

ELECTRICIAN

RAPIDS: 0159D

O*NET/SOC: 47-2111.00

REVISION DATE: 03/2021

TRADE DESCRIPTION: Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems.

TASK PERFORMANCE: Demonstrate knowledge and skills for qualifying as Journeyman. Applicable Job Qualification Requirements will be used as a guide in performing tasks and demonstrating knowledge in the following skill areas. Actual work time must be recorded in the Work Experience Log; each skill area must be completed.

TRADE ELIGIBILITY REQUIREMENTS:

Service Member assigned, trained and working full time in this trade occupation;

Have a minimum of 12 months remaining on active duty when beginning this trade apprenticeship;

Agree to abide by the National Standards of Apprenticeship.

Related Instruction:

Trade related On-The-Job-Training (OJT) or Any Trade related schools/courses totaling 432 or more hours.

Additional Requirement:

None.

Total Hours: **6000**

Skill	Description	Hours
A	PRELIMINARY WORK -- Inspect electrical systems, equipment, or components to identify hazards, defects, or the need for adjustment or repair, and to ensure compliance with codes. -- Prepare sketches or follow blueprints to determine the location of wiring or equipment and to ensure conformance to building and safety codes. -- Advise management on whether continued operation of equipment could be hazardous. -- Construct or fabricate parts, using hand tools, according to specifications.	500

	-- Provide preliminary sketches or cost estimates for materials or services.	
B	RESIDENTIAL AND COMMERCIAL FINISH WORK -- Connect wires to circuit breakers, transformers, or other components. -- Use a variety of tools or equipment, such as power construction equipment, measuring devices, power tools, and testing equipment, such as oscilloscopes, ammeters, or test lamps. -- Place conduit, pipes, or tubing, inside designated partitions, walls, or other concealed areas, and pull insulated wires or cables through the conduit to complete circuits between boxes. -- Repair or replace wiring, equipment, or fixtures, using hand tools or power tools. -- Install ground leads and connect power cables to equipment, such as motors. -- Assemble, install, test, or maintain electrical or electronic wiring, equipment, appliances, apparatus, or fixtures, using hand tools or power tools. -- Fasten small metal or plastic boxes to walls to house electrical switches or outlets.	2500
C	TROUBLESHOOTING -- Test electrical systems or continuity of circuits in electrical wiring, equipment, or fixtures, using testing devices, such as ohmmeters, voltmeters, or oscilloscopes, to ensure compatibility and safety of system. -- Diagnose malfunctioning systems, apparatus, or components, using test equipment and hand tools to locate the cause of a breakdown and correct the problem. -- Provide assistance during emergencies by operating floodlights or generators, placing flares, or driving needed vehicles.	1500
D	WORK SITE MANAGEMENT --Plan layout and installation of electrical wiring, equipment, or fixtures, based on job specifications and local codes. -- Work from ladders, scaffolds, or roofs to install, maintain, or repair electrical wiring, equipment, or fixtures. -- Maintain current electrician's license or identification card to meet governmental regulations. -- Direct or train workers to install, maintain, or repair electrical wiring, equipment, or fixtures. -- Perform business management duties, such as maintaining records or files, preparing reports, or ordering supplies or equipment.	1500

	-- Perform physically demanding tasks, such as digging trenches to lay conduit or moving or lifting heavy objects.	
--	--	--