

Designing Cisco Enterprise Wireless Networks (ENWLSD) v1.0 - On Demand

Modality: On Demand

Duration: 40 Hours

CLC: 8 Units

Course Information

About this course:

This course provides you the knowledge you need to design Cisco wireless networks. You will also learn design specifics from scenario design concepts through the installation phase and into post-deployment validation.

After completing this course you will be prepared to take the Designing Cisco Enterprise Wireless Networks (300-425 ENWLSD) exam, passing which will lead to the new CCNP® Enterprise and Cisco Certified Specialist – Enterprise Wireless Design certifications.

Course Objective:

Taking this course will enable you to:

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

Audience:

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

Prerequisite:

You should know the following before taking this course:

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

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

- Implementing Cisco Wireless Network Fundamentals (WIFUND) and Interconnecting Cisco Networking Devices, Part 1 (ICND1)
- Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR) and Understanding Cisco Wireless Foundations (WLFNDU)

Course 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