

## Implementing Cisco Data Center Core Technologies (DCCOR) v1.2

- Implementing Data Center Switching Protocols\*
  - Spanning Tree Protocol
  - Port Channels Overview
- Implementing First-Hop Redundancy Protocols\*
  - Hot Standby Router Protocol (HSRP) Overview
  - Virtual Router Redundancy Protocol (VRRP) Overview
- Implementing Routing in Data Center\*
  - Open Shortest Path First (OSPF) v2 and Open Shortest Path Protocol (OSPP) v3
  - Border Gateway Protocol
- Implementing Multicast in Data Center\*
  - IP Multicast in Data Center Networks
  - Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD)
- Implementing Data Center Overlay Protocols
  - Cisco Overlay Transport Virtualization
  - Virtual Extensible LAN
- Implementing Network Infrastructure Security\*
  - User Accounts and Role Based Access Control (RBAC)
  - Authentication, Authorization, and Accounting (AAA) and SSH on Cisco NX-OS
- Describing Cisco Application-Centric Infrastructure
  - Cisco ACI Overview, Initialization, and Discovery
  - Cisco ACI Management
- Describing Cisco ACI Building Blocks and VMM Domain Integration
  - Tenant-Based Components
  - Cisco ACI Endpoints and Endpoint Groups (EPG)
- Describing Packet Flow in Data Center Network\*
  - Data Center Traffic Flows
  - Packet Flow in Cisco Nexus Switches
- Describing Cisco Cloud Service and Deployment Models
  - Cloud Architectures
  - Cloud Deployment Models
- Describing Data Center Network Infrastructure Management, Maintenance, and Operations\*
  - Time Synchronization
  - Network Configuration Management

## Lab Outline

- Configure Virtual Extensible LAN (VXLAN)
- Explore the Cisco ACI Fabric
- Implement Cisco ACI Access Policies and Out-of-Band Management
- Implement Cisco ACI Tenant Policies
- Integrate Cisco ACI with VMware
- Configure Fibre Channel
- Configure Device Aliases
- Configure Zoning
- Configure NPV
- Provision Cisco UCS Fabric Interconnect Cluster
- Configure Server and Uplink Ports
- Configure VLANs
- Configure a Cisco UCS Server Profile Using Hardware Identities
- Configure Basic Identity Pools
- Configure a Cisco UCS Service Profile Using Pools
- Configure an Internet Small Computer Systems Interface (iSCSI) Service Profile
- Configure Cisco UCS Manager to Authenticate Users with Microsoft Active Directory
- Configure Cisco Nexus Switches with Ansible
- Program a Cisco Nexus Switch with Python
- Automate Cisco Application-Centric Infrastructure Configuration