Course: Cisco Wireless LAN Mastery - From Basics to Advanced

Duration: 5 days/40 Hrs

Module 1: Introduction to Cisco Wireless Technologies

Fundamentals of wireless networking

Understanding Cisco wireless products and solutions

Cisco Wireless LAN Controller (WLC) and Access Point (AP) architecture

Hands-on lab: Exploring Cisco WLC and AP interfaces

Module 2: Configuring Basic WLAN with Cisco WLC

Setting up initial configurations on Cisco WLC

Creating WLANs and SSIDs

Configuring basic security and authentication

Hands-on lab: Building a foundational WLAN with Cisco WLC

Module 3: Advanced WLAN Configurations

Implementing advanced security features (e.g., WPA3)

VLAN mapping and tagging for efficient traffic management

Leveraging guest access and captive portals

Hands-on lab: Implementing robust WLAN features

Module 4: Cisco WLC Management and Monitoring

Managing Cisco WLC with GUI and CLI

Configuring administrative access and authentication

Monitoring WLAN performance and client statistics

Hands-on lab: Efficiently managing and monitoring Cisco WLC

Module 5: High Availability and Redundancy with Cisco WLC

Implementing high availability with HA-SKU

Configuring redundant WLCs with AP SSO

Understanding failover and stateful switchover

Hands-on lab: Ensuring seamless WLAN operations with Cisco WLC

Module 6: Cisco WLC RF Management

Analyzing radio frequency and channel utilization

Configuring radio resource management (RRM) for optimal performance

Optimizing WLAN coverage and capacity

Hands-on lab: Mastering RF management with Cisco WLC

Module 7: Advanced AP Configurations

Efficiently organizing APs with AP groups and RF profiles

Deploying FlexConnect mode for remote sites

Leveraging Mesh networking for wireless backhaul

Hands-on lab: Configuring APs with advanced features

Module 8: Cisco WLC and AP Troubleshooting

Identifying and resolving common WLAN issues

Utilizing debugs and logs for effective troubleshooting

Analyzing client connectivity problems

Hands-on lab: Gaining proficiency in WLAN troubleshooting