Understanding Cisco Wireless Foundations (WLFNDU) v1.0

What you’ll learn in this course

The Understanding Cisco Wireless Foundations (WLFNDU) v1.0 course gives you the knowledge and skills you need to position, plan, implement, operate, and manage a Cisco® Wireless LAN (WLAN) network. This course teaches you how to design, install, configure, monitor, and conduct basic troubleshooting tasks on a Cisco WLAN network of any size.

This course does not lead directly to a certification exam, but it does cover foundational knowledge that can help you prepare for professional-level enterprise wireless courses and exams:

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<th>Enterprise Wireless Courses</th>
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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 course 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
How to enroll

- For instructor-led training, visit the Cisco Learning Locator.
- For private group training, visit Cisco Private Group Training.
- For self-paced e-learning, visit the Cisco Learning Network Store.
- For digital library access, visit the Cisco Learning Library.

Technology areas

- Enterprise networking
- Wireless networking

Course details

Objectives

After taking this course, you should be able to:

- Describe and implement foundational wireless theory
- Describe and implement basic wireless security and client access
- Describe and implement a Cisco wireless network architecture
- Configure Cisco centralized wireless networks
- Describe and implement WLAN maintenance and troubleshooting

Prerequisites

We recommend but do not require that you have the following knowledge and skills before taking this course:

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

Outline

- Describing and Implementing Foundational Wireless Theory
- Describing and Implementing Foundational Wireless Math and Antennas
- Describing and Implementing Foundational Wireless Operation
- Describing and Implementing Basic Wireless Security
- Describing and Implementing 802.1X and Extensible Authentication Protocol (EAP)
- Implementing Wireless Guest Access and Configuring Wireless Security
- Describing and Implementing Cisco Wireless Network Architecture
- Describing and Implementing Cisco Wireless Network
- Describing and Implementing Cisco Wireless Network Wired Support
- Configuring Cisco Centralized Wireless Networks
- Describing and Implementing WLAN Maintenance and Troubleshooting
Lab outline

- Practice RF Math
- Antenna Calculations
- Explore the Wi-Fi Environment
- Analyze Wireless Frames
- Configure Client Access
- Configure the Wired Infrastructure
- Configure a Centralized Cisco Wireless LAN Controller (WLC) Deployment
- Configure a Centralized WLAN Deployment on Cisco 3504 WLC
- Configure a Centralized WLAN Deployment on Cisco 9800 WLC
- Configure an IPv6 Operation in a Centralized WLAN Deployment
- Optimize RF Conditions and Performance for Clients
- Perform Centralized Controller Maintenance
- Use Troubleshooting Tools