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## Designing Cisco Enterprise Wireless Networks (ENWLSD) v1.0

Designing Cisco Enterprise Wireless Networks (ENWLSD) v1.0 is a 5-day course that introduces wireless engineers to concepts they need to know when planning advanced designs of Cisco wireless products. The course covers design specifics from scenario design concepts, through the installation phase, and into post-deployment validation.

This course also helps you prepare to take the exam, Designing Cisco Enterprise Wireless Networks (300-425 ENWLSD) which is part of the CCNP® Enterprise and Cisco Certified Specialist – Enterprise Design certifications.

### How you'll benefit

This course 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
- Earn 40 CE credits toward recertification

### Why Attend with Current Technologies CLC

- Our Instructors are the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses



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### 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 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

#### Course Duration

5 day

#### Course Price

\$4,195.00

#### Methods of Delivery

- ILT
- V-ILT

#### Certification Exam

300-425

#### Cisco CE Credits

40

### Who Should Attend

The job roles best suited to the material in this course are:

- Consulting Systems Engineer
- Network Administrator
- Network Engineer
- Network Manager
- Sales Engineer
- Systems Engineer
- Technical Solutions Architect
- Wireless Design Engineer
- Wireless Engineer

### Prerequisites

Before taking this course, you should have:

- General knowledge of networks



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- General knowledge of wireless networks
- Routing and switching knowledge

**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

#### Module 1: Describing and Implementing a Structured Wireless Design Methodology

- Importance of Planning Wireless Design with a Structured Methodology
- Describe the Cisco PPDIOO structured design model
- Cisco Structured Design Model
- Cisco Design Guides and Cisco Validated Designs for Wireless Networks
- Role of the Project Manager When Designing Wireless Networks

#### Module 2: Describing and Implementing Industry Protocols and Standards

- Wireless Standards Bodies
- IEEE 802.11 Standard and Amendments
- WFA Certifications
- Relevant IETF Wireless RFCs
- Practice Activity

#### Module 3: Describing and Implementing Cisco Enhanced Wireless Features



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- Hardware and Software Choices for a Wireless Network Design
- Cisco Infrastructure Settings for Wireless Network Design
- Cisco Enhanced Wireless Features
- Activity 1: Review Cisco Enhanced Wireless Features

### Module 4: Examining Cisco Mobility and Roaming

- Mobility and Intercontroller Mobility in a Wireless Network
- Optimize Client Roaming in a Wireless Network
- WGB and WGB Roaming in a Wireless Network

### Module 5: 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
- Activity 2: Design a Wireless Network

### Module 6: Describing and Implementing Specific Vertical Designs

- Designs for Wireless Applications
- Wireless Network Design Within the Campus
- Extend Wireless Networks to the Branch Sites
- Activity 3: Design a Wireless Network for a Specific Vertical
- Activity 4: Design a Wireless Network That Extends Beyond the Campus



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### Module 7: Examining Special Considerations in Advanced Wireless Designs

- High-Density Designs in Wireless Networks
- Introducing Location and CMX Concepts
- Design for Location
- FastLocate and HyperLocation
- Bridges and Mesh in a Wireless Network Design
- Redundancy and High Availability in a Wireless Network

### Module 8: 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
- Discovery 5: Use Cisco Prime Infrastructure as a Design Tool
- Discovery 6: Create a Predictive Site Survey with Ekahau Pro
- Discovery 7: Review a Live Site Survey Using AP on a Stick

### Module 9: Describing and Implementing Wireless Network Validation Processes

- Postinstallation Wireless Network Validation
- Making Postinstallation Changes to a Wireless Network
- Wireless Network Handoff to the Customer
- Installation Report
- Discovery 8: Simulate a Postinstallation Network Validation Survey

### LAB OUTLINE



## Designing Cisco Enterprise Wireless Networks (ENWLSD) v1.0

- 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