

GTC Training Consulting Group Ltd, 22 Kumasi Crescent, Off Aminu Kano Crescent, Wuse 2, Abuja. Tel: +234(0) 9056761232

Email: enquiries@thegtcgroup.com
Web: www.thegtcgroup.com

# Cisco Networking: Router Configuration, Troubleshooting and Security

#### **COURSE OVERVIEW**

This is a course that is dominantly practical as it provides hands-on training in the fundamentals of setting up, managing, and securing Cisco network routers. It covers essential security concepts, including access control, secure router configuration, and network threat prevention. Participants will learn how to configure routing protocols, manage IP addressing, and troubleshoot common network issues using Cisco tools and best practices. It has been designed to equip participants with the practical skills needed to support and secure Cisco-based network infrastructures in real-world environments.

#### WHO SHOULD ATTEND?

This course is ideal for network technicians, system administrators, IT support specialists, and aspiring network engineers who want to develop hands-on expertise in Cisco networking. It also benefits individuals preparing for Cisco certifications such as CCNA, as well as professionals responsible for configuring, maintaining, or securing enterprise networks. Delegates who are seeking to strengthen their troubleshooting and network security skills in Cisco environments will find this course especially valuable for advancing their careers in network infrastructure and IT operations.

## **COURSE OUTCOMES**

Delegates will gain the knowledge and skills to:

- Understand the basic functions and architecture of Cisco routers.
- Configure routers for static and dynamic routing using protocols like RIP, OSPF, and EIGRP.
- Implement IP addressing schemes and subnetting in network design.
- Troubleshoot routing and connectivity issues using Cisco CLI tools.
- Set up and manage router interfaces, routing tables, and access control lists (ACLs).
- Apply basic security measures to protect routers and network traffic.
- Identify and resolve common configuration errors and performance issues.
- Secure router access and configure encrypted remote management protocols.
- Understand best practices for maintaining and updating router firmware.
- Prepare for entry-level Cisco certifications and real-world networking roles.

### **KEY COURSE HIGHLIGHTS**

At the end of the course, you will understand;

- Cisco network fundamentals and router configuration
- IP addressing, routing protocols, and VLAN setup
- Basic troubleshooting and diagnostic tools
- Implementing network security on Cisco devices

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

- 1. A GTC end-of-course certificate
- 2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded











