



## Accelerated Electrical Trainee Program

This 6 ½ Month Electrician Training Program prepares you for Job Opportunities and Markets:

- Residential Electrician
- Voice & Data Technician
- Commercial Electrician
- Solar Technician
- Industrial Electrician
- Industrial Facilities
- H.V.A.C. Technician
- Electrical Contracting Firm

The Accelerated Electrical Trainee Program will emphasize repetition of standard work processes to maximize learning and ensure an extreme high rate of retention. The total number of hours to complete the program is **576** hours. This approved Electrical program offered by Eden Area ROP (formerly Construction Craft Training Center CCTC) prepares students to work in the electrical field.

This program will require at least 21 hours per week of instruction in the classroom lectures, hands-on lab, online study, to learn the general electrical work processes. This program is approximately 6.5 months or 28 weeks of instruction. The in-person instruction (4 hours per meeting) will include tasks or labs that require hands on applications or use of specific tools and procedures. The reading, note taking, online work, written assignments, and other tasks that do not require students being present in the class will be assigned and completed on the student’s own time (9 hours per week). The goal is to keep the timeline of the program’s instruction accelerated and completion date on time.

The enrollees must meet the following criteria: Have transportation to work (our training facility), basic math and reading skills, comfortable communicating in English, and be at least 18 years of age.

Upon successful completion of this program and all payments, students can earn 1) an OSHA 10 certification, 2) CPR certification, 3) Electrical Training card, and 4) Completion Certificate for 576 hours of General Electrician Studies – good for renewal of ET card.

Program fees and scheduling: Course topics include, but are not limited to, Electrical Trade Introduction, Electrical Safety, Electrical Theory, a Basic yet in depth understanding of the National Electrical Code (N.E.C.), Residential and Commercial rough-in and trim, conduit bending and basic wiring, and basic tools and uses.

The cost per student is **\$5,850**. Students also need access to a computer that has access to the internet for web-based work from the instructor. Otherwise, this price includes all classroom materials (4 Levels of the NCCER Electrical textbook, NEC code book, and some basic tools for labs are provided). Students will have additional costs if they choose to purchase their own personal tools.

Classes meet on Tuesday, Wednesday, and Thursday. **There are two cohorts:** A) 6:30 AM to 10:30 AM and B) 11:00 AM to 3:00 PM for approximately 6 ½ months in total (not including school holidays).

Electrical Industry Construction Training Criteria Curriculum Includes:

Electrical Safety	Tools & Material Handling
Appropriate Math Calculations	Electrical Theory
Code Requirements (NEC)	Raceways and Cable Installation
Panel Boards & Switch Boards	Lighting
Overcurrent Protection	Grounding & Bonding
Blueprints and Symbols	Basic Motors and Controls
Generators and Power Supplies	Transformers
Personal Development	Jobsite Management
Testing and Troubleshooting	Specialty Systems
Basic Conduit Bending	Distribution Equipment
Basic Residential Rough-in and Trim	Basic Commercial Rough-in and Trim

The job opportunities as electricians are extremely high in residential, commercial and the industrial industries. According to the Department of Labor, there are not enough trained workers in the bay area to meet the needs in these sectors. Electrical Contracting Firms

## **ACCELERATED ELECTRICAL TRAINEE COURSE SYLLABUS**

<b><u>MODULE #</u></b>	<b>BOOK LEVEL 1 Electrical NCCER 10<sup>th</sup> Edition</b>
26101-20	Orientation to the Electrical Trade
26102-20	Electrical Safety
26103-20	Introduction to Electrical Circuits
26104-20	Electrical Theory
26105-20	Introduction to the National Electrical Code
26106-20	Device Boxes
26107-20	Hand Bending
26108-20	Raceways and Fittings
26109-20	Conductors and Cables
26110-20	Basic Electrical Construction Drawings
26111-20	Residential Electrical Services
26112-20	Electrical Test Equipment
<b><u>MODULE #</u></b>	<b>BOOK LEVEL 2 Electrical NCCER 10<sup>th</sup> Edition</b>
26201-20	Alternating Current
26204-20	Conduit Bending
26205-20	Pull and Junction Boxes
26206-20	Conductor Installations
26208-20	Conductor Terminations and Splices
26209-20	Grounding and Bonding
26210-20	Circuit Breakers and Fuses
<b><u>MODULE #</u></b>	<b>BOOK LEVEL 2 &amp; 3 Electrical NCCER 10<sup>th</sup> Edition</b>
26301-20	Load Calculations - Branch and Feeder Circuits
26302-20	Conductor Selection and Calculations
26303-20	Practical Applications of Lighting
26304-20	Hazardous Locations
26305-20	Overcurrent Protection
26202-20	Motors: Theory and Application
26211-20	Control Systems and Fundamental Concepts
26309-20	Motor Calculations
26311-20	Motor Controls
26306-20	Distribution Equipment
26307-20	Transformers
26308-20	Commercial Electrical Services
26310-20	Voice, Data, and Video
<b><u>MODULE #</u></b>	<b>BOOK LEVEL 4 Electrical NCCER 10<sup>th</sup> Edition</b>
26401-20	Load Calculations – Feeders and Services
26402-20	Health Care Facilities
26404-20	Basic Electronic Theory
26405-20	Fire Alarm Systems
46101	Fundamentals of Crew Leadership
26406-20	Specialty Transformers
26408-20	HVAC Controls
26410-20	Motor Operation and Maintenance
26412-20	Special Locations