

## ENWLSD - Designing Cisco Enterprise Wireless Networks (ENWLSD)

### COURSE OVERVIEW:

The Designing Cisco Enterprise Wireless Networks (ENWLSD) v1.0 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. The exam will be available beginning February 24, 2020.

### WHO WILL BENEFIT FROM THIS COURSE?

This course is for wireless engineers who work in the following roles:

- 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
- 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)
- Coming soon: Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR) and Understanding Cisco Wireless Foundations (WLFNDU)

### COURSE 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 Requests For Comments (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 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

### **Lab Outline**

- Use Cisco Prime Infrastructure as a Design Tool
- Create a Predictive Site Survey with Ekahau Pro
- Perform a Live Site Survey Using Access Point on a Stick (APoS)
- Simulate a Post-installation Network Validation Survey

### **SUNSET LEARNING INSTITUTE (SLI) DIFFERENTIATORS:**

Sunset Learning Institute (SLI) has been an innovative leader in developing and delivering authorized technical training since 1996. Our goal is to help our customers optimize their cloud technology investments by providing convenient, high quality technical training that our customers can rely on. We empower students to master their desired technologies for their unique environments.

What sets SLI apart is not only our immense selection of trainings options, but our convenient and consistent delivery system. No matter how complex your environment is or where you are located, SLI is sure to have a training solution that you can count on!

### **Premiere World Class Instruction Team**

- All SLI instructors have a four-year technical degree, instructor level certifications and field consulting work experience.
- Sunset Learning has won numerous Instructor Excellence and Instructor Quality Distinction awards since 2012

### **Enhanced Learning Experience**

- The goal of our instructors during class is ensure students understand the material, guide them through our labs and encourage questions and interactive discussions.

### **Convenient and Reliable Training Experience**

- You have the option to attend classes at any of our established training facilities or from the convenience of your home or office with the use of our HD-ILT network (High Definition Instructor Led Training)
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- All Sunset Learning Institute classes are guaranteed to run – you can count on us to deliver the training you need when you need it!

**Outstanding Customer Service**

- Dedicated account manager to suggest the optimal learning path for you and your team
- Enthusiastic Student Services team available to answer any questions and ensure a quality training experience