**Student Syllabus**

**Course Title:** Electrical Technician  
**Course Code:** ELPT 1020  
**Course Length:** 120 hours  

**Course Description:** Course designed for entry into the workforce with skills and knowledge for increased productivity in the commercial or residential markets. This course includes residential, commercial and industrial electrical systems, trade mathematics, theory, troubleshooting and applicable codes and rules.

**Learning Outcomes:** Given lecture, handouts and discussion, the student will be able to demonstrate the knowledge, skills and ability associated with the following:

- Install Circuits and Control Circuits  
- Demonstrate troubleshooting of system and equipment problems  
- Calculating residential service requirements; selecting and installing components  
- Selecting and using appropriate electrical test instruments  
- Explain use of relays, switches, VFD, Motors and Caps  
- Explain and demonstrate Grounding and Bonding

**Prerequisite:** ELPT 1019

**Course Structure:**

- Content: 120.0 Hours  
  - Install Circuits and Control Circuits  
  - Troubleshooting; systems and equipment  
  - Electrical Test Instruments  
  - Relays, switches, VFD, Motors and Caps  
  - Grounding and Bonding  
  - Electrical test equipment

**Schedule:** Tri-weekly 6:00 - 9:00pm

**Evaluation:** Student Assessments, Passing 70%

**Books:** Handouts will be supplied

**Reference:** NCCER Core, Electrical Level One, 2014 NEC®
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Install Circuits and Control Circuits
Demonstrate troubleshooting of system and equipment problems
Calculating residential service requirements; selecting and installing components
Selecting and using appropriate electrical test instruments
Explain use of relays, switches, VFD, Motors and Caps
Explain and demonstrate Grounding and Bonding

Delivery Method: Classroom / Lecture/ Lab
Small group discussions

Audience: General

Course Structure:
Content: 120.0 Hours
Install Circuits and Control Circuits
Troubleshooting; systems and equipment
Electrical Test Instruments
Relays, switches, VFD, Motors and Caps
Grounding and Bonding
Electrical test equipment

Course Evaluation: Student Assessments

Books: Handouts will be supplied

Reference: NCCER Core, Electrical Level One, 2014 NEC®