

Designing Cisco Enterprise Wireless Networks (ENWLSD) v2.0

Duration: 5 Days (40 hours)

Course Prerequisites

The knowledge and skills you are expected to have before attending this course are:

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

These skills can be found in the following Cisco Learning Offerings:

- Understanding Cisco Wireless Foundations (WLFNDU)
- Cisco Certified Network Professional Enterprise (CCNP)

Course Objectives

The **Designing Cisco Enterprise Wireless Networks (ENWLSD)** training introduces you to concepts you need to know when planning advanced designs of Cisco wireless products. The training covers design specifics from scenario design concepts, through the installation phase, and into post-deployment validation.

This training prepares you for the ENWLSD exam. If passed, you earn the Cisco Enterprise Wireless Design Specialist certification and satisfy the concentration exam requirement for the CCNP Enterprise certification. This training also earns you 40 Continuing Education (CE) credits toward recertification.

This training will help you:

- Learn how to successfully design Cisco Wireless Networks.
- Gain leading-edge skills for high-demand responsibilities focused on wireless networks.
- Earn 40 CE credits toward recertification.

About the exam:

300-425 ENWLSD: Designing Cisco Enterprise Wireless Networks is a 90-minute exam associated with the Cisco Enterprise Wireless Design Specialist certification and satisfies the concentration exam requirement for the CCNP Enterprise certification. The multiple-choice format tests your knowledge of wireless network design, including:

- Site surveys
- Wired and wireless infrastructure
- Mobility
- Wireless Local Area Network (WLAN) high availability

After taking this course, you should be able to:

- Describe Cisco-recommended structured wireless design methodology
- Describe wireless industry standards, amendments, certifications, and Retain for Comments (RFCs)
- Examine the wireless technology
- Describe and implement Cisco enhanced wireless feature
- Describe Cisco mobility, roaming, and Work Group Bridges
- Describe the wireless design process
- Describe and implement specific wireless application designs
- Describe and implement specific wireless network vertical designs
- Describe and implement bridge and mesh designs in wireless networks
- Describe special considerations in advanced wireless designs
- Understand requirements to adapt a wireless network for Cisco Connected Mobile Experiences (CMX) and Cisco Spaces
- Describe site survey processes
- Describe third-party planning tools
- Describe and implement wireless network validation processes
- Describe and implement final phases of the design project

Course Outline

1. Structured Wireless Design Methodology
2. Wireless Industry Protocols and Standards
3. The Science of Wireless Technology
4. Cisco Enhanced Wireless Features
5. Cisco Mobility and Roaming
6. Wireless Design Process
7. Wireless Network Design for Specific Applications
8. Designing Wireless Networks for Specific Vertical Designs
9. Bridging and Mesh in Wireless Networks
10. Special Considerations in Advanced Wireless Designs
11. Cisco CMX and Cisco Spaces
12. Survey Processes
13. Wireless Network Design with Third-Party Tools
14. Wireless Network Validation Processes
15. Completing the Wireless Design Project

Lab Outline

1. Examine Ekahau Site Survey Predictive Fundamentals
2. Create a Site Survey Report
3. Design a Data Network in an Enterprise Environment
4. Design a Voice and Data Network in a Healthcare Environment
5. Convert an Enterprise Data Design to Include Voice
6. Design a Voice and Data Network in a Warehouse Environment with Directional Antennas
7. Review a Live Site Survey Using Ekahau Tools
8. Simulate a Post Installation Network Validation Survey
9. Analyze Layer 1 Data

Who Should Enroll

This course is for wireless engineers who work in the following roles:

- Network Engineers
- Systems Engineers
- Wireless Engineers
- Consulting Systems Engineers

- Technical Solutions Architects
- Network Administrators
- Wireless Design Engineers
- Network Manager