---|-----------|
| ELPT 1315 | Electrical Calculations I | 3 |
| ELPT 1325 | National Electric Code I | 3 |
| ELPT 1321 | Introduction to Electrical Safety and Tools | 3 |
| ELPT 1429 | Residential Wiring | 4 |
| CETT 1302 | Electricity Principles | 3 |
| Credits | | 16 |
| Second Term | | |
| ELPT 2325 | National Electrical Code II | 3 |
| CNBT 2310 | Commercial/Industrial Blueprint Reading | 3 |
| ELPT 1351 | Electrical Machines | 3 |
| ELPT 1345 | Commercial Wiring | 3 |
| Credits | | 12 |

Third Term

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| ELPT 1357 or ELPT 1371 | Industrial Wiring or Commercial Lighting, Fixtures, and Controls | 3 |
| ELPT 2423 or ELPT 2405 | Transformers or Motors & Transformers | 4 |
| ELPT 1441 | Motor Control | 4 |
| ELPT 2343 | Electrical System Design | 3 |
| ELPT 2364 or ELPT 2319 or ELPT 2337 | Practicum-Electrical and Power Transmission Installation/Installer, General or Programmable Logic Controllers I or Electrical Planning and Estimating | 3 |
| Credits | | 17 |
| Total Credits | | 45 |

Capstone Experience: ELPT 2364 Practicum-Electrical and Power
Transmission Installation/Installer, General or ELPT 2337 Electrical
Planning and Estimating or ELPT 2319 Programmable Logic Controllers I