

# Aruba Certified Campus Access Professional

## Course outline

### **Module 1: Introduction to Aruba Campus Networking**

Module 1: Introduction to Aruba Campus Networking is an introductory course designed to provide students with a comprehensive overview of Aruba's campus networking solutions. This module covers topics such as network architecture, switching, routing, security, and wireless technologies. Students will gain an understanding of the fundamentals of Aruba's campus networking solutions and how to design, configure, and manage them.

#### ***Lessons***

- Overview of Aruba Campus Networking
- Aruba Campus Networking Architecture
- Aruba Campus Networking Design Considerations
- Aruba Campus Networking Security
- Aruba Campus Networking Troubleshooting
- Aruba Campus Networking Management
- Aruba Campus Networking Best Practices
- Aruba Campus Networking Performance Optimization
- Aruba Campus Networking Automation
- . Aruba Campus Networking Scalability

#### **After completing this module, students will be able to:**

- Understand the fundamentals of Aruba Campus Networking, including the architecture, components, and features.
- Configure and manage Aruba Campus Networking devices, including switches, access points, and controllers.
- Troubleshoot and resolve common issues related to Aruba Campus Networking.
- Implement best practices for secure and reliable Aruba Campus Networking deployments.

### **Module 2: Aruba Campus Network Design**

Module 2 of the Aruba Certified Campus Access Professional course provides an in-depth look at the design of an Aruba campus network. It covers topics such as network topology, network segmentation, and security considerations. It also provides guidance on how to design a secure and reliable campus network that meets the needs of the organization.

## **Lessons**

- Introduction to Aruba Campus Network Design
- Designing a Campus Network with Aruba Switches
- Configuring Aruba Switches for Campus Network Design
- Implementing Aruba Campus Network Security
- Troubleshooting Aruba Campus Network Design
- Best Practices for Aruba Campus Network Design
- Advanced Aruba Campus Network Design Concepts
- Designing a High Availability Campus Network with Aruba Switches
- Designing a Scalable Campus Network with Aruba Switches
- . Designing a Secure Campus Network with Aruba Switches

### **After completing this module, students will be able to:**

- Design and implement an Aruba campus network architecture that meets customer requirements.
- Configure and troubleshoot Aruba campus access switches, controllers, and access points.
- Utilize Aruba ClearPass for authentication, authorization, and accounting.
- Implement advanced features such as Multi-Zone Security, Multi-Domain Authentication, and Multi-Site Roaming.

## **Module 3: Aruba Campus Network Security**

Module 3 of the Aruba Certified Campus Access Professional course covers the fundamentals of Aruba Campus Network Security. It provides an overview of the security features available on Aruba Campus networks, including authentication, authorization, and encryption. It also covers the different types of threats and attacks that can occur on a campus network, and how to protect against them. Finally, it provides an introduction to Aruba ClearPass, a comprehensive network security solution.

## **Lessons**

- Introduction to Aruba Campus Network Security
- Understanding Aruba Campus Network Security Architecture
- Configuring Aruba Campus Network Security
- Implementing Aruba Campus Network Security Policies
- Troubleshooting Aruba Campus Network Security Issues
- Best Practices for Aruba Campus Network Security
- Managing Aruba Campus Network Security
- Monitoring Aruba Campus Network Security
- Securing Aruba Campus Network Access
- . Securing Aruba Campus Network Infrastructure

### **After completing this module, students will be able to:**

- Understand the fundamentals of Aruba Campus Network Security, including authentication, authorization, and accounting (AAA)

- Configure and manage Aruba Campus Network Security features such as user roles, firewall policies, and access control lists
- Implement and troubleshoot secure wireless networks using Aruba Campus Network Security
- Utilize Aruba Campus Network Security to protect against malicious threats and vulnerabilities

## **Module 4: Aruba Campus Network Troubleshooting**

Module 4 of the Aruba Certified Campus Access Professional course focuses on troubleshooting Aruba campus networks. It covers topics such as identifying and resolving common network issues, understanding the Aruba campus network architecture, and using the Aruba AirWave Network Management System to troubleshoot and manage Aruba networks. The module also provides hands-on labs to help students gain practical experience in troubleshooting Aruba campus networks.

### ***Lessons***

- Troubleshooting Common Campus Network Issues
- Analyzing Network Performance and Utilization
- Investigating Network Security Issues
- Resolving Network Connectivity Problems
- Troubleshooting VLANs and Trunks
- Troubleshooting Spanning Tree Protocols
- Troubleshooting DHCP and DNS
- Troubleshooting Access Points and Wireless Clients
- Troubleshooting Aruba Mobility Controllers
- . Troubleshooting Aruba ClearPass
- . Troubleshooting Aruba AirWave
- . Troubleshooting Aruba Central

### **After completing this module, students will be able to:**

- Understand the fundamentals of Aruba Campus Network Troubleshooting
- Identify and troubleshoot common issues related to Aruba Campus Networks
- Utilize the Aruba Campus Network Troubleshooting tools and techniques
- Implement best practices for Aruba Campus Network Troubleshooting and maintenance

## **Module 5: Aruba Campus Network Management**

Module 5 of the Aruba Certified Campus Access Professional course covers the fundamentals of Aruba Campus Network Management. It provides an overview of the Aruba Campus Network Management architecture, including the components, features, and functions of the Aruba Campus Network Management solution. It also covers the configuration and management of Aruba Campus Network Management, including the setup of the Aruba Mobility Controller, Aruba Access Points, and Aruba Switches.

### ***Lessons***

- Introduction to Aruba Campus Network Management

- Configuring Aruba Campus Network Management
- Troubleshooting Aruba Campus Network Management
- Managing Aruba Campus Network Security
- Implementing Aruba Campus Network Access Control
- Monitoring Aruba Campus Network Performance
- Optimizing Aruba Campus Network Connectivity
- Automating Aruba Campus Network Management
- Integrating Aruba Campus Network Management with Other Systems
- . Best Practices for Aruba Campus Network Management

### **After completing this module, students will be able to:**

- Understand the fundamentals of Aruba Campus Network Management, including the architecture, components, and features.
- Configure and manage Aruba Campus Network Management components, such as switches, routers, and access points.
- Troubleshoot and resolve common network issues related to Aruba Campus Network Management.
- Implement best practices for secure and reliable Aruba Campus Network Management.

## **Module 6: Aruba Campus Network Optimization**

Module 6 of the Aruba Certified Campus Access Professional course focuses on optimizing the Aruba campus network. It covers topics such as network design, troubleshooting, and optimization techniques. It also covers topics such as network security, wireless network design, and network management. This module provides students with the knowledge and skills necessary to design, configure, and manage an Aruba campus network.

### ***Lessons***

- Introduction to Aruba Campus Network Optimization
- Designing an Optimized Aruba Campus Network
- Implementing Aruba Campus Network Optimization
- Troubleshooting Aruba Campus Network Optimization
- Best Practices for Aruba Campus Network Optimization
- Security Considerations for Aruba Campus Network Optimization
- Monitoring and Managing Aruba Campus Network Optimization
- Automating Aruba Campus Network Optimization
- Advanced Aruba Campus Network Optimization Techniques
- . Case Studies in Aruba Campus Network Optimization

### **After completing this module, students will be able to:**

- Understand the fundamentals of Aruba Campus Network Optimization
- Configure and troubleshoot Aruba Campus Network Optimization
- Implement best practices for Aruba Campus Network Optimization
- Analyze and optimize Aruba Campus Network Optimization for improved performance

## Module 7: Aruba Campus Network Automation

Module 7 of the Aruba Certified Campus Access Professional course covers the fundamentals of Aruba Campus Network Automation. It provides an overview of the Aruba Campus Network Automation architecture, and teaches students how to configure and manage Aruba Campus Network Automation. The module also covers topics such as network segmentation, policy enforcement, and troubleshooting.

### **Lessons**

- Introduction to Aruba Campus Network Automation
- Automating Campus Network Configuration with Aruba
- Automating Campus Network Security with Aruba
- Automating Campus Network Troubleshooting with Aruba
- Automating Campus Network Monitoring with Aruba
- Automating Campus Network Provisioning with Aruba
- Automating Campus Network Maintenance with Aruba
- Automating Campus Network Performance with Aruba
- Automating Campus Network Access Control with Aruba
- Automating Campus Network Mobility with Aruba

### **After completing this module, students will be able to:**

- Understand the fundamentals of Aruba Campus Network Automation and its components.
- Configure and manage Aruba Campus Network Automation for campus access networks.
- Utilize Aruba Campus Network Automation to automate and optimize campus access networks.
- Troubleshoot and resolve issues related to Aruba Campus Network Automation.

## Module 8: Aruba Campus Network Monitoring

Module 8 of the Aruba Certified Campus Access Professional course covers the fundamentals of Aruba Campus Network Monitoring. This module provides an overview of the different types of network monitoring tools available, as well as how to configure and use them to monitor and troubleshoot network performance. It also covers the basics of network security and how to use Aruba's security features to protect the network.

### **Lessons**

- Introduction to Aruba Campus Network Monitoring
- Understanding Aruba Campus Network Monitoring Tools
- Configuring Aruba Campus Network Monitoring
- Troubleshooting Aruba Campus Network Monitoring
- Best Practices for Aruba Campus Network Monitoring
- Analyzing Aruba Campus Network Monitoring Reports
- Automating Aruba Campus Network Monitoring
- Integrating Aruba Campus Network Monitoring with Other Systems
- Securing Aruba Campus Network Monitoring
- Optimizing Aruba Campus Network Monitoring Performance

## **After completing this module, students will be able to:**

- Understand the fundamentals of Aruba Campus Network Monitoring
- Configure and troubleshoot Aruba Campus Network Monitoring
- Utilize Aruba Campus Network Monitoring to monitor and analyze network performance
- Implement best practices for Aruba Campus Network Monitoring to ensure optimal network performance

## **Module 9: Aruba Campus Network Virtualization**

Module 9 of the Aruba Certified Campus Access Professional course covers the fundamentals of Aruba Campus Network Virtualization. It provides an overview of the different components of the Aruba Campus Network Virtualization architecture, including the Aruba Virtual Switch, Aruba Virtual Controller, and Aruba Virtual Access Point. It also covers the configuration and management of the Aruba Campus Network Virtualization environment.

### ***Lessons***

- Introduction to Aruba Campus Network Virtualization
- Understanding Aruba Virtual Switching Framework
- Configuring Aruba Virtual Switching Framework
- Implementing Aruba Virtual Switching Framework
- Troubleshooting Aruba Virtual Switching Framework
- Managing Aruba Virtual Switching Framework
- Best Practices for Aruba Virtual Switching Framework
- Security Considerations for Aruba Virtual Switching Framework
- Integrating Aruba Virtual Switching Framework with Other Network Technologies
- Automating Aruba Virtual Switching Framework Deployment

## **After completing this module, students will be able to:**

- Understand the fundamentals of Aruba Campus Network Virtualization and its components.
- Configure and manage Aruba Campus Network Virtualization.
- Troubleshoot and optimize Aruba Campus Network Virtualization.
- Implement best practices for Aruba Campus Network Virtualization.

## **Module 10: Aruba Campus Network Mobility**

Module 10 of the Aruba Certified Campus Access Professional course covers Aruba Campus Network Mobility, which is a comprehensive solution for managing and securing wireless networks. It provides secure access to applications and services, as well as advanced features such as location-based services, guest access, and policy enforcement. This module will teach students how to configure and manage Aruba Campus Network Mobility, as well as troubleshoot and optimize the network.

### ***Lessons***

- Introduction to Aruba Campus Network Mobility

- Aruba Mobility Controllers
- Aruba Mobility Access Switches
- Aruba Virtual Mobility Controllers
- Aruba AirWave Network Management
- Aruba ClearPass Access Management
- Aruba Instant Access Points
- Aruba Mobility Access Points
- Aruba Mobility Access Point Security
- . Aruba Mobility Access Point Troubleshooting
- . Aruba Mobility Access Point Deployment
- . Aruba Mobility Access Point Configuration
- . Aruba Mobility Access Point Management
- . Aruba Mobility Access Point Monitoring
- . Aruba Mobility Access Point Optimization
- . Aruba Mobility Access Point High Availability
- . Aruba Mobility Access Point Scalability
- . Aruba Mobility Access Point Interoperability
- . Aruba Mobility Access Point Integration
- . Aruba Mobility Access Point Best Practices

### **After completing this module, students will be able to:**

- Understand the fundamentals of Aruba Campus Network Mobility and how it can be used to improve network performance.
- Configure and manage Aruba Campus Network Mobility solutions.
- Troubleshoot and resolve issues related to Aruba Campus Network Mobility.
- Implement best practices for Aruba Campus Network Mobility deployments.

## **Module 11: Aruba Campus Network Quality of Service**

This module covers the fundamentals of Quality of Service (QoS) on Aruba Campus networks. It provides an overview of QoS concepts, including traffic classification, congestion management, and QoS policies. It also covers the configuration of QoS on Aruba Campus networks, including the use of CoS, DSCP, and other QoS features. Finally, it covers the troubleshooting of QoS issues on Aruba Campus networks.

### ***Lessons***

- Introduction to Quality of Service (QoS)
- Configuring QoS on Aruba Campus Networks
- Implementing QoS Policies on Aruba Campus Networks
- Troubleshooting QoS Issues on Aruba Campus Networks
- Best Practices for QoS on Aruba Campus Networks
- QoS Design Considerations for Aruba Campus Networks
- QoS Performance Monitoring on Aruba Campus Networks
- QoS Security on Aruba Campus Networks
- QoS Optimization on Aruba Campus Networks
- . QoS Automation on Aruba Campus Networks

## **After completing this module, students will be able to:**

- Understand the fundamentals of Quality of Service (QoS) and how it is used to prioritize network traffic.
- Configure QoS policies on Aruba Campus networks to ensure optimal performance.
- Troubleshoot and resolve QoS-related issues on Aruba Campus networks.
- Monitor and analyze QoS performance on Aruba Campus networks.

## **Module 12: Aruba Campus Network Troubleshooting and Maintenance**

Module 12 of the Aruba Certified Campus Access Professional course covers the troubleshooting and maintenance of Aruba campus networks. It provides an overview of the tools and techniques used to identify and resolve network issues, as well as how to maintain the network for optimal performance. The module also covers topics such as network security, monitoring, and troubleshooting.

### ***Lessons***

- Troubleshooting Common Campus Network Issues
- Understanding Aruba Campus Network Architecture
- Configuring and Troubleshooting Aruba Campus Network Security
- Managing and Maintaining Aruba Campus Network Devices
- Troubleshooting and Resolving Campus Network Performance Issues
- Implementing and Troubleshooting Campus Network Quality of Service
- Troubleshooting and Resolving Campus Network Connectivity Issues
- Troubleshooting and Resolving Campus Network Routing Issues
- Troubleshooting and Resolving Campus Network Access Control Issues
- Troubleshooting and Resolving Campus Network Mobility Issues

## **After completing this module, students will be able to:**

- Understand the fundamentals of Aruba Campus Network Troubleshooting and Maintenance.
- Identify and troubleshoot common issues related to Aruba Campus Network.
- Utilize the Aruba Campus Network Troubleshooting and Maintenance tools to diagnose and resolve network issues.
- Implement best practices for Aruba Campus Network maintenance and optimization.