CCNP BOOT CAMP
CISCO CERTIFIED NETWORK PROFESSIONAL

FEATURES

The CCNP curriculum helps students develop the skills needed to succeed in networking-related degree and diploma programs and prepare for the Cisco CCNP certification. It provides a theoretically rich, hands-on learning experience covering advanced routing, switching, and troubleshooting.

The curriculum offers the following features and benefits:
• Provides an in-depth, theoretical overview of advanced routing and switching and troubleshooting complex enterprise networks
• Builds on the Cisco CCNA Discovery and CCNA Exploration courses with more complex network configurations, diagnosis, and troubleshooting
• Experience-oriented courses employ industry-relevant instructional approaches to prepare students for professional jobs in the industry
• Students gain significant hands-on interaction with networking equipment to prepare them for certification exams and career opportunities
• Hands-on labs and case studies help students apply what they learn and develop critical thinking and complex problem-solving skills

Course Description

CCNP equips students with the knowledge and skills needed to plan, implement, secure, maintain, and troubleshoot converged enterprise networks. The curriculum consists of three courses:

CCNP ROUTE: Implementing IP Routing,
CCNP SWITCH: Implementing IP Switching
CCNP TSHOOT: Maintaining and Troubleshooting IP Networks

CCNP ROUTE: Implementing IP Routing

This course teaches students how to implement, monitor, and maintain routing services in an enterprise network. Students will learn how to plan, configure, and verify the implementation of complex enterprise LAN and WAN routing solutions, using a range of routing protocols in IPv4 and IPv6 environments. The course also covers the configuration of secure routing solutions to support branch offices and mobile workers. Comprehensive labs emphasize hands-on learning and practice to reinforce configuration skills.
### Chapter Goals

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<th>Chapter</th>
<th>Goals</th>
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<tbody>
<tr>
<td>• Routing Services</td>
<td>• Explain complex network requirements and design models for implementing advanced routing services in an enterprise network</td>
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<tr>
<td>• Configuring the Enhanced Interior Gateway Routing Protocol</td>
<td>• Implement EIGRP in an enterprise network</td>
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<tr>
<td>• Configuring the Open Shortest Path First Protocol</td>
<td>• Implement OSPF in an enterprise network</td>
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<tr>
<td>• Manipulating Routing Updates</td>
<td>• Implement various mechanisms for controlling routing updates and traffic</td>
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<tr>
<td>• Implementing Path Control</td>
<td>• Implement path control using IP SLA and PBR</td>
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<tr>
<td>• Implementing a Border Gateway Protocol Solution for ISP connectivity</td>
<td>• Implement BGP to allow an enterprise network to connect to an ISP</td>
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<tr>
<td>• Implementing Routing Facilities for Branch Offices and Mobile Workers</td>
<td>• Describe a basic implementation for branch office and mobile worker connectivity</td>
</tr>
<tr>
<td>• Implementing IPv6 in an Enterprise Network</td>
<td>• Describe and configure IPv6 in an enterprise network</td>
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**CCNP SWITCH: Implementing IP Switching**

This course teaches students how to implement, monitor, and maintain switching in converged enterprise campus networks. Students will learn how to plan, configure, and verify the implementation of complex enterprise switching solutions. The course also covers the secure integration of VLANs, WLANs, voice, and video into campus networks. Comprehensive labs emphasize hands-on learning and practice to reinforce configuration skills.

### Chapter Goals

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<thead>
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<tr>
<td>• Analyzing the Cisco Enterprise Campus Architecture</td>
<td>• Assess the structure and components used to build or expand an enterprise campus network</td>
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<tr>
<td>• Implementing VLANs in Campus Networks</td>
<td>• Implement VLANs in campus networks</td>
</tr>
<tr>
<td>• Implementing Spanning Tree Protocol</td>
<td>• Implement, monitor, and maintain spanning tree protocol in an enterprise campus network</td>
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<tr>
<td>• Implementing InterVLAN Routing</td>
<td>• Implement, monitor, and maintain interVLAN routing in an enterprise campus network</td>
</tr>
<tr>
<td>• Implementing High Availability and Redundancy in a Campus Network</td>
<td>• Configure and optimize high availability on switches to provide Layer 3 redundancy</td>
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<tr>
<td>• Securing the Campus Infrastructure</td>
<td>• Describe and implement LAN security features</td>
</tr>
<tr>
<td>• Preparing the Campus Infrastructure for Advanced Services</td>
<td>• Plan and prepare for advanced services in a campus infrastructure</td>
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CCNP TSHOOT: Maintaining and Troubleshooting IP Networks

This course teaches students how to monitor and maintain complex, enterprise routed and switched IP networks. Skills learned include the planning and execution of regular network maintenance, as well as support and troubleshooting using technology based processes and best practices, based on systematic and industry recognized approaches. Extensive labs emphasize hands-on learning and practice to reinforce troubleshooting techniques.

<table>
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<th>Chapter</th>
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<tr>
<td>• Planning Maintenance for Complex Networks</td>
<td>• Plan and document the most common maintenance functions in complex enterprise networks</td>
</tr>
<tr>
<td>• Troubleshooting Processes for Complex Enterprise Networks</td>
<td>• Develop a troubleshooting process to identify and solve problems in complex enterprise networks</td>
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<tr>
<td>• Using Maintenance and Troubleshooting Tools and Applications</td>
<td>• Select tools that best support specific troubleshooting and maintenance processes in large, complex enterprise networks</td>
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<tr>
<td>• Maintaining and Troubleshooting Campus Switched Solutions</td>
<td>• Practice maintenance procedures and fault resolution in switched environments</td>
</tr>
<tr>
<td>• Maintaining and Troubleshooting Routing Solutions</td>
<td>• Practice maintenance procedures and fault resolution in routing environments</td>
</tr>
<tr>
<td>• Troubleshooting Addressing Services</td>
<td>• Troubleshoot NAT/PAT, DHCP, and other services</td>
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<tr>
<td>• Troubleshooting Network Performance Issues</td>
<td>• Identify and troubleshoot network performance issues</td>
</tr>
<tr>
<td>• Troubleshooting Converged Networks</td>
<td>• Troubleshoot wireless connectivity, VoIP, and video</td>
</tr>
<tr>
<td>• Maintaining and Troubleshooting Network Security Implementations</td>
<td>• Practice maintenance procedures and fault resolution in a secure infrastructure</td>
</tr>
<tr>
<td>• Review and Preparation for Troubleshooting Complex Enterprise Networks</td>
<td>• Practice maintenance procedures and fault resolution in a complex environment</td>
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COURSE FEE is BDT 15,000/- [10% Discount for AIUB student]