OEET - ELECTRICAL TRADES (OEET)

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 112. Math Study Skills for Electrical  
1 Credit  
Covers specific math study skills and critical thinking processes to reinforce practical uses of math relating to electrical apprenticeship applications. The student will be introduced to electrical mathematical formulas during the problem-solving steps required for electrical circuit design and analysis. May be repeated up to 4 credits.  
Prerequisite(s)/Corequisite(s): OEET 151 OR OEET 152. Restricted to: Community Colleges only.  

OEET 115. Wiring Methods and Materials  
5 Credits (2+6P)  
Application of electrical code in selection of wiring materials; proper methods of installation.  
Corequisite: OEET 110 or consent of instructor.  

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 130. Introduction to Electrical Power Systems  
2 Credits  
An overview of electrical power systems, equipment, safety practices, first aid and CPR. Restricted to majors.  
Prerequisite: acceptance into the electrical lineworker program.  
Corequisite: OEET 110 and OEET 131.  

OEET 131. Electrical Lineworker Lab I  
6 Credits  
Climbing and work on utility poles using ropes and rigging, pole setting and an introduction to transmission and distribution line construction. Maintenance and troubleshooting to include the use of hot sticks. Restricted to majors.  
Prerequisite: acceptance into the electrical lineworker program.  
Corequisite: OEET 110 and OEET 130.  

OEET 140. Electrical Power Systems II  
3 Credits (2+2P)  
Theory of power generation and distribution with emphasis on three phase systems to include transformers, voltage regulators, surge arrestors. Includes troubleshooting. Restricted to majors.  
Prerequisites: acceptance into the electrical lineworker program and OEET 130.  
Corequisite: OEET 141.  

OEET 141. Electrical Lineworker II  
6 Credits  
Practice in the installation of electrical power lines including transformers, voltage regulators, and surge arrestors. Also advanced hot sticking procedures, troubleshooting, underground systems procedures, and pole-top rescue. Restricted to: Community Colleges only.  
Prerequisites: Acceptance into the lineworker program and OEET 131.  
Corequisite: OEET 140.  

OEET 151. Electrical Apprenticeship I  
6 Credits  
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  
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  
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  
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  
Interpretation and application of the National Electric Code.  
Prerequisite: OEET 110.  

OEET 210. Intermediate Electricity  
5 Credits (3+4P)  
Introduction to inductance, capacitance, reactances, and power factor correction.  
Prerequisite: OEET 110.  

OEET 221. Cooperative Experience I  
1-4 Credits  
Supervised cooperative work program. Student is employed in an approved occupation and is supervised and rated by the employer and instructor. Student will meet in a weekly class. Graded S/U.  
Prerequisite: consent of instructor.  

OEET 251. Electrical Apprenticeship V  
6 Credits  
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
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
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
Miscellaneous topics for the journeyperson 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.