



Networking Essentials

Detalles del curso:

Duración: 70 horas

Modalidad: Online

Información e inscripción:

685 457 610 - 615 844 193

formacion@laberit.com

LĀBERIT

CENTRO DE
FORMACIÓN TIC.

Introducción

Este curso enseña conocimientos y habilidades intermedios para la red, ya que abarca conceptos y habilidades básicos necesarios para crear una red de oficina doméstica y una red de oficina pequeña.

¿Por qué hacer este curso?

Desarrolla una comprensión básica de la arquitectura de red de alto nivel y cómo funciona una red.

Objetivos didácticos

- Para desarrolladores, ciberseguridad, analistas comerciales u otros profesionales: obtenga conocimientos esenciales de redes.
- Para los estudiantes: un punto de partida para muchas carreras profesionales, desde ciberseguridad hasta software, negocios y más.

Programa

1. Communications in a Connected World

- Introduction
- Network Types
- Data Transmission
- Bandwidth and Throughput
- Clients and Servers
- Network Components
- Communications in a Connected World Summary

2. Online Connections

- Introduction
- Wireless Networks
- Local Network Connections
- Network Documentation

- Online Connections Summary

3. Explore Networks with Packet Tracer

- Introduction
- Packet Tracer Network Simulator
- Packet Tracer Installation
- The Packet Tracer User Interface
- Packet Tracer Network Configuration
- Explore Networks with Packet Tracer Summary

4. Build a Simple Network

- Introduction
- Network Media Types
- Ethernet Cabling
- Coaxial and Fiber-Optic Cabling
- Twisted-Pair Operation
- Verify Connectivity
- Build a Simple Network Summary

5. Communication Principles

- Introduction
- The Rules
- Communication Standards
- Network Communication Models
- Ethernet
- Communication Principles Summary

6. Network Design and the Access Layer

- Introduction
- Encapsulation and the Ethernet Frame
- Hierarchical Network Design
- The Access Layer
- Broadcast Containment
- Network Design and Access Layer Summary

7. Routing Between Networks

- Introduction

- The Need for Routing
- The Routing Table
- Create a LAN
- Routing Between Networks Summary

8. The Internet Protocol

- Introduction
- Purpose of the IPv4 Address
- Binary Conversion of an IPv4 Address
- The IPv4 Address Structure
- Classful IPv4 Addressing
- Public and Private IPv4 Addresses
- Unicast, Broadcast and Multicast Addresses
- The Internet Protocol Summary

9. Dynamic Addressing with DHCP

- Introduction
- Static and Dynamic Addressing
- DHCPv4 Configuration
- Dynamic Addressing with DHCP Summary

10. IPv4 and IPv6 Address Management

- Introduction
- Network Boundaries
- Network Address Translation
- IPv4 Issues
- IPv6 Features
- IPv4 and IPv6 Address Management Summary

11. Transport Layer Services

- Introduction
- The Client Server Relationship
- TCP and UDP
- Port Numbers
- Transport Layer Services Summary

12. Application Layer Services

- Introduction
- Network Application Services
- Domain Name System
- Web Clients and Servers
- FTP Clients and Servers
- Virtual Terminals
- Email and Messaging
- Application Layer Services Summary

13. Build a Home Network

- Introduction
- Home Network Basics
- Network Technologies in the Home
- Wireless Standards
- Wireless Traffic Controls
- Set Up a Home Router
- Build a Home Network Summary

14. Connect to the Internet

- Introduction
- ISP Connectivity Options
- Network Virtualization
- Mobile Device Connectivity
- Connect to the Internet Summary

15. Security Considerations

- Introduction
- Security Threats
- Social Engineering Attacks
- Malware
- Denial of Service
- Security Tools
- Antimalware Software
- Security Considerations Summary

16. Configure Network and Device Security

- Introduction
- Wireless Security Measures
- Implement Wireless Security
- Configure a Firewall
- Configure Network and Device Security Summary

17. Cisco Switches and Routers

- Introduction
- Cisco Switches
- Switch Boot Process
- Cisco Routers
- Router Boot Process
- Cisco Switches and Routers Summary

18. The Cisco IOS Command Line

- Introduction
- Navigate the IOS
- The Command Structure
- View Device Information
- The Cisco IOS Command Line Summary

19. Build a Small Cisco Network

- Introduction
- Basic Switch Configuration
- Configure Initial Router Settings
- Secure the Devices
- Connecting the Switch to the Router
- Build a Small Cisco Network Summary

20. Troubleshoot Common Network Problems

- Introduction
- The Troubleshooting Process
- Physical Layer Problems
- Troubleshooting Commands
- Troubleshoot Wireless Issues
- Common Internet Connectivity Issues

Curso de Networking Essentials

- Customer Support
- Troubleshoot Common Network Problems Summary

Acreditado:

Microsoft **Imagine Academy**
Program Member

Fundación Estatal 
PARA LA FORMACIÓN EN EL EMPLEO

LABORA
Servei Valencià d'Ocupació i Formació

CertiProf® | Partner

 **Pearson**
VUE
Authorised
Test Centre


A PEARSON VUE BUSINESS
AUTHORIZED TESTING CENTER