

# Designing Cisco Enterprise Wireless Network (ENWLSD)

**ID ENWLSD Price 1,757.25 € (excl. tax) Duration 5 days**

## Who should attend

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

## objectives:

- 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

## This course is part of the following Certifications

Cisco Certified Network Professional Enterprise (CCNP ENTERPRISE)

## Prerequisites

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

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

Here are recommended Cisco learning offerings that may help students meet these prerequisites:

- [Implementing and Operating Cisco Enterprise Network Core Technologies \(ENCOR\)](#) and
- Understanding Cisco Wireless Foundations (WLFNDU)

## Course Objectives

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 postdeployment validation.

Upon completing this course, students will be able to meet these

## Course Content

- Describing and Implementing a Structured Wireless Design Methodology
- Describing and Implementing Industry Protocols and Standards
- Describing and Implementing Cisco Enhanced Wireless Features
- Examining Cisco Mobility and Roaming
- Describing and Implementing the Wireless Design Process
- Describing and Implementing Specific Vertical Designs
- Examining Special Considerations in Advanced Wireless Designs
- Describing and Implementing the Site Survey Processes
- Describing and Implementing Wireless Network Validation Processes

## Detailed Course Outline

- Describing and Implementing a Structured Wireless Design Methodology
  - Importance of Planning Wireless Design with a Structured Methodology
  - Describe the Cisco PPIDIO 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
- Describing and Implementing Industry Protocols and Standards
  - Wireless Standards Bodies

- IEEE 802.11 Standard and Amendments
- WFA Certifications
- Relevant 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
  - Activity 1: Review Cisco Enhanced Wireless Features
- 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
- 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
- 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
- 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
- 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
- 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

# About Fast Lane



Fast Lane is a global, award-winning specialist in technology and business training as well as consulting services for digital transformation. As the only global partner of the three cloud hyperscalers- Microsoft, AWS and Google- and partner of 30 other leading IT vendors, Fast Lane offers qualification solutions and professional services that can be scaled as needed. More than 4,000 experienced Fast Lane professionals train and advise customers in organizations of all sizes in 90 countries worldwide in the areas of cloud, artificial intelligence, cyber security, software development, wireless and mobility, modern workplace, as well as management and leadership skills, IT and project management.

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- ✓ Networking
- ✓ Cyber Security
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