

# **Designing Cisco Enterprise Wireless Networks**

Course Code
Duration

ENWLSD 5 days

#### **Overview**

The Designing Cisco Enterprise Wireless Networks 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 to the new CCNP Enterprise and Cisco Certified Specialist – Enterprise Wireless Design certifications.

# **Audience**

Individuals interested in gaining the knowledge needed to plan advanced designs of Cisco Wireless Products.

# **Learning Objectives**

By actively participating in this course, you will learn about the following:

- Describing and implementing a Cisco-recommended structured design methodology.
- Describing and implementing industry standards, amendments, certifications, and RFCs.
- Describing and implementing Cisco enhanced wireless features.
- Describing and implementing the wireless design process.
- Describing and implementing specific vertical designs.
- Describing and implementing site survey processes.
- Describing and implementing network validation processes.

# **Pre-Requisites**

- General knowledge of networks ICND1 or CCNA
- General knowledge of wireless networks WIFUND or WLFNDU
- Routing and switching knowledge ICND1 or CCNA

#### Recommended courses:

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

# **Course Contents**

# **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
- 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

#### **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

# **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 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

#### Labs

- Use Cisco Prime Infrastructure as a Design Tool
- Create a Predictive Site Survey with Ekahau Pro
- Perform a Live Site Survey Using AP on a Stick
- Stimulate a Post-installation Network Validation Survey

# **Exam Details**

This course leads to the 300-425 - Designing Cisco Enterprise Wireless Networks (ENWLSD) exam.

Successful completion will earn you the Cisco Certified Specialist - Enterprise Wireless Design Certification and count towards the New CCNP Enterprise Certification - To achieve the new CCNP Enterprise Certification you will also need the CCNP Enterprise Core Exam.

# **Further Information**

For more information or to book this course, please contact our Course Enquiries Team on **01752 227330** (Option 2) or email us at <a href="mailto:enquiries@skilltec.co.uk">enquiries@skilltec.co.uk</a>.