350-401 ENCOR Exam: Implementing Cisco Enterprise Network Core Technologies

Exam Code	: 350-401
Hours	: 60 hours
Exam Prerequisites	: None
Course Prerequisites	: CCNA/JNCIA/or, equivalent

Classroom Outline

1. Understanding hierarchical network design model
2. Design small to large Enterprise Network with best practices
3. Understanding Cisco switching mechanisms
4. All about EIGRP
5. Understanding, implementing and optimizing OSPF
6. eBGP in details
7. Implementing Network Redundancy
8. Implementing NAT
9. Introducing Virtualization Protocols and Techniques
10. Understanding VPNs
11. Understanding VxLAN
12. Understanding LISP
13. Understanding Wireless Principles and
14. Wireless Deployment Options
15. Understanding Wireless Roaming and Location Services
16. Examining Wireless AP Operation, and Client Authentication
17. Troubleshooting Wireless Client Connectivity
18. Introducing Multicast Protocols
19. Introducing QoS
20. Implementing Network Services
21. Everything needs to know about Network Time Protocol (NTP)
22. Using Network Analysis Tools
23. Implementing Infrastructure Security
24. Understanding Enterprise Network Security Architecture
25. Examining the Cisco SD-Access Solution
26. Understanding the Working Principles of the Cisco SD-WAN Solution
27. Understanding the Basics of Python Programming
28. Introducing Network Programmability Protocols such as Chef, Puppet, Ansible, and SaltStack
29. Introducing APIs in Cisco DNA Center and vManage
30. Describe the high-level principles and benefits of a data modeling language, such as YANG

Classroom Labs

1. Understanding CAM and CEF
2. Troubleshoot VLAN and Trunk Issues
3. Tuning Spanning Tree Protocol (STP) and Configuring Rapid Spanning Tree Protocol (RSTP)
4. Configure Multiple Spanning Tree Protocol (MSTP)
5. Troubleshoot EtherChannel
6. Configure and verify SPAN/RSPAN/ERSPAN
7. In details configuration of OSPF with Multi-area environment
8. Implement OSPFv3
9. Configure and Verify EBGP (single-homed)
10. Implementing and Verify Hot Standby Routing Protocol (HSRP)
11. Configure Virtual Router Redundancy Protocol (VRRP)
12. Implement NAT/PAT
13. Configure and Verify Virtual Routing and Forwarding (VRF)
14. Configure and Verify a Generic Routing Encapsulation (GRE) Tunnel
15. Configure and Verify Configure IPsec VPN
16. Configure Syslog
17. Configure and Verify Flexible NetFlow
18. Configuring Cisco IOS Embedded Event Manager (EEM)
19. Troubleshoot Connectivity and Analyze Traffic with Ping, Traceroute, and Debug
20. Configure and Verify Cisco IP SLAs
21. Configure Standard and Extended ACLs
22. Configure Control Plane Policing
23. Implement Local and Server-Based AAA
24. Writing and Troubleshooting Python Scripts
25. Explore JavaScript Object Notation (JSON) Objects
26. Exploring NETCONF and RESTCONF