

DRAFT CHANGE OF APPROACH

NETWORK ADMINISTRATOR (Time-Based)

APPENDIX A

O*NET CODE 15-1142.00

This training outline is a minimum standard for Work Processes and Related Instruction. Changes in technology and regulations may result in the need for additional on-the-job or classroom training.

Potential Job Titles: Systems Administrator, Computer Systems Analyst, Network Control Operator and Supervisor, Network Control Operator, Level 1 IT Engineer.

WORK PROCESSES

Approximate Hours

A. Workplace Basics

200

1. Describe workplace structure.
2. Describe workplace policies and procedures; general and Information Technology (IT) related.
3. Demonstrate efficient basic task/time management, status reporting, work order updates, team participation.
4. Demonstrate ability to communicate technical ideas/concepts when assisting users unfamiliar with IT jargon.

B. Computer Fundamentals

600

1. Identify, research, and resolve technical issues affecting the following, but not limited to; desktops, laptops, servers, printers, access points and mobile devices.
2. Demonstrate knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
3. Identify and demonstrate knowledge of computer software by: installing, configuring, and providing customer assistance in using common software, such as, but not limited to; Microsoft Office and/or Apple equivalents.
4. Provide all aspects of day-to-day support to users in Windows-based environments.
5. Demonstrate ability to maintain user accounts and access privileges.

C. Customer Service Fundamentals

300

1. Perform help desk functions assisting in the following, but not limited to; internal and external systems, databases, networking equipment, personal computer systems, and peripherals.
2. Employ knowledge of principles and processes for providing customer and personal services, including customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
3. Consult with users, management, vendors, and technicians to assess computing needs and system requirements.
4. Respond promptly to inbound help desk requests and provide remote remediation when required.
5. Identify, research and resolve technical issues affecting the following technologies: desktops, laptops, servers, firewalls, switches, printers, access points, tablets, mobile devices, telecommunications technologies, Internet connectivity & Intranet connectivity.

D. Networking and Systems Fundamentals

600

1. Provide support for Windows Server 2008/2012/2016 networks (if applicable).
2. Perform user maintenance through Active Directory.
3. Configure a network operating system, including protocols, accessibility, and layering.
4. Troubleshoot issues related to routing & switching.
5. Support & maintain network equipment including but not limited to Cisco, Meraki, SonicWall, & HP.
6. Support & maintain backup technologies utilizing tape and disk-disk architectures such as Acronis, ArcServ, Barracuda & Symantec Backup Exec.
7. Support and maintain network equipment including but not limited to Cisco, Meraki, SonicWall, and HP.
8. Remediate malware infections using Anti-Virus and Anti-Malware applications.

E. Additional Computing Topics

300

1. Demonstrate a solid understanding of technology such as, but not limited to; databases and their application; multi-media software; video conferencing applications.
2. Provide internal training to staff on how to support and manage various technologies currently utilized and new ones as they are implemented.

Approximate Total Hours 2000

Apprenticeship work processes are applicable only to training curricula for apprentices in approved programs. Apprenticeship work processes have no impact on classification determinations under Article 8 or 9 of the Labor Law. For guidance regarding classification for purposes of Article 8 or 9 of the Labor Law, please refer to <https://dol.ny.gov/public-work-and-prevailing-wage>.

NETWORK ADMINISTRATOR

APPENDIX B

RELATED INSTRUCTION

Safety/Health/Environment

1. General Workplace Safety
2. First Aid & CPR (minimum 6.5 hours every 3 years)
3. Right-to-Know/ Safety Data Sheets (SDS)
4. Sexual Harassment Prevention – must comply with Section 201-g of the Labor Law

Computer and Network Components and Operations

1. Hardware
2. Peripherals
3. Software
4. Installation and configuration of software
5. Operating Systems, e.g., Microsoft, MacOS
6. Troubleshooting
7. Networks: Local Area Network (LAN); Wide Area Network (WAN)
8. Domain Name Servers
9. Domain Controllers
10. Transmission Control Protocol (TCP) / Internet Protocol (IP)
11. Installation and configuration of various network devices
12. Network Functions
13. Routers
14. Routing Protocol
15. Cybersecurity
16. Databases (if Work Process E is selected in Appendix A)
17. Multi-Media applications (if Work Process E is selected in Appendix A)
18. Video applications (if Work Process E is selected in Appendix A)

Professional Development

1. Technical Support Communication

2. Time Management
3. Basic Project Management
4. Team and Supervisor Communication Skills
5. Customer Service Fundamentals
6. Industry recognized credentials/certifications pertaining to the field

Other Related Topics as Necessary

A Minimum of 144 Hours of Related Instruction is required for each apprentice for each year.

Appendix B topics are approved by New York State Education Department.

DRAFT