GALILEU

HCIA Routing & Switching

Huawei

- **Nível:** Intermédio
- **Duração:** 70h

Sobre o curso

With **HCIA certification**, you demonstrate a basic understanding of small and medium-sized networks, including general network technologies, and the ability to assist the design of small and medium-sized networks, and implement the designs using Huawei routing and switching devices.

This 10 day HCIA Routing & Switching course prepares you for the H12-211 exam.

Objetivos

- On completion of this program, the participants will be able to:
  - Navigate and manage Huawei products through the virtual routing platform (VRP).
  - Build efficient data switching environments through the management of switching products and manipulation of related (STP/RSTP) link layer protocols.
  - Explain the principles of routing and configure (RIP/OSPF) routing protocols for implementation and support of effective enterprise network routing solutions.
  - Establish solutions for enterprise network administration and management through application layer services including DHCP, FTP and Telnet.
  - Establish a fundamental network capable of supporting basic communications.
  - Enhance link layer performance the through implementation of features and services including link aggregation, VLAN technologies and GVRP.
  - Manage and support Wide Area Network communications over serial links for a range of technologies including HDLC, PPP, PPPoE and Frame Relay.
  - Apply Network Address Translation (NAT) solutions for private networks.
  - Provide effective IP security solutions using various security architectures including Access Control Lists (ACL), AAA, and IPSec with GRE support solutions.
  - Describe solutions for unified enterprise network management, including SNMP and Huawei eSight NMS technology solutions.
  - Establish truly business capable enterprise networks for real-world industries.

Destinatários

- Those who wish to become a Huawei Certified ICT Associate.
- For those who possess basic IT skills, but lack knowledge of IP networks.

Pré-requisitos

- A working knowledge of IT technologies.

Programa

CIA Routing&Switching Entry

- Establishing a Single Switched Network
- FTP Protocol Principles
- Rapid Spanning Tree Protocol
- RIP Static Route
- Basic Knowledge of TCP/IP
- Basic Knowledge of IP Routing
- DHCP Protocol Principles
- Link State Routing with OSPF
- Introduction to the VRP
- Spanning Tree Protocol
- Telnet Protocol Principles

HCIA Routing&Switching Intermediate

- Advanced switching technologies
- Ipv6 Application Service – DHCPv6
- Segment Routing basic principle
- IPv6 Routing Technologies
- Introducing IPv6 Networks
- Principles and Configuration of PPPoE
- MPLS basic principle
- Introduction to Network Management
- Introduction to Access Contro
- Principles and Configuration of HDLC and PPP

HCIA Routing&Switching Entry

- Establishing a Single Switched Network
- FTP Protocol Principles
- Rapid Spanning Tree Protocol
- RIP Static Route
- Basic Knowledge of TCP/IP
  - Introduction to Transmission Media
  - Ethernet framing
  - IP addressing
  - ICMP protocol
  - ARP protocol
  - Transport layer protocol
  - Data forwarding Scenario
- Basic Knowledge of IP Routing
- DHCP Protocol Principles
- Link State Routing with OSPF
- Introduction to the VRP
  - VRP Foundation
  - Navigating the CLI
  - File System Navigation and Management
  - VRP Operating system Image management
- Spanning Tree Protocol
- Telnet Protocol Principles

HCIA Routing&Switching Intermediate

- Advanced switching technologies
  - Link aggregation
  - VLAN Principle
  - VLAN Routing
- Ipv6 Application Service – DHCPv6
- Segment Routing basic principle
- IPv6 Routing Technologies
- Introducing IPv6 Networks
- Principles and Configuration of PPPoE
- MPLS basic principle
- Introduction to Network Management
  - Simple Network Management Protocol
- Introduction to Access Control
  - Network address translation

- Access control list
- AAA
- Securing Data with IPsec VPN
- Generic Routing Encapsulation
- Principles and Configuration of HDLC and PPP