



**Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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**Du kan nå oss här**

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# Implementing Aruba OS-CX Switching

CODE:	LENGTH:	PRICE:
ARU_IACS	40 Hours (5 days)	kr40,350.00

## Description

This course teaches you the advanced skills necessary to implement and operate enterprise level Aruba campus switching solutions. You will build on the skills you learned at the Associate level to configure and manage modern, open standards-based networking solutions using Aruba's OS-CX routing and switching technologies.

## Audience

IT professionals looking to build their networking knowledge and gain insight to campus switching solutions. That also includes Aruba Certified Mobility certification holders wanting to combine the deployment of campus switching and mobility solutions.

## Prerequisites

Experience and knowledge of the OSI Model, IP Addressing and Subnetting, TCP/UDP, VLANs, Spanning Tree and Routing would be beneficial.

## Programme

- Introduction to Aruba Switching
  - Switches overview
  - Architectures
- NetEdit
  - Overview
  - Centralized configuration
  - Switch groups/templates
  - AOS-CX mobile App
- Network Analytics Engine (NAE)
  - Overview
  - Configuration
  - Core NAE feature lab
  - sflow, local mirror, remote mirror
- VSX
  - VSF vs. VSX: access and Agg/core design
  - Stacking review
  - VSF and uni/multi packet forwarding
  - Stack fragments / split brain
  - VSX Overview: roles, control, data, management planes
  - VSX components (ISL, Keepalive, VSX LAG, Active Gateway, Active-Forwarding, Link Delay)
  - Split Brain scenario
  - Upstream Connectively Options (ROP single VRF, SVIs with multiple VRF, VSX Lag SVIs with multiple VRFs)
  - Upstream/Downstream unicast traffic flow (South-North and North-South)
  - VSX Configuration: VSX and Active Gateway
  - VSX firmware updates
- ACLs

- Overview: types, components
- MAC ACL, Standard ACL, Extended ACL,
- Classifier-based Policies
- Configuration: wildcard bits, logging, pacl, vacl, racl
- Advanced OSPF
  - Review basic OSPF
  - Multi area: setup and aggregation
  - Area-Types Stub, Totally Stub, NSSA, Totally NSSA
  - External routes
  - OSPF tuning: costs, bfd, gr, auth, vrrp, virt link
- BGP
  - Overview: i/e bgp, as numbers
  - Best path selection
  - Configuration: route announcement
  - Route filtering to prevent transit as
- IGMP
  - Overview
  - Querier
  - Snooping
  - Unknown multicasts
- Multicast Routing: PIM
  - Overview
  - PIM DM
- 802.1X Authentication
  - Overview: roles, requirements, coa, accounting
  - Dynamic port configuration: avp, acl, qos, VLAN
  - Port-based vs. user-based: examples
  - Radius service tracking, critical VLAN
- MAC Authentication
  - Overview: Use cases
  - Radius-based MAC Auth
- Dynamic Segmentation
  - Leverage dynamic segmentation features
  - Configure tunneled-node on AOS-CX switches
  - Describe when and how to configure PAPI enhanced security, high availability, and fallback switching for tunneled-node
- Quality of Service
  - Overview
  - VoQ (Virtual Output Queue)
  - QOS: queueing, QOS marks, dot1p, dscp
  - Trust levels
  - QOS configuration: port, VLAN, policies
  - Interaction with user roles
  - Queue configuration
  - Rate limiters
  - LLDP-MED
- Additional Routing Technologies
  - VRF - Management VRF
  - PBR
  - MDNS
  - PIM SM
- Captive Portal Authentication
  - Overview of guest solutions
  - Built-in web auth
  - ClearPass redirect with CPPM

## Session Dates

På begäran, [kontakta oss](#)

## Ytterligare information

[Denna utbildning finns också som utbildning på plats. Kontakta oss för mer information.](#)