



Networking/CCNA

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CISCO CERTIFICATION

CONTENTS

Internetworking Overview

Basics of Network

LANs, WANs, and the Internet

Controllers (Cisco DNA Center and WLC)

Endpoints

Servers

Topologies

Network Topology Architectures

Describe small office/home office(SOHO)

2 tier ,3 tier Spine-leaf WAN

On-premises and cloud

Media

Types of network media, including

Coaxial cable, twisted-pair cable, fiber-optic cable.

Network Devices

Functions of various network devices

Routers, Switches and Hubs.

Configuring the Access points

Explain the next generation firewall and IPS

Compare TCP to UDP

IP Addressing and Subnetting

Types of Address

IP Address

Classes of IP Address

Configure and Verify the need of IP addressing and Subnetting

Difference between IP Version -IV & VI

Configure and Verify IP VI Address

Overview the need of private IP Address

Assigning IP Address Types



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Working with wireless Principle

- Non Overlapping Wifi Channels
- SSID
- RF
- Encryption

Overview of Switch Concepts

- Mac Learning and aging
- Frame switching
- Frame flooding
- Mac address Table

Configuring Virtual Networks

- VLAN Overview
- Implementing VLANs and VLAN Security
- Configure and verify Trunk ports
- 8021.Q
- Native VLAN

Router Fundamentals and Configurations

- Router Components
- Internal
- External
- Booting Process of a Router
- Interconnect operating systems
- Working with Command Line Interface
- Router Configuration

IP Routing and Routing Protocols

- Routing Overview
- Types of routing
- Different routing protocols
- Routing metrics
- Static routing

Routing Information Protocol (RIP)

- Rip configuration
- Rip / v2 configuration

Enhanced Interior Gateway Routing Protocol (EIGRP)

- Features and characteristics of EIGRP.
- Configure EIGRP



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Open Shortest Path First (OSPF)

- Overview of OSPF
- Router Coordination for OSPF
- Area Parameters
- Cisco OSPF Implementation

Cisco Discovery Protocol (CDP)

- Configure and verify Layer 2 protocols
- CDP, LLDP

Basic IP Traffic Management with Access Control lists

- Describe the types
- Features and applications of ACLs
- Configuring ACL for a host – for a Network
- Establishing serial Point to Point Connection

Address Translations (NAT/PAT)

- Basic Operation of NAT
- Configure Static Network Address Translation (NAT)
- Configure Dynamic NAT and Port Address Translation (PAT)
- Troubleshoot NAT

Cisco Virtual Private Network

- Describe VPN technology
- Importance of VPN
- Benefits & Role
- Impact & Components

Configuring DHCP

- Configure and verify DHCP

Teaching Contact Hours

- Total duration- 1 month, 6 days/week and 2 hours/day. Theory and Particles

Entry Requirements

- This course can be taken only by Technical and NON Technical Graduates.

How will this course enhance my career Growth?

- This course will help you become either one of the following,
 1. Desktop Engineer/IT Support Engineer
 2. System Administrator
 3. Cloud administrator



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4. Network Administrator
5. Network Analyst/ General manager IT and IMS

What Network and Computer Systems Administrators and cloud Administrator Do

Computer networks are critical parts of almost every organization. Network and computer systems administrators are responsible for the day-to-day operation of these networks.

Work Environment

Network and computer systems administrators work with the physical computer networks of a variety of organizations and therefore are employed in many industries.

How to Become a Network and Computer Systems Administrator?

Most employers require network and computer systems administrators to have a bachelor's degree in a field related to computer or information science. Others may require only an Graduation from any field

Students Benefits from SNIT

Training by Industry Experts on Real time scenarios

The steps to gets placed

1. Complete the Course
2. Resume preparation
3. Mock Interviews
4. Attend Interviews
5. Get Selection & Appointment letter

The Institute offers placement free of cost to those students who complete the entire curriculum successfully. As per the placement policies

- The Student shall only Pay the Institution fee for learning Subject not for Job
1. Depending on vacancies, a student may be offered a job at any location.
 2. Students will be supported for vacancies, once he is selected cannot refuse placement.
 3. Student will be placed at salaries which will be depends on their performance

Q. Does SNIT guarantee a job through its job assistance program?

Ans. SNIT does not guarantee any job through the job assistance program. However, we will definitely offer you full assistance by circulating your resume among different companies.