

## **Cisco Unified Wireless Networking Bootcamp (CUWNBC): Deploying Cisco Wireless LANs Basic and Advanced (WDBWL / WDAWL)**

### **COURSE OVERVIEW:**

*All Scheduled Dates are Guaranteed to Run! Please note, this class runs extended hours.*

Cisco Unified Wireless Networking Bootcamp (CUWNBC) combines WDBWL (Deploying Basic Cisco Wireless LANs) and WDAWL (Deploying Advanced Cisco Wireless LANs) into a cohesive five-day delivery. CUWNBC presents students with challenging real-world deployments such as client mobility between subnets, high client density deployments, and mesh network deployments. Students will be trained on how to make network design decisions about, configure, and troubleshoot WLANs with these challenges. The format of the course allows students and the instructor to explore realistic use cases and best practices around more challenging deployment scenarios. The course is written at software code level 7.5.

WDBWL (Deploying Basic Cisco Wireless LANs) is the first 3 days of training and WDAWL (Deploying Advanced Cisco Wireless LANs) is the last two days of class. If students would like to attend WDBWL or WDAWL only - please contact Sunset Learning Institute for scheduling and pricing options!

### **WHO WILL BENEFIT FROM THIS COURSE?**

This course is intended for IT engineers or administrators who need to know the fundamentals about planning, installing, configuring, troubleshooting, and maintaining a basic Cisco Wireless LAN infrastructure. This includes installers, SEs, Field Engineers, technical support professionals, network managers, security team members, and administrators.

### **PREREQUISITES:**

Prior to taking this course, it is recommended that students have the following knowledge and skills:

- Prior completion of Defining Cisco Wireless LAN Essentials course or equivalent work experience
- Basic networking skills
- RF/Wireless field experience (helpful)

### **COURSE OBJECTIVES:**

Upon successful completion of this course, students should be able to:

- Successfully plan, install, configure, troubleshoot, monitor and maintain basic Cisco Wireless LAN solutions in a customer enterprise environment
- Configure autonomous, unified, and FlexConnect architectures
- Configure all base feature sets, including wireless security
- Administer the WLAN network
- Maintain and troubleshoot basic wireless networks
- Describe the steps involved in client mobility at layer 2 and the differences involved in client mobility at layer 3
- Discuss the challenges faced in providing a quality user experience in a high-density wireless network deployment scenario
- Differentiate the operational characteristics of, and implement, a wireless MESH architecture

**COURSE OUTLINE:****WDBWL Outline: Deploying Basic Cisco Wireless LANs****Module 1 - Cisco Wireless LAN Essentials Refresher**

- Lesson 1: High level review of prerequisite course - Defining Cisco Wireless LAN Essentials

**Module 2 - Pre-Deployment Planning**

- Lesson 1: Successful Wireless Deployments and Pre-deployment Planning
- Lesson 2: Cisco WLAN Professional Services
- Lesson 3: Spectrum Expert
- Lesson 4: PI Planning tools

**Module 3 - Autonomous Deployments**

- Lesson 1: Easy Setup GUI Interface
- Lesson 2: Basic Setup via CLI
- Lesson 3: Access Point Modes
- Lesson 4: Bridge Modes
- Lesson 5: Non-Client serving Modes

**Module 4 - Unified Deployments**

- Lesson 1: Initial controller Setup, and configure basic settings
- Lesson 2: Modes of operation available for a unified access point
- Lesson 3: Mechanisms by which an AP associates to a WLC
- Lesson 4: User Interfaces to the System
- Lesson 5: Radio Resource Management and CleanAir
- Lesson 6: Administering WLANs and AP Groups
- Lesson 7: Configuring Quality of Service
- Lesson 8: IPv6 Support
- Lesson 9: Identify and Configure the Wireless LAN
- Lesson 10: Security Parameters
- Lesson 11: General Administration
- Lesson 12: Guest Access

**Module 5 - FlexConnect Deployments**

- Lesson 1: Benefits and Limitations of FlexConnect Architecture
- Lesson 2: Operational Differences between
- Lesson 3: FlexConnect and Unified Architectures

**Module 6 - Wireless LAN Maintenance and Troubleshooting**

- Lesson 1: Routine Maintenance
- Lesson 2: Policy Configuration and Management
- Lesson 3: Gathering Data
- Lesson 4: Troubleshooting in a Cisco Unified Wireless Network

**WDAWL Outlines: Deploying Advanced Cisco Wireless LANs****Module 1 - Client Mobility**

- Lesson1: Same Subnet Roaming
- Lesson 2: Inter-subnet Mobility

**Module 2 - High Density Deployment Challenges**

- Lesson 1: Effects of Client Density on a Wireless Network
- Lesson 2: Planning for Areas of High Client Density

**Module 3 - Implementing Mesh Network**

- Lesson 1: Describe Wireless Mesh Networks
- Lesson 2: Mesh Network Formation Process
- Lesson 3: Implementing a Mesh Network for the Enterprise
- Lesson 4: Configuring Advanced Mesh Features
- Lesson 5: Troubleshooting a Mesh Network

**Labs:**

- Lab 4-1 Performing the Initial WLC Configuration Using the CLI
- Lab 4-2: Unified AP Modes of Operation
- Lab 4-3: AP Association Options
- Lab 4-4: Controller Web Interface
- Lab 4-5: Configuring RRM and CleanAir
- Lab 4-8: Configuring IPv6 First Hop Security
- Lab 4-9: Configuring Security Parameters on the WLC
- Lab 4-10: Configuring Guest Access and Web Authentication
- Lab 3-1: Configuring Mesh Access Points

**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)
- 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