NETWORK SECURITY 11.1999.00

Program Description, Industry Credential, Coherent Sequence, and Teacher Certification

PROGRAM DESCRIPTION

The **Network Security** instructional program prepares students to assess the security needs of computer and network systems, recommend safeguard solutions, and manage the implementation and maintenance of security devices, systems, and procedures. Students who successfully complete the **Network Security** program's coherent sequence of instruction will develop skill to analyze, test, troubleshoot, and evaluate existing network systems, such as local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system. Perform network maintenance to ensure networks operate correctly with minimal interruption.

Throughout the **Network Security** instructional program, students will enhance their technical knowledge and skills that are associated with functions of application integrity, cyber threat management, and infrastructure security within Network Technologies' occupations. In addition to the occupation-related skills, students completing this program will also develop advanced critical thinking and applied academic foundational skills.

The **Network Security** Career and Technical Education program is delivered as a coherent sequence of courses designed to offer students' knowledge and skills that meet the needs of the workplace. The Professional Skills developed by business and industry leaders across Arizona are integrated throughout the program. **Network Security** students develop leadership, social, civic, and career skills through participation in the state-recognized Career and Technical Student Organizations, SkillsUSA or FBLA (Future Business Leaders of America).

The **Network Security** instructional program prepares students for entry-level employment, further training, and/or post-secondary education for these and other occupations: Cryptologic Technician, Cyber Risk, Manager, Hardware Technician/Engineer, Help Desk Technician/Manager, Intelligence Analysis Intern, IT Designer, Network Technician, Administrator Technician, Analyst Technician, PC Technician, Program Analyst Systems Analyst, Systems Operations Specialist, Technical Sales Representative, Technical Support Technician/Manager, Training Manager, and Wireless Network Specialist

INDUSTRY CREDENTIALS

The following credentials have been approved for the A-F CCR and are CTED eligible for the **Network Security** instructional program:

- CompTIA A+
- CompTIA IT Fundamentals
- CompTIA Network+
- CompTIA Security +
- CSX Cybersecurity Fundamentals Certificate

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The following industry credentials have been approved to meet CTED eligibility for the **Network Security** instructional program:

- Certified Network Associate (CCNA) Routing and Switching Certification
- Client Pro (Windows 7-8 management troubleshooting certification)
- Global Security Essentials Certification (GSEC)
- Linux Pro (Linux prep certification)
- Microsoft Certified Professional (MCP)
- Network Pro (networking basics)
- Network +
- Security Pro (entry-level IT security administrator)
- Server Pro (Windows server skills)
- TestOut PC Pro Certification

COHERENT SEQUENCE

- 11.1999.12 Network Security I, and
- 11.1999.30 Network Security II, and program may elect to add:
- 11.1999.35 Network Security III, or
- 11.1999.40 Network Security IV, or
- 11.1999.71 Network Security DCE (Diversified Cooperative Education) or
- 11.1999.76 Network Security Internship, or
- 11.1999.81 Network Security Cooperative Education

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TEACHER CERTIFICATION REQUIREMENTS

The instructor must be ADE/CTE certified in one of the following Certificates:

SCTBMStandard Career and Technical Education Business and MarketingSSCTEBMStandard Specialized Career and Technical Education Business and MarketingSCTIETStandard Career and Technical Education Industrial and Emerging TechnologiesSSCTEIETStandard Specialized Career and Technical Education Industrial and Emerging Technologies

- Note: Network Security 11.1999.71 (DCE) requires a CTE Teacher to have the Cooperative Education Endorsement (CEN).
 - Network Security 11.1999.76 (Internship) **does not** require a CTE Teacher to have a Cooperative Education Endorsement (CEN).
 - Network Security 11.1999.81 (Cooperative Ed.) requires CTE Teacher to be appropriately certified for the program and to have a Cooperative Education Endorsement (CEN).