

## FAST TRACK: Cisco Certified Network Professional - CCNP

Varighet: 10 Days    Kurskode: CCNPFT

### Beskrivelse:

The Cisco Certified Network Professional - Fast Track (CCNPFT) course is designed to cover the knowledge and skills required to achieve the Cisco CCNP certification in an accelerated timeframe. This course combines content from the 3 courses that make up the CCNP certification: ROUTE, SWITCH and TSHOOT.

This is an intensive course with up to ten hours of instruction every day.

### Målgruppe:

**This course is designed for:** Experienced Network Engineers who wish to gain Cisco CCNP accreditation. This is an intensive accelerated

### Agenda:

- **After you complete this course you will be able to:**
- Analyze campus network designs
- Implement VLANs in a network campus
- Implement spanning tree
- Implement inter-VLAN routing in a campus network
- Implement a highly available network
- Implement security features in a switched network
- Integrate WLANs into a campus network
- Plan and document the configuration of routing protocols in enterprise network
- Implement EIGRP routing in diverse, large-scale internetworks
- Implement OSPF multiarea routing in a complex enterprise network
- Implement Route redistribution in a multiprotocol network
- Evaluate common network performance issues
- Implement BGP to connect an enterprise network to a service provider
- Plan and document the most commonly performed maintenance functions in complex enterprise networks
- Develop a troubleshooting process to identify and resolve problems in complex enterprise networks
- Select tools that best support specific troubleshooting and maintenance processes
- Practice maintenance procedures and fault resolution in switching-based environments and routing-based environments
- Practice maintenance procedures and fault resolution in a secure infrastructure

### Forkunnskaper:

Attendees should meet the following prerequisites:

- Interconnecting Cisco Networking Devices Part 1 (ICND1)
- Interconnecting Cisco Networking Devices Part 2 (ICND2)

### Test og sertifisering

Recommended as preparation for exams:

- **642-902** - Implementing Cisco IP Routing
  - **642-813** - Implementing Cisco IP Switched Networks
  - **642-832** - Troubleshooting and Maintaining Cisco IP Networks
- Delegates looking to achieve the **Cisco Certified Network Professional Certification (CCNP)** will need to take and pass all three of the above exams.*

## Innhold:

### Analyzing Campus Network Designs

- Enterprise Campus Architecture
- Cisco Lifecycle and Network Implementation

### Implementing VLANs in Campus Networks

- Applying Best Practices for VLAN Topologies
- Configuring Private VLANs
- Configuring Link Aggregation with EtherChannel

### Implementing Spanning Tree

- Spanning Tree Protocol Enhancements
- Describing STP Stability Mechanisms

### Implementing Inter-VLAN Routing

- Describing Routing Between VLANs
- Deploying Multilayer Switching with Cisco Express Forwarding

### Implementing Layer 3 High Availability

- Configuring Layer 3 Redundancy with HSRP
- Configuring Layer 3 Redundancy with VRRP and GLBP

### Minimizing Service Loss and Data Theft in a Campus Network

- Understanding Switch Security Issues
- Protecting Against VLAN Attacks
- Protecting Against Spoofing Attacks
- Securing Network Services

### Accommodating Voice and Video in Campus Networks

- Planning for Support of Voice in a Campus Network
- Integrating and Verifying VoIP in a Campus Infrastructure
- Working with Specialists to Accommodate Voice and Video on Campus Switches

### Integrating Wireless LANs into a Campus Network

- Comparing WLANs with Campus Networks
- Assessing the Impact of WLANs on Campus Networks
- Preparing the Campus Infrastructure for WLANs
- Integrate Wireless in the Campus

### Planning Routing Services to Requirements

- Assessing Complex Enterprise Network Requirements
- Creating an Implementation Plan and Documenting the Implementation

### Implementing an EIGRP based Solution

- Planning Routing Implementations with EIGRP
- Implementing and Verifying Basic EIGRP for the Enterprise LAN Architecture
- Configuring and Verifying EIGRP for the Enterprise WAN Architecture
- Implementing and Verifying EIGRP Authentication
- Advanced EIGRP Features in an Enterprise Network

### Implementing a Scalable Multiarea Network OSPF Based Solution

- Planning Routing Implementations with OSPF as the Scalable Routing Protocol
- How OSPF Packet Processes Work
- Improving Routing Performance in a Complex Enterprise Network
- Configuring and Verifying OSPF Routing
- Configuring and Verifying OSPF Route Summarization
- Configuring and Verifying OSPF Special Area Types
- Configuring and Verifying OSPF Authentication

### Implement an IPv4-based Redistribution Solution

- Assessing Network Routing Performance and Security Issues
- Operating a Network Using Multiple IP Routing Protocols
- Configuring and Verifying Route Redistribution

### Implementing Path Control

- Assessing Path Control Network Performance Issues

### Connection of an Enterprise Network to an

### Planning Maintenance for Complex Networks

- Applying Maintenance Methodologies
- Common Maintenance Processes and Procedures
- Network Maintenance Tools, Applications, and Resources

### Selecting Maintenance and Troubleshooting Tools and Applications

- Applying Troubleshooting Methodologies
- Planning and Implementing Troubleshooting Procedures
- Integrating Troubleshooting into the Network Maintenance Process

### Planning Troubleshooting Processes for Complex Enterprise Networks

- Assembling a Basic Diagnostic Toolkit Using Cisco IOS Software
- Using Specialized Maintenance and Troubleshooting Tools

### Maintaining and Troubleshooting Campus Switching-Based Problems

- Troubleshooting VLANs
- Troubleshooting Spanning Tree
- Troubleshooting Switched Virtual Interfaces and Inter-VLAN Routing
- Troubleshooting FHRPs
- Troubleshooting Performance Problems on Switches

### Maintaining and Troubleshooting Routing Based Solutions

- Troubleshooting Network Layer Connectivity
- Troubleshooting EIGRP
- Troubleshooting OSPF
- Troubleshooting Route Redistribution
- Troubleshooting BGP
- Troubleshooting Performance Problems on Routers

### Maintaining and Troubleshooting Network Security Solutions

- Troubleshooting Security Features
- Security Features Review

## ISP Network

- Planning the Enterprise-to-ISP Connection
- Considering the Advantages of Using BGP
- Comparing the Functions and Uses of EBGP and IBGP
- Configuring and Verifying Basic BGP Operations
- Using the BGP Attributes and Path Selection Process

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### Ytterligere informasjon:

For mer informasjon eller kursbooking, vennligst ring oss 22 95 66 00

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