Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR) v1.0

Course Outline

Examining Cisco Enterprise Network Architecture - Traditional and SPINE LEAF

Understanding Cisco Switching Paths and ARP

Building Redundant Switched Topology - HSRP

Implementing Layer 2 Port Aggregation PAGP

Implementing Layer 3 Port Aggregation LACP

Understanding EIGRP

EIGRP Load balancing – equal cost and unequal cost

EIGRP Summarization

Implementing OSPF

OSPF Virtual Links

Optimizing OSPF

OSPF DR & BDR Election

OSPF Stub and Totally Stub area

OSPF Not-SO-Stub Area and Totally Not-SO-Stub Area

OSPF Summarization

Redistribution between RIPv2, EIGRP and OSPF

Exploring EBGP.

Configuring Local Preference -BGP

Configuring MED - BGP

Configuring Route Reflectors -BGP

Changing BGP weight

Route filtering using prefix-list

Route filtering using Distribute list with ACL

Implementing Network Redundancy

Static NAT

Dynamic NAT

Port Address Translation

Implementing Campus LAN Connectivity and VLAN implementation

Understanding Virtual Private Networks and Interfaces

Introducing Virtualization Protocols and Techniques

Understanding Wireless Principles

Examining Wireless Deployment Options

Light weight Access point binding with WLC

Examining Wireless AP Operation

Understanding Wireless Client Authentication

Troubleshooting Wireless Client Connectivity with DHCP server

Introducing QoS

Using Network Analysis Tools - Basics of Wireshark

RIP V2 Authentication

EIGRP Authentication

OSPF Authentication

IPv6 Basic Configuration

IPv6 Stateless Address Auto-Configuration (SLAAC)

IPv6 Static Routing

IPv6 Default Routing

OSPFv3 using IPv6

EIGRPv6 using IPv6

GRE Tunneling

Passive Interface in OSPF

Passive Interface in EIGRP

Passive Interface in RIP

NTP- Network time protocol

IP SLA - Internet protocol service level agreement

Implementing Secure Access Control

Implementing Infrastructure Security - Basics of ASA Firewall

Basics of SD WAN

Multicasting PIM and dense mode

python programming for networking

JK ACADEMY