

# Implementing Cisco Enterprise Wireless Networks (ENWLSI) v.1.1

## What you'll learn in this course

The **Implementing Cisco Enterprise Wireless Networks (ENWLSI)** v1.1 course gives you the knowledge and skills needed to create a secure wireless network infrastructure and troubleshoot any related issues. You'll learn how to implement and fortify a wireless network infrastructure using Cisco Identity Service Engine (ISE), Cisco Prime Infrastructure (PI), and Cisco Connect Mobile Experience to monitor and troubleshoot network issues.

This course provides hands-on labs to reinforce concepts including deploying Cisco Prime Infrastructure Release 3.5, Cisco Catalyst® 9800 Wireless Controller Release, Cisco IOS XE Gibraltar 16.10, Cisco Digital Network Architecture (Cisco DNA) Center Release 1.2.8, Cisco Connected Mobile Experiences (CMX) Release 10.5, Cisco Mobility Services Engine (MSE) Release 8.0 features, and Cisco ISE Release 2.4.

This course also helps you prepare to take the **300-430 Implementing Cisco Enterprise Wireless Networks (ENWLSI)** exam, which is part of the **CCNP® Enterprise certification** and the **Cisco Certified Specialist - Enterprise Wireless Implementation** certification. This course also earns you 40 Continuing Education (CE) credits towards recertification.

## Course duration

- Instructor-led training: 5 days 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 of instruction with hands-on lab practice

## How you'll benefit

This course will help you:

- Use Cisco Identity Services Engine, Cisco Prime Infrastructure, and Cisco Connect Mobile Experience to streamline network management, improve operations efficiency, and enhance consistency of network services
- Implement, secure and configure a tailored Cisco wireless network infrastructure
- Earn 40 CE credits toward recertification

## Who should enroll

- Network designers
- Sales engineers
- Wireless network engineers

## How to enroll

### E-learning

- To buy a single e-learning license, visit the [Cisco Learning Network Store](#).
- For more than one license, or a learning library subscription, contact us at [learning-bdm@cisco.com](mailto:learning-bdm@cisco.com).

### Instructor-led training

- Find a class at the [Cisco Learning Locator](#).
- Arrange training at your location through [Cisco Private Group Training](#).

## Technology areas

- Networking
- Wireless

## Course details

### Objectives

After taking this course, you should be able to:

- Implement network settings to provide a secure wireless network infrastructure
- Implement a secure wireless client and troubleshoot wireless client connectivity issues
- Implement and troubleshoot QoS in wireless networks
- Implement and troubleshoot advanced capabilities in wireless network services

### Prerequisites

Before taking this course, you should have:

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

The following Cisco courses can help you gain the knowledge you need to prepare for this course:

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

### Outline

- Securing and Troubleshooting the Wireless Network Infrastructure
- Implementing and Troubleshooting Secure Client Connectivity
- Implementing and Troubleshooting Quality of Service (QoS) in Wireless Networks
- Implementing and Troubleshooting Advanced Wireless Network Services

## Lab Outline

- Lab Familiarization (Base Learning Lab)
- Configure Secure Management Access for Cisco Wireless LAN Controllers (WLCs) and Access Points (APs)
- Add Network Devices and External Resources to Cisco Prime Infrastructure
- Customize Cisco Prime Infrastructure for Network Monitoring
- Configure 802.1X Port Access for the APs
- Capture a Successful AP Authentication
- Implement Authentication, Authorization, and Accounting (AAA) Services for Central Mode WLANs
- Implement AAA Services for FlexConnect Mode Wireless LANs (WLANs)
- Configure Guest Services in the Wireless Network
- Configure Bring Your Own Device (BYOD) in the Wireless Network
- Capture Successful Client Authentications
- Configure Cisco CMX Facebook Wi-Fi
- Configure QoS in the Wireless Network for Voice and Video Services
- Configure Cisco Application Visibility and Control (AVC) in the Wireless Network
- Configure multicast DNS (mDNS) in the Wireless Network
- Capture Successful QoS Traffic Marking in the Wireless Network
- Configure, Detect, and Locate Services on the Cisco CMX




Americas Headquarters  
Cisco Systems, Inc.  
San Jose, CA

Asia Pacific Headquarters  
Cisco Systems (USA) Pte. Ltd.  
Singapore

Europe Headquarters  
Cisco Systems International BV Amsterdam,  
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

 Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: <https://www.cisco.com/go/trademarks>. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Course content is dynamic and subject to change without notice.