



Electrician

Certificate (30 SCH*)

*Semester Credit Hour

7/2023

First Semester - 15 SCH

CNBT 2310 - Commercial/Industrial Blueprint Reading
ELPT 1411 - Basic Electrical Theory
ELPT 1221 - Introduction to Electrical Safety & Tools
ELPT 1225 - National Electrical Code
ELPT 1429 - Residential Wiring

Second Semester - 15 SCH

ELPT 1357 - Industrial Wiring
ELPT 2225 - National Electrical Code II
ELPT 1341 - Motor Control
ELPT 1445 - Commercial Wiring
ELPT 2323 - Transformers

Marketable Skills

- Plan layout and installation of electrical wiring, equipment, or fixtures
- Acquire and evaluate information
- Interpret and communicate information
- Electrical construction management
- Residential, commercial, industrial blueprint reading
- OSHA - Construction and General Industries
- Electrical Safety and Tools
- National Electrical Code
- Residential load calculation and service entrance sizing
- Commercial electrical load calculation
- Overcurrent protection
- Raceway panel installation
- Single and poly-phase DC and AC motors, generators and alternators Industrial wiring, motor circuits, raceways and busways
- Single and three-phase motors and transformers
- Transformer banking, power factor correction and protective devices.

Program Outcomes

- Apprentice Electrician
- Trouble shooting Residential Electrical Systems
- Trouble shooting Commercial Electrical Systems
- Trouble shooting Industrial Electrical Systems
- Residential Electrician (Apprentice)
- Commercial Electrician (Apprentice)
- Industrial Electrician (Apprentice)
- Apprentice Electrician Conduit Bending

High School Endorsements

Business and Industry

Expected Salary

Texas wage data: workers on average earn \$50,100; 10% of workers earn \$31,500 or less; 10% of workers earn \$74,860 or more.

Additional Educational Opportunities

Associate in Applied Science, Bachelor of Arts in Applied Science

Career Opportunities

Inside Wireman; Outside Lineman; Residential Wireman; Installer Technician; Electrician; Electrical Maintenance Worker; Construction Electrician; Appliance Installer; Sign Electrician; Motor Repair; Electrical and Electronics Installers and Repairers; Electronic Home Entertainment Equipment Installers and Repairers; Electrical Drafters; Construction and Building Inspectors; Elevator Installation and Maintenance; Electrical and Electronic Equipment Assemblers; Electrical Installers and Repairers; Electrical Inspectors.