

CCNA VITS Customized

Part I: OSI and TCP/IP Model

- Layers and functions
- IPv4 addressing and Subnetting
- Transport Layer
 - TCP/IP Ports
 - Multiplexing
 - Data Recovery
- Encapsulation / De-Encapsulation

Part II: Switching

- History of networking devices
- Collision domain
- Broadcast domain
- Switching logic
- Connecting to Cisco Switch/Router using CLI
- Identify interface and cable issues (errors, mismatch duplex, speed)
- Basic CLI commands
- Configure Switch/Router to support Telnet/SSH
- VLAN
- Dynamic Trunking Protocol (DTP), VLAN Trunking Protocol (VTP) and Trunking
- Inter-VLAN routing using router and switch:
 - Trunk ports
 - Native VLAN
 - 802.1Q tagging
- Spanning Tree Protocol (STP) and Rapid PVST+ Spanning Tree Protocol
- Switchport PortFast and BPDU Guard
- EtherChannel
- Switchport Security
 - Configure and verify Layer 2 discovery protocols (CDP, LLDP)
 - Configure and verify Switchport Port Security

Part III: Routing

- Interpret the components of routing table
 - How routing table is built?
 - Next hop
 - Administrative distance
 - Metric
 - Gateway of last resort
- Static route
- Default route
- Routing Protocols for IPv4:
 - RIPv2

- OSPF
- EIGRP
- BGP
- Configure and verify inside source NAT using static and pools
- Implementing DHCP

Part IV: WAN Protocols

- HDLC
- PPP

Part V: First Hop Redundancy Protocol (FHRP)

- Hot Standby Router Protocol (HSRP) basic configuration

Part VI: IPv6 addressing

- **Routing Protocols:** RIPng, OSPFv3, EIGRP

Part VII: Device Security / Management

- Configure local device passwords
- IPv4 Access Control Lists (ACLs)
- Syslog and NTP
- Router password recovery

Note: 80% topics from Cisco's Global Certification Exam (200-301) are covered in this customized course.

Training Duration: 1.5-2 months *tentative*

Weekly 5 days: daily 1.5 - 2 hours

Training Fees: Rs.12,000/-

Topics Not Covered from Cisco Blue Print / Syllabus

- *Automation and Programmability*
- *Security Fundamentals*
- *Wireless LANs*
- *DHCP Snooping, ARP inspection*
- *QoS*
- *Network Architecture*
- *Network Automation*