



## Networking Courses

No other skill is more vital to business operations than networking because, as you know, the network connects *everything!* Rapid advances in technologies, such as automation and artificial intelligence (AI), are radically changing the way networks are designed, built, and managed. This creates huge demand for new skills for networking professionals. Of the business leaders surveyed, 60% believe IT is leading the organization's business transformation strategy, yet 93% of executives say the current skills gap is preventing their businesses from transforming fast enough.<sup>1</sup>

Employers today require technology professionals with a broad range of knowledge as well as deep specialized skills. Our networking courses develop these critical technical skills while incorporating innovative methods that improve student outcomes.

| Course                         | Networking Essentials  | CCNAv7: Introduction to Networks (ITN)  | CCNAv7: Switching, Routing, and Wireless Essentials (SRWE)  |
|--------------------------------|--|---|---|
| <b>Course Overview</b>         | Introduces networking skills based on daily environments, including small office and home office (SOHO) networking. Course provides hands-on learning using real equipment and Cisco Packet Tracer simulation activities.        | The first course in the CCNA curriculum introduces the architectures, models, protocols, and networking elements that connect users, devices, applications and data through the Internet and across modern computer networks - including IP addressing and Ethernet fundamentals. | The second course in the CCNA curriculum focuses on switching technologies and router operations that support small-to-medium business networks and includes wireless local area networks (WLAN) and security concepts. |
| <b>Benefits</b>                | Students develop skills required to obtain entry-level SOHO network installer jobs, develop some skills needed to become network technicians, cable installers, and help desk technicians, or continue with the CCNA curriculum. | By the end of the course, students can build simple local area networks (LAN) that integrate IP addressing schemes, foundational network security, and perform basic configurations for routers and switches.   | Students learn key switching and routing concepts. They can perform basic network configuration and troubleshooting, identify and mitigate LAN security threats, and configure and secure a basic WLAN.                 |
| <b>Target Audience</b>         | Secondary and 2-year college vocational students, college and university students in non-IT fields   | Secondary vocational students, 2-year and 4-year college students in Networking or Engineering  | Secondary vocational students, 2-year and 4-year college students in Networking or Engineering  |
| <b>Prerequisites</b>           | None   | None  | CCNAv7: ITN (recommended)   |
| <b>Certification Alignment</b> | No   | <a href="#">Cisco Certified Networking Associate (CCNA)</a>   | <a href="#">Cisco Certified Networking Associate (CCNA)</a>   |
| <b>Additional Details</b>      | <ul style="list-style-type: none"> <li>Instructor training required</li> <li>Instructor-led</li> <li>70 hours</li> </ul>   | <ul style="list-style-type: none"> <li>ASC alignment required</li> <li>Instructor training required</li> <li>Instructor-led</li> <li>70 hours</li> </ul>  | <ul style="list-style-type: none"> <li>ASC alignment required</li> <li>Instructor training required</li> <li>Instructor-led</li> <li>70 hours</li> </ul>  |
| <b>Next Course(s)</b>          | CCNAv7: ITN, Introduction to IoT   | CCNAv7: SRWE  | CCNAv7: ENSA  |



| Course                         | CCNAv7: Enterprise Networking, Security, and Automation (ENSA)  | CCNP Routing & Switching (R&S) Curriculum  |
|--------------------------------|---|--|
| <b>Course Overview</b>         | <p>The third course in the CCNA curriculum describes the architectures and considerations related to designing, securing, operating, and troubleshooting enterprise networks. This course covers wide area network (WAN) technologies and quality of service (QoS) mechanisms used for secure remote access along with the introduction of software-defined networking, virtualization, and automation concepts that support the digitalization of networks.</p>  | <p>The CCNP Routing &amp; Switching Curriculum includes 3 courses:</p> <ol style="list-style-type: none"> <li>1. CCNP R&amp;S ROUTE: Implementing IP Routing</li> <li>2. CCNP R&amp;S SWITCH: Implementing IP Switched Networks</li> <li>3. CCNP R&amp;S TSHOOT: Troubleshooting and Maintaining IP Networks</li> </ol> <p>This course series provides a comprehensive overview of enterprise-level networking concepts, including advanced routing, switching, and troubleshooting.</p> |
| <b>Benefits</b>                | <p>Students gain skills to configure and troubleshoot enterprise networks, and learn to identify and protect against cybersecurity threats. They are introduced to network management tools and learn key concepts of software-defined networking, including controller-based architectures and how application programming interfaces (APIs) enable network automation.</p> <p>By the end of the CCNA course series, students gain practical, hands-on experience preparing them for the CCNA certification exam and career-ready skills for associate-level roles in the Information &amp; Communication Technologies (ICT) industry.</p> | <p>The CCNP R&amp;S curriculum integrates industry-relevant instructional approaches preparing students for career opportunities. Students gain hands-on practical experience, preparing them for CCNP R&amp;S certification, and career-ready skills in advanced routing, switching, and troubleshooting.</p>   |
| <b>Target Audience</b>         | <p>2-year and 4-year college students in Networking or Engineering</p>  | <p>4-year college students in Networking or Engineering programs</p>   |
| <b>Prerequisites</b>           | <p>CCNAv7: SRWE (recommended)</p>   | <p>CCNAv7: ITN, CCNAv7: SRWE, CCNAv7: ENSA</p>   |
| <b>Certification Alignment</b> | <p><a href="#">Cisco Certified Networking Associate (CCNA)</a></p>  | <p><a href="#">Cisco Certified Networking Professional (CCNP)</a></p>  |
| <b>Additional Details</b>      | <ul style="list-style-type: none"> <li>• ASC alignment required</li> <li>• Instructor training required</li> <li>• Instructor-led</li> <li>• 70 hours</li> </ul>  | <ul style="list-style-type: none"> <li>• ASC alignment required</li> <li>• Instructor training required</li> <li>• Instructor-led</li> <li>• 3 courses for 210 hours</li> </ul>  |
| <b>Next Course(s)</b>          | <p>CCNP Routing &amp; Switching</p>   |  |