Wireless LAN Networking   2023-2024 Catalog

[ARCHIVED CATALOG]

NETI 250 - Wireless LAN Networking

PREREQUISITES: NETI 115 - Routing and Switching or NETI 119 - Networking II.
PROGRAM: Network Infrastructure
CREDIT HOURS MIN: 3
LECTURE HOURS MIN: 2
LAB HOURS MIN: 2
DATE OF LAST REVISION: Fall 2020

Focuses on the design, planning, installation, operation, maintenance and troubleshooting of Wireless Local Area Networks. Students will learn various wireless protocols, radio frequency fundamentals, media access control standards, Wireless Local Area Networks management, performing site surveys, and implementing Wireless Local Area Networks security protocols.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Demonstrate the use of wireless radio technologies and topologies.
2. Discriminate between and describe the IEEE 802.11 wireless standards.
3. Configure and install various wireless access points, bridges, adapters, and antennae.
4. Demonstrate the concepts of WLAN design and installation.
5. Configure, monitor and maintain a WLAN using both Command Line Interface and web-based device manager tools.
6. Identify wireless security threats and vulnerabilities.
7. Configure wireless LAN security.
8. Demonstrate the use of proper site survey techniques and safety practices.
9. Demonstrate the use of wireless radio technologies and topologies.
10. Define and explain the basic concepts of RF behavior.
11. Configure and install various wireless access points, bridges, adapters, and antennae.
12. Demonstrate the concepts of WLAN design and installation.

COURSE CONTENT: Topical areas of study include -

- Wireless LAN
- 802.11 products and solutions
- Radio technologies
- WLAN applications
- Site survey
- WLAN security
- Vendor interoperability
- MAC filtering
- Encryption techniques
- 802.1 technologies

Course Addendum - Syllabus (Click to expand)