

NorthWest Arkansas Community College
Division of Business & Computer Information Systems

NTWK 2263 Network Security Support

Catalog Description:

Network Security Support is an advanced course that provides students with the knowledge to secure Cisco routers and switches and their associated networks. Students learn to configure, troubleshoot and monitor network devices to maintain integrity, confidentiality and availability of data and devices and develop competency in the technologies that Cisco uses in its security infrastructure. Some specific topics include: IPv4 to IPv6 transition, AAA, ACLs, secure network management and reporting. This course is aligned with the Cisco CCNA Security certification (Exam 640-554) and is recognized by the U.S. National Security Agency (NSA) and the Committee on National Security Systems (CNSS) to meet the CNSS 4011 training standard.

Prerequisite(s):

NTWK 2013, NTWK 2083, or equivalent knowledge.

Credit Hours/Contact Hours/Load Hours:

3/3/3

Target Audience/Transferability

The target includes, but is not necessarily limited to, the following:

- Students pursuing a career in Networking and/or other computer-related fields
- Students who wish to enhance their understanding of network design
- Community members or networking professionals who wish to expand their understanding of what business and technical decisions lead to network design decisions and actual implementation.

Student Learning Outcomes:

Upon successful completion of this course, students will:

- Further their knowledge of the implementation of security principles and practices
- Describe common security threats and threat mitigation
- Secure the Local-Area network using AAA and Radius
- Describe cryptographic systems on routers
- Implement VPNs
- Implement Cisco Adaptive Security
- Configure Zone-Based Policy Firewalls
- Configure Intrusion Prevention System
- Secure Layer 2 Switches
- Configure ASA settings and firewalls using CLI and ASDM
- Respond properly to security incidents

Methods of Instruction:

The primary method of instruction will be instructor assisted Computer Based Training using the Cisco approved curriculum. Supplemental methods of instruction include lecture, lab demonstrations audio visual demonstrations and required lab assignments and projects.

Forms of Assessment:

Students will demonstrate proficiency by averaging at least 70% on all homework, quizzes, tests and lab assignments.