



<p>INTRO DUCTION TO CORE NETWORKING</p> <ul style="list-style-type: none"> ▣ Fundamentals of Networking ▣ OSI Reference Model & TCP/IP Protocol Suite ▣ Collision Domain & Broadcast Domain ▣ Ethernet Networking and Data Encapsulation <p>SUBNETTING</p> <ul style="list-style-type: none"> ▣ Operation of IP Data Networks ▣ Easy Subnetting ▣ VLSM/CIDR ▣ Summarization <p>CISCO'S INTERNETWORKING DEVICES</p> <ul style="list-style-type: none"> ▣ Introduction to CISCO Routers ▣ Basic configuration of router & switch ▣ What is cisco CLI ▣ Trouble shooting of cisco networks ▣ How to configure router & switch? <p>MANAGING CISCO INTERNETWORK</p> <ul style="list-style-type: none"> ▣ LAN Switching Technologies ▣ IP Routing Technologies ▣ Cisco IOS commands to perform basic router setup ▣ Verify router configuration and network connectivity ▣ IP Services ▣ Configure and verify DHCP (IOS Router) ▣ Boot process of cisco IOS ▣ IOS licensing ▣ Backup Restore of router & switch 	<p>CISCO IP ROUTING</p> <ul style="list-style-type: none"> ▣ Differentiate methods of routing and routing protocols ▣ Static vs. Dynamic ▣ Link State vs. Distance Vector ▣ Next hop/IP routing table ▣ Passive interfaces ▣ Configure and verify OSPF ▣ Neighbor adjacencies ▣ Configure and verify EIGRP ▣ Administrative distance & Metric Values <p>VLAN & INTERVLAN ROUTING</p> <ul style="list-style-type: none"> ▣ Configure and verify VLANs ▣ Configure and verify trunking on Cisco switches ▣ Configure and verify InterVLAN routing (on stick) ▣ Sub interfaces, Upstream routing ▣ Encapsulation, Configure SVI interfaces ▣ Troubleshoot and Resolve VLAN problems ▣ Troubleshoot and Resolve trunking problems on Cisco switches ▣ Correct trunk states <p>SECURITY (ACCESS CONTROLL LIST)</p> <ul style="list-style-type: none"> ▣ Introduction to Network Security ▣ IP Services ▣ Describe the types, features, and applications of ACLs ▣ How to configure Standard Extended & Named ACL's 	<p>NETWORK ADDRESS TRANSLATION (NAT)</p> <ul style="list-style-type: none"> ▣ Identify the basic operation of NAT ▣ How to configure Static & Dynamic NAT? ▣ How to configure PAT (Port address translation?) <p>INTERNET PROTOCOL VERSION-6 (IPV6)</p> <ul style="list-style-type: none"> ▣ Introduction to ipv6 ▣ Describe IPv6 addresses ▣ Global unicast ▣ Multicast/Link local ▣ Unique local/EUI -64 <p>ENHANCED SWITCHED TECHNOLOGIES (L2 SWITCHING)</p> <ul style="list-style-type: none"> ▣ VTP/STP/RSTP ▣ PVSTP ▣ Describe root bridge election ▣ Spanning-tree mode ▣ Root switch/Priority concepts <p>IP SERVICES</p> <ul style="list-style-type: none"> ▣ Recognize high availability (FHRP) ▣ VRRP/HSRP/GLBP ▣ Describe SNMP v2 & v3 ▣ Configure and verify Syslog ▣ Utilize Syslog Output <p>WIDE AREA NETWORK(WAN)</p> <ul style="list-style-type: none"> ▣ Identify different WAN Technologies ▣ Leased line ▣ Circuit switching/packet switching ▣ DSL & ADSL ▣ Frame-Relay ▣ ISDN ▣ PPP/HDLC encapsulation
---	---	---