NETWORKING – CCNP COURSE CONTENT

BASICS OF NETWORKING
ROUTE – (642-902)
Enhanced Interior Gateway Routing Protocols – EIGRP

- Establishing Neighbors
- Topology Table
- IP Routing Table
- Optimizing EIGRP Convergence
- Route Filtering
- Route Summarization
- Authetication

Open Shortest Path First – OSPF

- Planning
- Verification
- Configuration
- Neighbors
- Adjacencies Formation (on LAN & WAN)
- Link State Advt – LSAs
- Link State Database
- Route Filtering & Summerization
- Areas & Special Areas
- Authentication
- Virtual Links

Path Control

- Redistribution into EIGRP
- Redistribution into OSPF
- Redistribution with Distribute Lists
- Redistribution with Route Map
- Policy Based Routing – PBR

Border Gateway Protocol – BGP

- Internal BGP
- External BGP
- Neighbors
- Verifying BGP Tables
- Route Filtering

IPv6

- IPv6 Addressing
- IPV6 Routing
- Configuring IPv6 Address
- Tunnels

SWITCH
Building Campus Network (642-813)

- Layer 2 Switch
- Layer 3 Switch
- Tables used in Switching
- Switch port Configuration
- VLANs & VLAN Trunks & VTP
- Ether Channel
- STP & PVST+
- Adv. STP (RSTP & MST)
- Inter VLAN Routing
- Multi-Layer Switching (MLS)

Designing Campus Networks

- Hierarchical Network Design
- Modular Network Design
- Router Redundancy in Multilayer Switching
- HSRP
- VRRP
- GLBP

Campus Network Services

- IP Telephony
- Wireless LANs

Securing Switched Networks

- Port Security
- Port-based Authentication
- Mitigating Spoofing Attacks
- Best practices for Securing Switches

TSHOOT – (642-832)

- Securing Switched Networks
- Introduction to Network Maintenance
- Introduction to Troubleshooting Process
- Maintenance & Troubleshooting
- Basic & Adv. Cisco Catalyst Switch Troubleshooting
- Introduction to Troubelshooting Routing Protocols
- Security Troubleshooting
- IP Services Troubleshooting
- IP Communications Troubleshooting
- IPv6 Troubleshooting
- Advanced Services Troubleshooting
- Large Enterprise Network Troubleshooting