



# Electrician

Certificate (24 SCH\*)

\*Semester Credit Hour

8/2020

## First Semester - 12 SCH

CNBT 1309 - Basic Construction Management  
ELPT 1325 - National Electrical Code I  
ELPT 1311 - Basic Electrical Theory  
ELPT 1329 - Residential Wiring

## Second Semester - 12 SCH

CNBT 2310 - Commercial/Industrial Blueprint Reading  
ELPT 1345 - Commercial Wiring  
ELPT 1357 - Industrial Wiring  
ELPT 2305 - Motors and Transformers

## Marketable Skills

Math Skills; manage time and materials; acquire and evaluate information; interpret and communicate information; oral and written communications skills; computer skills; teamwork; cultural diversity; apply technology to work; creative thinking; decision making; problem solving; self-management; Electrical construction management; residential, commercial, industrial blueprint reading; OSHA-Construction and General Industries; Measurement; Electrical Safety and Tools; National Electrical Code; Electrical Theory; Calculation of A.C. and D.C. systems; Residential electrical load calculation; residential service entrance sizing; proper grounding techniques; commercial electrical load calculation; overcurrent protection; raceway panel board installation; single-phase and poly-phase DC and AC motors, generators and alternators; Industrial wiring, motor circuits, raceways and busways; single-phase 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

## 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.