

Introduction to Networks

What You Will Study:

During this 70-hour course, learners will cover:

- Introduction to computer networks and network components
- Types of networks: LAN, WAN, WLAN, and Internet
- Network topologies and network architectures
- OSI and TCP/IP networking models
- Physical media and network cabling
- Ethernet concepts and switching basics
- IP addressing (IPv4 & IPv6) and subnetting fundamentals
- ARP, ICMP, and basic network protocols
- Introduction to routing concepts
- Network security fundamentals
- Hands-on labs using Cisco Packet Tracer
- Troubleshooting basic network connectivity issues

Course Outcomes

By the end of this course, learners will be able to:

- Explain how networks function and how devices communicate
- Identify and describe network components and their roles
- Configure basic network settings and IP addressing
- Understand data flow across networks
- Apply basic security concepts to network environments
- Prepare confidently for the next CCNA modules