# Arista Cloud Engineer Level 1 - Cloud Novice (ACE: L1)



Days: 5

**Description:** The ACE Level 1 course is designed to establish a firm foundation in open networking and Arista EOS. The engineer will progress through fundamental topics such as Ethernet, IP, Routing and Switching exposing them to the ease of configuration in the CLI. The course will build on these topics and introduce architectures built upon modern Leaf-Spine designs used in today's Enterprise Data Center and Campus environments. Engineers will be introduced to automation and Arista's CloudVision Solution.

**Audience:** The ACE Level 1 course is best suited for individuals entering the Network Engineering Field and looking to establish the core skills that Arista Customers desire. Job Changers, Interns, University Students and Transitioning Veterans will gain the needed skills to begin their career in Network Engineering. Engineers looking to cross over from other fields such as Server, Wireless, Storage, M&E Broadcast Engineers, DevOps and Application Designers will gain the required knowledge of modern Ethernet networks. Those individuals holding current or expired Associate certifications in other vendor programs will find a refreshed and updated approach. ACE:L1 focuses on foundational knowledge from an updated and modern perspective. You will not waste energy learning outdated technologies, approaches or tasks no longer used in open networks. All topics are used daily within every Arista Customer network.

#### **OUTLINE:**

## MODULE 1: NETWORK ENGINEERING FUNDAMENTALS

- OSI in Today's Networks
- Ethernet
- TCP and UDP
- IPv4
- Layer 1 Cabling Modern Connectivity

#### **MODULE 2: WORKING WITH ARISTA EOS**

- EOS Overview
- Initial Bootup
- EOS Images
- Zero Touch Provisioning (ZTP)
- Intro to CLI
- Configuring Basic Device Parameters
- Initial Switch Setup
- ARP
- IPv6
- VRRP-VARP

#### **MODULE 3: LAYER 2 OPERATIONS**

- MAC Learning
- VLANs and Trunk 802.1Q
- Spanning Tree PVST and MSTP
- LACP and MLAG
- Configuring Layer 2 Parameters in CLI

#### **MODULE 4: LAYER 3 OPERATIONS**

- Routing Fundamentals
- OSPF, IS-IS and BGP overview
- Configuring OSPF in a Leaf-Spine Design
- WAN Connectivity
- Internet Peering with a Service Provider
- Understanding IP Address Schemas

## MODULE 5: DATA CENTER LEAF-SPINE ARCHITECTURES

- Intro to Unified Cloud Networking (UCN)
- Comparing a Layer 2 vs Layer 3 Leaf-Spine
- VXLAN Overview
- BUM Traffic

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### **MODULE 6: CAMPUS ARCHITECTURES**

- WiFi Fundamentals
- Arista CloudVision for WiFi Overview
- Power over Ethernet (PoE)
- Leveraging a Leaf-Spine Architecture

### **MODULE 7: CLOUDVISION**

- Intro to CloudVision
- Configlet and Container Plan
- Installation and Initial Switch Behavior
- Change Control, Snapshots, and Rollbacks
- Day 2 Operations