

# OEET- ELECTRICAL TRADES (OEET)

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## **OEET 110. Basic Electricity and Electronics** **4 Credits (3+3P)**

An introduction to electricity theory and practice, including electron theory, Ohm's law, construction of electrical circuits, direct and alternating currents, magnetism, transformers, and practical applications. Same as HVAC 102, ELT 105, OEPB 102.

## **OEET 120. Basic Motor Controls** **5 Credits (2+6P)**

Developing schematics and wiring simple manual and electromechanical control devices.

**Prerequisite:** OEET 110 or consent of instructor.

## **OEET 151. Electrical Apprenticeship I** **6 Credits (6)**

Apprenticeship responsibilities and benefits as well as first aid and CPR will be covered. Hand tools, electrical theory, and the regulations imposed by national codes and OSHA. Students will apply theory taught in their jobs.

**Prerequisite:** consent of instructor.

## **OEET 152. Electrical Apprenticeship II** **6 Credits (6)**

OHM's law circuit sizing and service panel sizing will be covered in detail. Other topics include low voltage systems, heating and air conditioning circuits, alarm systems and smoke detectors.

**Prerequisites:** OEET 151 and consent of instructor.

## **OEET 153. Electrical Apprenticeship III** **6 Credits (6)**

Various electrical measuring devices will be covered in detail. Inductance, transformers, capacitance, and simple motors will be studied.

**Prerequisites:** OEET 152 and consent of instructor.

## **OEET 154. Electrical Apprenticeship IV** **6 Credits (6)**

Theory and application of three-phase transformers and autotransformers. Electrical distribution using switchboards, panelboards, and circuit breakers.

**Prerequisites:** OEET 153 and consent of instructor.

## **OEET 205. National Electric Code** **3 Credits (3)**

Interpretation and application of the National Electric Code.

**Prerequisite:** OEET 110.

## **OEET 251. Electrical Apprenticeship V** **6 Credits (6)**

Commercial/industrial applications for electricians. Blueprint interpretation, commercial construction types and processes, wiring methods, wiring materials, and motor controls.

**Prerequisites:** OEET 154 and consent of instructor.

## **OEET 252. Electrical Apprenticeship VI** **6 Credits (6)**

In-depth commercial applications to include commercial/industrial service calculations, mobile home parks, multi-family dwellings, and commercial fire/security systems.

**Prerequisites:** OEET 251 and consent of instructor.

## **OEET 253. Electrical Apprenticeship VII** **6 Credits (6)**

Control devices in commercial/industrial applications; emphasis on logic in-line diagrams, time delay starters, reversing starters, and manual/magnetic solenoids.

**Prerequisites:** OEET 252 and consent of instructor.

## **OEET 254. Electrical Apprenticeship VIII** **6 Credits (6)**

Miscellaneous topics for the journeyman electrician to include power distribution/transmission, solid state controls and relays, photoelectric and proximity controls and programmable controllers.

**Prerequisites:** OEET 253 and consent of instructor.

## **OEET 295. Special Topics** **1-6 Credits**

Topics to be announced in the Schedule of Classes.