

ELECTRONICS TECHNICIAN

RAPIDS: 0169D

O*NET/SOC: 17-3023.01

REVISION DATE: 09/2019

TRADE DESCRIPTION: Lay out, build, test, troubleshoot, repair, and modify developmental and production electronic components, parts, equipment, and systems, such as computer equipment, missile control instrumentation, electron tubes, test equipment, and machine tool numerical controls, applying principles and theories of electronics, electrical circuitry, engineering mathematics, electronic and electrical testing, and physics. Usually work under direction of engineering staff.

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.

Applicable Ratings/MOS/NEC

USMC MOS: 2821, 2823, 2831, 2834, 2841, 2848, 2862, 2871, 2887, 2891, 5939, 5948, 5974, 5979

USCG: ET

USN: AE, AT, AWV, ET, ETN, FC

USA MOS: 12P, 12Q, 25C, 25L, 25N, 25P, 25Q, 25R, 25S, 25T, 25W, 25X, 25Z, 881A, 88L, 948B, 948D, 948E, 94A, 94D, 94E, 94F, 94H, 94M, 94P, 94R, 94S, 94T, 94W, 94Y, 94Z

Related Instruction:

Trade related On-The-Job-Training (OJT) or Any Trade related schools/courses totaling 288 or more hours.

Additional Requirement:

None.

Total Hours: **4000**

Skill	Description	Hours
A	<p>GENERAL SHOP PRACTICES</p> <ul style="list-style-type: none"> -- Identify and resolve equipment malfunctions, working with manufacturers or field representatives as necessary to procure replacement parts. -- Provide customer support and education, working with users to identify needs, determine sources of problems, or to provide information on product use. -- Procure parts and maintain inventory and related documentation. -- Research equipment or component needs, sources, competitive prices, delivery times, or ongoing operational costs. -- Provide user applications or engineering support or recommendations for new or existing equipment with regard to installation, upgrades, or enhancements. -- Maintain working knowledge of state-of-the-art tools or software by reading or attending conferences, workshops, or other training. 	1500
B	<p>SCHEMATICS, TECHNICAL MANUALS, AND DOCUMENTATION</p> <ul style="list-style-type: none"> -- Read blueprints, wiring diagrams, schematic drawings, or engineering instructions for assembling electronics units, applying knowledge of electronic theory and components. -- Maintain system logs or manuals to document testing or operation of equipment. -- Write reports or record data on testing techniques, laboratory equipment, or specifications to assist engineers. 	1000
C	<p>INSTALLATION, MAINTENANCE, AND DESIGN OF ELECTRICAL EQUIPMENT</p> <ul style="list-style-type: none"> -- Test electronics units, using standard test equipment, and analyze results to evaluate performance and determine need for adjustment. -- Adjust or replace defective or improperly functioning circuitry or electronics components, using hand tools or soldering iron. -- Assemble, test, or maintain circuitry or electronic components, according to engineering instructions, technical manuals, or knowledge of electronics, using hand or power tools. -- Perform preventative maintenance or calibration of equipment or systems. -- Design basic circuitry and draft sketches for clarification of details and design documentation under engineers' direction, using drafting instruments or computer-aided design (CAD) equipment. -- Build prototypes from rough sketches or plans. -- Fabricate parts, such as coils, terminal boards, or chassis, using bench lathes, drills, or other machine tools. 	1500

