



## **Technocation Freelancing Training Institute And Software House**

### **CCST Networking Course Certification Module**

#### **MODULE 1: Introduction to Networking**

- Learn what a network is and why it's used.
- Understand how computers talk to each other.
- Explore different types of networks (LAN, WAN).
- Know the parts that make a network work.

#### **MODULE 2: Network Devices and Components**

- Study routers, switches, hubs, and cables.
- Learn how each device helps data move.
- See how Wi-Fi and wired networks connect.
- Understand IP cameras, printers, and servers.

#### **MODULE 3: IP Addressing and Subnetting**

- Learn what an IP address is.
- Understand IPv4 and IPv6 basics.
- Practice dividing networks into subnets.
- Know how to assign IPs correctly.

#### **MODULE 4: Network Topologies**

- Learn different shapes of networks (Star, Bus, Mesh).
- Understand how data travels in each design.
- Know which topology is best for which setup.
- Compare wired and wireless topologies.

#### **MODULE 5: OSI and TCP/IP Models**

- Understand the 7 OSI layers and their roles.
- Learn how data moves layer by layer.
- Study the TCP/IP model for real-world use.
- Match protocols with their layers.

## **MODULE 6: Routing and Switching Basics**

- Learn what routing and switching mean.
- Understand how data finds its best path.
- Explore static and dynamic routing.
- Practice simple switch configurations.

## **MODULE 7: Network Security Fundamentals**

- Learn about firewalls and antivirus tools.
- Understand how to protect data from attacks.
- Study common threats like malware and phishing.
- Know safe networking habits.

## **MODULE 8: Wireless Networking**

- Learn how Wi-Fi networks work.
- Understand SSID, frequency, and channels.
- Set up a secure wireless connection.
- Fix common Wi-Fi problems.

## **MODULE 9: Network Troubleshooting**

- Identify and fix simple network errors.
- Learn about ping, tracert, and other tools.
- Understand error messages and logs.
- Practice real troubleshooting cases.

## **MODULE 10: Network Protocols and Services**

- Learn key protocols like HTTP, FTP, DNS, DHCP.
- Understand how each helps data move smoothly.
- Know how to configure basic network services.
- Test and monitor protocol performance.

## **MODULE 11: Cloud and Virtual Networks**

- Understand what cloud networking is.
- Learn about virtual machines and networks.
- Know how cloud and on-site networks connect.
- Explore benefits like scalability and speed.

## **MODULE 12: Automation and Network Management**

- Learn about network monitoring tools.
- Understand automation and scripting basics.
- See how AI helps manage big networks.
- Practice using simple management software.

## **MODULE 13: Certification & Final Assessment**

- Review all networking topics learned.
- Take practice tests for CCST exam prep.
- Get tips for interview and real-world application.
- Receive your CCST Networking Certificate.

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