



## Designing Aruba Solutions (AR-DAS)

### Course Description

This course teaches you how to plan and design enterprise Aruba campus wireless and wired networks. Hands-on labs give you experience with network design from information gathering to planning and high-level design including RF Planning, Redundant Campus Architecture design, and Remote Access Branch office design.

This course teaches Aruba Mobility Network Design for Aruba Secure wireless and wired network deployments using Aruba Best Practices on how to plan and design enterprise campus networks including designing for redundancy and high availability. This course is approximately 40% lecture and 60% hands-on lab exercises.

This 5-day course will help students prepare for the Aruba Certified Design Professional (ACDP) exam.

### Course Duration:

5 days

### Prerequisites:

The recommended prerequisites are the Aruba Certified Switching Associate (ACSA) and the Aruba Certified Mobility Associate (ACMA) certifications

### Objectives:

After you successfully complete this course, expect to be able to:

- Plan and design enterprise Aruba campus wireless and wired networks.
- Evaluate the requirements, and select the wired networking technologies for the design.
- Evaluate the requirements, and select the wireless networking technologies for the design.
- Plan and design an Aruba solution per the customer requirements.
- Produce a detailed design specification document.
- Recommend the solution to the customer

### Course Outline:

- Determine Customer Requirements
  - Determine key Stakeholders expectations and requirements
  - Determine network usage and requirements
  - Identify applications to determine throughput and bandwidth, technologies, and products
  - Determine security requirements and Authentication and Compliance
  - Determine redundancy requirements
  - Determine roaming requirements

- RF Planning
  - RF fundamentals
  - RF Planning and Site Survey
  - Determine the environment type
  - Document wireless RF coverage
  - Plan AP physical location
  - Selecting APs and antennas
  - Channel planning and Airmatch
- Aruba Campus Design
  - Campus Topology
  - Aruba Campus WLAN logical architecture
  - Overview of Mobility Manager-based architecture
  - Planning the deployment architecture
  - Controller Scaling
  - Planning and selecting licenses
  - Using IRIS
- Wired Network Design
  - Selecting 2-tier or 3-tier architecture
  - VSP and backplane stacking
  - L2 vs. L3 design
  - Planning the access layer
  - Planning the aggregation/core layers
- Network Security
  - Clearpass features
  - Clearpass Server Design
  - Wireless Access Control
  - Wired access Control
  - IDS/IPS
- VLANs
  - Planning VLANs based on access control requirements
  - Planning Wired VLAN in a Multiple VLAN design
  - Planning for a wireless large flat VLAN design
- Redundancy
  - Designing types of redundancy: Mobility Master redundancy, mobility controller redundancy, AP redundancy, switch redundancy, and link-level redundancy
  - Mobility Master redundancy
  - Mobility Controller redundancy
  - Wired Network Redundancy
- Planning Quality of Service
  - Determine what traffic needs to be prioritized - Overview of real-time applications such as voice and video
  - Explain the features the Aruba solutions provide for prioritizing traffic
  - Map traffic from wireless user device to AP, to controller, and then onto the wired network

- Very High Density (VHD) Design
  - VHD Wireless network design
  - Planning VHD design for a Wired network
  - Planning High Density RF Coverage
- Branch and SMB Topologies
  - Designing Remote Access and Branch solutions
  - Remote Access Points
  - Activation using Aruba Activate
  - Aruba Instant APs (IAPs)
  - Wired solutions for the branch

## Who Should Attend

Typical candidates for this course are IT Professionals and Network Architects who will design and plan networks based on Aruba wired and wireless products and solutions.

