

Work Processes Schedule

INTERNETWORKING TECHNICIAN

RAPIDS: 1038N

O*NET/SOC: 15-1152.00

REVISION DATE: 06/2015

The Internetworking Technician is a highly skilled network technician responsible for the effective installation, maintenance, and operation of advanced data networking products, routers, hubs, and switches in an integrated data/voice network. Individual will install terminal transmission products such as modems, channel service units and interface applications. In addition the candidate will provide On-premise and Network Operation Center maintenance support and resolve maintenance problems through the interpretation of diagnostic results and system tests. Different manufacturers of advanced data network equipment require certifications on their equipment in order to effectively configure their products. Education and training on these devices will be continuous for technicians in this field as technology continues to change.

Applicable Ratings/MOS

USMC MOS 0231, 0241, 0651, 0659, 0689, 2651, 4068, 5974, 6694

USCG IT

USN CT, ET, ETN, ETR, ETV, FC, FT, IT, ITS, ST

Related Instruction

Any trade related schools/courses totaling 360 hours.

Additional Requirement

IT rating- 'A' school qualifies. Other USN ratings must hold NEC 1678, 2780, 2781, 9325, OR course (A-531-0767). FC rating must hold one of these NEC's 1111, 1091, 1318, 1335, 1339, 1345, 1355, 1365, 1375, 1385, 1386, 1395, 1601, 1615 or 1628.

Total Hours: **5000**

Skill	Description	Hours
A	<p>Data/Voice Cable Installation and Termination</p> <p>1. Safety Demonstration Throughout Performance is Required 2. Building Code Requirements and Floor Plans 3. Cable and Wire Installation Using Floor Duct, Conduit, Stud Drilling and Associated Tools and Equipment 4. Cable and Wire Termination Using Industry Standard Material, Equipment and Color Code 5. Basic Electrical Theory and Print Reading</p>	400
B	<p>Computers, Installation, Maintenance and Troubleshooting</p> <p>1. Maintenance and Installation of Personal Computers 2. Maintenance and Installation of PC OS Software 3. Installation of Network PC's and Software 4. Installation of Network Hardware Including Modems and Concentrators 5. OS Configuration and Administration (Novell and Windows NT)</p>	600
C	<p>Installation and Maintenance of Internetworking Components, Switches and Routers</p> <p>1. Basic Internetworking Instruction and Familiarity LAN Devices WAN Devices OSI Model LAN Technologies 2. LAN Indoctrination and Familiarization Segmentation Full and Half Duplex Ethernet 3. TCP/IP Protocol and Addressing DOD Reference Model IP Address Resolution Subnetting 4. Basic Router Installation Router Startup User Interface Designing Internetworking Static, Default and Dynamic Routing Interior Routing Protocols Exterior Routing Protocols 5. Basic Router Configuration Sources for CISCO IOS Software CISCO IOS Commands Accessing Other Routers 6. Basic Wide Area</p>	2000

Network Instruction Plain Old Telephone (POTS) Synchronous Data-Link Control (SDLC) High-Level Data-Link Control (HDLC) Dial-On-Demand Routing (DDR) X.25 Frame Relay Point-To-Point (PPP) ISDN

Advanced Internetworking Installation and Maintenance

D

1. Installing, Configuring, Operating, and Troubleshooting Complex Routed LAN, Routed WAN, and Switched LAN Networks and Dial Access Services 2. Understanding Complex Networks, such as, but not limited to, IP, IGRP, IPX, Async Routing, Apple Talk, Extended Access Lists, IP RIP, Route Redistribution, IPXRIP, Route Summarization, OSPF, VLSM, BGP, Frame Relay, ISDN, ISL, X.25, PSTN, PPP, VLANS, Ethernet, ATM, Access Lists, 802.10, FDDI, and Transparent and Translational Bridging. Maximizing Performance Through LANS, Routed WANs and Remote Access. 3. Provide Access Security to Network Switches and Routers 4. Provide Increased Switching and Routing Bandwidth , End-to-End Resiliency Services 5. Provisioning Custom Queuing and Routed Priority Services

2000