

# **Understanding Networking Fundamentals (Network+)**

**Duration: 4 Days** Course Code: GK3150

#### Overview:

Take the course that over 50,000 networking professionals have taken to truly understand how networks function. This class will tie together all of the hardware and software components of today's computer networks. The in-depth lecture and 14 hands-on labs will enable each student to acquire the skills they need to design, install, and maintain their organization's LANs and WANs.

The course will ensure you know the basics of data networking. It is the foundation for preparing you for more advanced technology areas including IP Networking, Network Security, Wireless Integration, advanced Routing and Switching, Storage Networking, as well as product specific training such as Cisco, Nortel, and Microsoft. This is the ultimate, hands-on networking course to help you prepare for the real world with leading edge technologies, and a solid foundation to the more advanced networking topics you will face as an IT professional.

### **Target Audience:**

Network administrators, voice technicians, applications developers, help desk staff and all the various departments touched heavily by IT.

## Objectives:

 Understand how hubs, switches, and routers function and how they are installed and configured using Cisco equipment

Understand IP addressing works and how to perform subnetting

TCP/IP functions and is configured on devices

Capture and view live classroom network traffic using a protocol analyzer

Understand what various wireless options you have for your networks

Understand basic security and firewall issues

Ethernet works and how all of the various forms can be connected together  Use the basics of WAN services, including Frame Relay, T1 lines, ATM, and DSL

Understand the difference between frames and packets

Cat 5e UTP and fiber optic cables are installed

Set up a network at home for a home office and for your family

Understand VLANs function and are set up

Understand how NAT works and is used

Understand various routing protocols such as RIP, ISRP, and OSPF function and are set up.

#### Prerequisites:

There are no prerequisites for this course.

# **Testing and Certification**

This course prepares delegates for the CompTIA Network+ exam.

Follow-on-Courses:

Interconnecting Cisco Network Devices (ICND) or CCNA Fast Track Programme (CCNABC)

#### Content:

- Networking Standards
- Microsoft, Unix, and Linux Networking
- Network Cabling Systems
- Ethernet Overview
- IP Addressing Issues
- TCP/IP Protocols
- Switching
- Routing
- Network Security
- Wireless Networking
- WAN Overview
- WAN Services
- The Internet
- Networking Standards
- Microsoft, Unix, and Linux Networking
- Network Cabling Systems
- Ethernet Overview
- IP Addressing Issues
- TCP/IP Protocols
- Switching
- Routing
- Network Security
- Wireless Networking
- WAN Overview
- WAN Services
- The Internet
- Networking Standards
- Microsoft, Unix, and Linux Networking
- Network Cabling Systems
- Ethernet Overview
- IP Addressing Issues
- TCP/IP Protocols
- Switching
- Routing
- Network Security
- Wireless Networking
- WAN Overview
- WAN Services
- The Internet
- Networking Standards
- Microsoft, Unix, and Linux Networking
- Network Cabling Systems
- Ethernet Overview
- IP Addressing Issues
- TCP/IP Protocols
- Switching
- Routing
- Network Security
- Wireless Networking
- WAN Overview
- WAN Services
- The Internet

- Networking Standards
- Microsoft, Unix, and Linux Networking
- Network Cabling Systems
- Ethernet Overview
- IP Addressing Issues
- TCP/IP Protocols
- Switching
- Routing
- Network Security
- Wireless Networking
- WAN Overview
- WAN Services
- The Internet
- Networking Standards
- Microsoft, Unix, and Linux Networking
- Network Cabling Systems
- Ethernet Overview
- IP Addressing Issues
- TCP/IP Protocols
- Switching
- Routing
- Network Security
- Wireless Networking
- WAN Overview
- WAN Services
- The Internet
- Networking Standards
- Microsoft, Unix, and Linux Networking
- Network Cabling Systems
- Ethernet Overview
- IP Addressing Issues
- TCP/IP Protocols
- Switching
- Routing
- Network Security
- Wireless Networking
- WAN Overview
- WAN Services
- The Internet
- Networking Standards
- Microsoft, Unix, and Linux Networking
- Network Cabling Systems
- Ethernet Overview
- IP Addressing Issues
- TCP/IP Protocols
- Switching
- Routing
- Network Security
- Wireless Networking
- WAN OverviewWAN Services
- The Internet

www.globalknowledge.com/en-eg/

- Networking Standards
- Microsoft, Unix, and Linux Networking
- Network Cabling Systems
- Ethernet Overview
- IP Addressing Issues
- TCP/IP Protocols
- Switching
- Routing
- Network Security
- Wireless Networking
- WAN Overview
- WAN Services
- The Internet
- Networking Standards
- Microsoft, Unix, and Linux Networking
- Network Cabling Systems
- Ethernet Overview
- IP Addressing Issues
- TCP/IP Protocols
- Switching
- Routing
- Network Security
- Wireless Networking
- WAN Overview
- WAN Services
  The Internet
- Networking StandardsMicrosoft, Unix, and Linux Networking
- Network Cabling Systems
- = rectwork cabing c
- Ethernet OverviewIP Addressing Issues
- TCP/IP Protocols
- TCP/IP P
- Switching
- RoutingNetwork Security
- Wireless Networking
- WAN Overview
- WAN Services
- The Internet
- Networking Standards
- Microsoft, Unix, and Linux Networking
- Microsoft, Offix, and Ema
- Network Cabling Systems
- Ethernet OverviewIP Addressing Issues
- TCP/IP Protocols
- Switching
- Routing
- Network Security
- Wireless Networking
- WAN OverviewWAN Services
- The Internet

# Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142 training@globalknowledge.com.eg

www.globalknowledge.com/en-eg/

Global Knowledge, 16 Moustafa Refaat St. Block 1137, Sheraton Buildings, Heliopolis, Cairo