



# Designing Cisco Enterprise Wireless Networks (ENWLSD) v2.0

## What you'll learn in this course

The **Designing Cisco Enterprise Wireless Networks (ENWLSD) v2.0** course gives you the knowledge you need to design Cisco® wireless networks. The course covers design specifics from scenario design concepts through the installation phase and into post-deployment validation.

This course, including the self-paced material, helps prepare you to take the exam, **Designing Cisco Enterprise Wireless Networks (300-425 ENWLSD)**, which leads to the new **CCNP® Enterprise and Cisco Certified Specialist – Enterprise Wireless Design** certifications. This course 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 classes with hands-on lab practice
- E-learning: Equivalent of 5 days instruction with video and hands-on lab practice

## How you'll benefit

This class will help you:

- Gain the knowledge you need to plan advanced designs of Cisco wireless products
- Qualify for professional-level job roles in wireless networking
- Prepare for the **Designing Cisco Enterprise Wireless Networks (300-425 ENWLSD)** exam.
- Earn 40 CE credits toward recertification

## Who should enroll

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

- Consulting systems engineer
- Network administrator
- Network engineer
- Network manager
- Sales engineer
- Systems engineer
- Technical solutions architect
- Wireless design engineer
- Wireless engineer

## What to expect in the exam

This course will help you prepare for the **Designing Cisco Enterprise Wireless Networks (300-425 ENWLSD)** exam. This exam tests your knowledge of wireless network design, including site surveys, wired and wireless infrastructure, mobility, and WLAN high availability.

After you pass **300-425 ENWLSD**:

- You earn the **Cisco Certified Specialist – Enterprise Wireless Design** certification.
- You satisfy the concentration requirement for the new **CCNP Enterprise** certification. To complete your **CCNP Enterprise** certification, pass the Enterprise core exam, **Implementing Cisco Enterprise Network Core Technologies (350-401 ENCOR)**.

## Technology areas

- Networking
- Wireless

## Course details

### Objectives

After taking this course, you should be able to:

- Describe and implement a Cisco-recommended structured design methodology
- Describe and implement industry standards, amendments, certifications, and Requests For Comments (RFCs)
- Describe and implement Cisco enhanced wireless features
- Describe and implement the wireless design process
- Describe and implement specific vertical designs
- Describe and implement site survey processes
- Describe and implement network validation processes

### Recommended knowledge and training

Before taking this course, you should have:

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

Either of the following combinations of Cisco courses can help you meet these prerequisites:

- **Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR)** and **Understanding Cisco Wireless Foundations (WLFNDU)**

### Outline

- Describing and Implementing a Structured Wireless Design Methodology
  - Importance of Planning Wireless Design with a Structured Methodology
  - Cisco Structured Design Model
  - Cisco Design Guides and Cisco Validated Designs for Wireless Networks
  - Role of the Project Manager When Designing Wireless Networks
- Describing and Implementing Industry Protocols and Standards
  - Wireless Standards Bodies
  - Institute of Electrical and Electronics Engineers (IEEE) 802.11 Standard and Amendments
  - Wi-Fi Alliance (WFA) Certifications
  - Relevant Internet Engineering Task Force (IETF) Wireless RFCs
  - Practice Activity
- Describing and Implementing Cisco Enhanced Wireless Features
  - Hardware and Software Choices for a Wireless Network Design
  - Cisco Infrastructure Settings for Wireless Network Design
  - Cisco Enhanced Wireless Features

- Examining Cisco Mobility and Roaming
  - Mobility and Intercontroller Mobility in a Wireless Network
  - Optimize Client Roaming in a Wireless Network
  - Cisco Workgroup Bridge (WGB) and WGB Roaming in a Wireless Network
- Describing and Implementing the Wireless Design Process
  - Overview of Wireless Design Process
  - Meet with the Customer to Discuss the Wireless Network Design
  - Customer Information Gathering for a Wireless Network Design
  - Design the Wireless Network
  - Deployment of the Wireless Network
  - Validation and Final Adjustments of the Wireless Network
  - Wireless Network Design Project Documents and Deliverables
- Describing and Implementing Specific Vertical Designs
  - Designs for Wireless Applications
  - Wireless Network Design Within the Campus
  - Extend Wireless Networks to the Branch Sites
- Examining Special Considerations in Advanced Wireless Designs
  - High-Density Designs in Wireless Networks
  - Introducing Location and Cisco Connected Mobile Experiences (CMX) Concepts
  - Design for Location
  - FastLocate and HyperLocation
  - Bridges and Mesh in a Wireless Network Design
  - Redundancy and High Availability in a Wireless Network
- Describing and Implementing the Site Survey Processes
  - Site Survey Types
  - Special Arrangements Needed for Site Surveys
  - Safety Aspects to be Considered During Site Surveys
  - Site Survey Tools in Cisco Prime Infrastructure
  - Third-Party Site Survey Software and Hardware Tools
- Describing and Implementing Wireless Network Validation Processes
  - Post-installation Wireless Network Validation
  - Making Post-installation Changes to a Wireless Network
  - Wireless Network Handoff to the Customer
  - Installation Report

## How to enroll

To enroll in the ENWLS D course or explore our larger catalog of courses on Cisco Digital Learning, contact us at: [info@clc-training.com](mailto:info@clc-training.com)

### Lab outline

- Review Cisco Enhanced Wireless Features
- Design a Wireless Network
- Design a Wireless Network for a Specific Vertical
- Design a Wireless Network that Extends Beyond the Campus (ILT output)
- Use Cisco Prime Infrastructure as a Design Tool
- Create a Predictive Site Survey with Ekahau Pro
- Review a Live Site Survey Using Access Point on a Stick (APoS)
- Simulate a Post-installation Network Validation Survey

