





# What you'll learn in this course

The Understanding Cisco Wireless Foundations (WLFNDU) training teaches you the knowledge and skills you need to configure, manage, and troubleshoot a Cisco wireless LAN (WLAN) network. Topics include understanding critical aspects of RF technology, industry standards for Wi-Fi and security, how to design, install, and configure a WLAN network of any size, and using Cisco DNA Center. This training also earns you 40 Continuing Education (CE) credits towards recertification.

## Course duration

- Instructor-led training: 5 days in the classroom with hands-on lab practice
- Virtual instructor-led training: 5 days of web-based instruction with hands-on lab practice
- E-learning: Equivalent of 5 days in the classroom with hands-on lab practice

# How you'll benefit

This training will help you:

- Learn the skills, technologies, and best practices needed to manage a Cisco WLAN network
- Understand and implement a Cisco wireless network architecture
- Design and implement WLAN maintenance and troubleshooting solutions





## Who should enroll

- Network engineer
- Systems engineer
- Wireless engineer
- Technical solutions architect
- Network administrator
- Wireless design engineer
- Network manager

# Technology areas

- Enterprise networking
- Wireless networking

### Course details

### **Objectives**

- Describe and implement foundational wireless theory
- · Describe and implement foundational wireless math and antennas
- Describe and implement foundational wireless operation including Wi-Fi 6
- · Describe security and client access in a wireless network
- Implement 802.1X and Extensible Authentication Protocol (EAP)
- · Implement wireless guest access and configure wireless security
- Describe Cisco wireless architecture components and deployment options
- Describe Cisco wireless architecture and its deployment modes, the Control and Provisioning of Wireless Access Points (CAPWAP) protocol, and the Cisco WLC and AP line up
- Describe the wired support for implementing wireless networks
- Deploy Cisco centralized wireless networks using Cisco 9800 WLC
- Describe the centralized wireless access model and its configuration
- Describe maintenance and troubleshooting in the centralized WLAN model
- Describe the management and monitoring of Cisco Wireless Networks with Cisco DNA Center

### Recommended knowledge and training

Before taking this offering, you should have:

- · General knowledge of networks
- General knowledge of wireless networks
- Routing and switching knowledge

## How to enroll

To enroll in the WLFNDU course or explore our larger catalog of courses on Cisco Digital Learning, contact us at <training@fastlane-mea.com>

### **Outline**

Module 1: RF and WLAN Theory Module 2: WLAN Math and Antennas

Module 3: Wi-Fi Operations Module 4: Basic WLAN Security Module 5: Advanced WLAN Security

Module 6: Configuring WLAN Security

Module 7: Cisco Wireless Network Architecture Module 8: Implementing Cisco Wireless Network

Module 9: Implementing Cisco Wireless Network Wired Support Module 10: Deploying Cisco Centralized Wireless Networks Module 11: Configuring Cisco Centralized Wireless Networks Module 12: Maintaining and Troubleshooting Cisco Wireless Networks

Module 13: Managing and Monitoring Cisco Wireless Networks with Cisco DNA Center

### Lab outline

Discovery 1: Practice RF Math Discovery 2: Antenna Calculations

Discovery 3: Explore the Wi-Fi Environment Discovery 4: Analyze Wireless Frames Discovery 5: Configure Client Access Discovery 6: Deploy Cisco 9800 WLC Discovery 7: Configure Cisco 9800 WLC

Discovery 8: Perform Cisco 9800 WLC Maintenance



