# IMPLEMENTING CISCO APPLICATION CENTRIC INFRASTRUCTURE – ADVANCED

**DURACION 42 HORAS (1 mes y 2 semanas)**
**(Clases: Lunes 02 horas, Miercoles 02 horas, Sabado: 3 horas)**

**After completing this course, you should be able to:**

- Explain Cisco ACI advanced fabric packet forwarding
- Explain advanced ACI policy and tenant configuration
- Describe Cisco ACI Multi-Pod deployment
- Explain the details and consideration of implementing and integrating traditional network with Cisco ACI
- Describe Cisco ACI Service Graph Policy-Based Redirect (PBR)
- Describe Cisco ACI Multi-site Deployment

## Chapter 01: Describing Cisco ACI Advanced Packet Forwarding

- Packet Forwarding Between Leaf Switches
- Endpoint Learning
- NIC Teaming to ACI Fabric
- Endpoint Learning Optimizations
- Endpoint Loop Protection
- Rogue Endpoint Control

## Chapter 02: Using Advanced Cisco ACI Policy and Tenant Configuration

- Layer 3 Outside Transit Routing
- Using Tenant Common for Shared Services
- Using VRF Route Leaking for Shared Services
- Using L3Out VRF Route Leaking for Shared Services
- Detailed Contract Architecture with pcTag
- Contract with vzAny
- Contract Preferred Group
- Contract Priorities

### Chapter 03:  Implementing Traditional Network in Cisco ACI

- Integrating Switched Network with Cisco ACI
- Migrating Existing Switched Network to Cisco ACI
- Network- vs. Application-Centric Deployment Models

### Chapter 04: Describing Cisco ACI Service Graph PBR

- Service Graph PBR Overview
- PBR End-to-End Packet Flow
- Service Graph PBR Requirements and Topologies
- Service Graph PBR Tracking Options

### Chapter 05: Describing Cisco ACI Multi-Pod Deployment

- Cisco ACI Multi-Pod Overview
- Inter-Pod Network Overview
- Multi-Pod Provisioning and Packet Flow Between Pods
- Connectivity to External Layer 3 Networks
- Service Node Integration Considerations
- Service Graph Considerations

### Chapter 06: Describing Cisco ACI MultiSite Deployment

- Cisco ACI MultiSite Overview
- Cisco Nexus Dashboard Considerations
- Intersite Network Overview
- Tenant Configuration Deployment from NDO
- Packet Flow Between Sites
- MultiSite Stretched Components
- MultiSite Vs Multi-Pod Comparsion

## Labs

- Examine Local and Remote Endpoint Learning **(Lab01)**
- Verify Bounce Entries **(Lab02)**
- Validate IP Learning **(Lab03)**

- Mitigate IP and MAC Flapping with the Rogue Endpoint Feature **(Lab04)**
- Enable Transit Routing **(Lab05)**
- Implement VRF Route Leaking **(Lab06)**
- Configure VRF Route Leaking with L3Out **(Lab07)**
- Examine Contracts and Zoning Rules **(Lab08)**
- Configure Policy-Based Redirect to Layer 4–7 Service Node **(Lab09)**
- Deploy Multi-Pod Fabric **(Lab10)**
- Provision Policies with Nexus Dashboard Orchestrator **(Lab11)**