

# Network Routing & Switching I

CSIS - 1250 501

## Course Description

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This course covers the first two Cisco courses of the CCNA certification. The course covers the architecture, structure, functions and components of the Internet and other computer networks and covers the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts. It is recommended students complete CSIS 1200, possess CompTIA Network+ Certification, or have equivalent knowledge prior to taking this course.

Semester: Fall & Spring

## Course Student Learning Outcomes

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- Categorize and route network traffic.
- Learn Cisco CCENT level skills necessary to administer routers and switches.
- Use Cisco's tools to create and analyze dynamic networking environments.

## Course Prerequisites

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This course does not have any pre-requisites, but we do recommend CSIS-1200 (Introduction to Networking).

## Transfer/Certification/Licensure/Employment Information

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This course prepares you for completing the Cisco CCNA certification.

## Engagement Plan

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- I will respond to email within 24hrs. I will offer feedback on major assignments within one week after the due date. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.
- In this course I will be posting interactive announcements which will offer specific opportunities for class questions and extra credit every other week.
- Additionally, I will be participating in the discussion forums with you to share my perspective within the discipline and to offer some nuances of interpretation that may not be present in your textbook.
- Lastly, we'll be holding small group Q & A sessions, where we can learn from our peers (and faculty) on some of the more difficult units within the course.

## Keys for Success (how to succeed in the course)

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Stay current with all assignments and exams.

## Course Content Advisory

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Follow the instructions closely within the Canvas course.

## Brief Description of Assignments/Exams

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All assignments and exams are accessed through the Cisco Networking Academy.

## Assignment Schedule

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Due Date	Assignment Name	Assignment Type	Points
	<a href="#">2nd Course</a>	Discussion	0
	<a href="#">Introduce Yourself</a>	Discussion	0

Due Date	Assignment Name	Assignment Type	Points
	<a href="#">Netlab usernames and passwords</a>	Discussion	0
8/26/25	<a href="#">Introduce Yourself</a>	Discussion	10
8/27/25	<a href="#">Orientation Quiz</a>	Quiz	5
8/29/25	<a href="#">1.5.5 Packet Tracer - Network Representation</a>	Assignment	100
9/1/25	<a href="#">2.3.7 Packet Tracer - Navigate the IOS</a>	Assignment	100
9/1/25	<a href="#">2.5.5 Packet Tracer - Configure Initial Switch Settings</a>	Assignment	72
9/1/25	<a href="#">2.7.6 Packet Tracer - Implement Basic Connectivity</a>	Assignment	88
9/1/25	<a href="#">2.9.1 Packet Tracer - Basic Switch and End Device Configuration</a>	Assignment	98
9/4/25	<a href="#">3.5.5 Packet Tracer - Investigating the TCP/IP and OSI Models in Action</a>	Assignment	100
9/5/25	<a href="#">Modules 1-3 Basic Network Connectivity and Communication Exam</a>	Assignment	100
9/7/25	<a href="#">4.6.5 Packet Tracer - Connect a Wired and Wireless LAN</a>	Assignment	80

Due Date	Assignment Name	Assignment Type	Points
9/7/25	<a href="#">4.7.2 Packet Tracer - Connect the Physical Layer</a>	Assignment	51
9/17/25	<a href="#">Modules 4-7 Ethernet Concepts Exam</a>	Assignment	100
9/18/25	<a href="#">Module 14 Discussion</a>	Discussion	20
9/22/25	<a href="#">9.2.9 Packet Tracer - Examine the ARP Table</a>	Assignment	100
9/25/25	<a href="#">10.1.4 Packet Tracer - Configure Initial Router Settings</a>	Assignment	80
9/25/25	<a href="#">10.3.4 Packet Tracer - Connect a Router to a LAN</a>	Assignment	54
9/25/25	<a href="#">10.3.5 Packet Tracer - Troubleshoot Default Gateway Issues</a>	Assignment	100
9/26/25	<a href="#">Modules 8-10 Communicating Between Networks Exam</a>	Assignment	100
9/28/25	<a href="#">11.5.5 Packet Tracer - Subnet an IPv4 Network</a>	Assignment	23
9/28/25	<a href="#">11.7.5 Packet Tracer - Subnetting Scenario</a>	Assignment	30

Due Date	Assignment Name	Assignment Type	Points
9/28/25	<a href="#">11.9.3 Packet Tracer - VLSM Design and Implementation Practice</a>	Assignment	30
10/1/25	<a href="#">12.6.6 Packet Tracer - Configure IPv6 Addressing</a>	Assignment	52
10/1/25	<a href="#">12.9.1 Packet Tracer - Implement a Subnetted IPv6 Addressing Scheme</a>	Assignment	42
10/4/25	<a href="#">13.2.6 Packet Tracer - Verify IPv4 and IPv6 Addressing</a>	Assignment	100
10/4/25	<a href="#">13.2.7 Packet Tracer - Use Ping and Traceroute to Test Network Connectivity</a>	Assignment	100
10/5/25	<a href="#">Modules 11-13 IP Addressing Exam</a>	Assignment	100
10/7/25	<a href="#">14.8.1 Packet Tracer - TCP and UDP Communications</a>	Assignment	100
10/11/25	<a href="#">Modules 14-15 Network Application Communications Exam</a>	Assignment	100
10/13/25	<a href="#">16.4.6 Packet Tracer - Configure Secure Passwords and SSH</a>	Assignment	213

Due Date	Assignment Name	Assignment Type	Points
10/13/25	<a href="#">16.5.1 Packet Tracer - Secure Network Devices</a>	Assignment	98
10/16/25	<a href="#">17.5.9 Packet Tracer - Interpret Show Command Output</a>	Assignment	100
10/16/25	<a href="#">17.8.2 Packet Tracer - Skills Integration Challenge</a>	Assignment	128
10/17/25	<a href="#">Modules 16-17 Building and Securing a Small Network Exam</a>	Assignment	100
10/21/25	<a href="#">Final Exam for Introduction to Networks</a>	Assignment	200
10/24/25	<a href="#">1.3.6 Packet Tracer - Configure SSH</a>	Assignment	100
10/24/25	<a href="#">1.4.7 Packet Tracer - Configure Router Interfaces</a>	Assignment	100
10/24/25	<a href="#">1.5.10 Packet Tracer - Verify Directly Connected Networks</a>	Assignment	25
10/30/25	<a href="#">3.1.4 Packet Tracer - Who Hears the Broadcast?</a>	Assignment	100
10/30/25	<a href="#">3.2.8 Packet Tracer - Investigate a VLAN Implementation</a>	Assignment	100

Due Date	Assignment Name	Assignment Type	Points
10/30/25	<a href="#">3.3.12 Packet Tracer - VLAN Configuration</a>	Assignment	94
10/30/25	<a href="#">3.4.5 Packet Tracer - Configure Trunks</a>	Assignment	80
10/30/25	<a href="#">3.6.1 Packet Tracer - Implement VLANs and Trunking</a>	Assignment	45
10/30/25	<a href="#">3.6.2 Lab - Implement VLANs and Trunking</a>	Assignment	100
11/2/25	<a href="#">4.2.8 Lab - Configure Router-on-a-Stick Inter-VLAN Routing</a>	Assignment	100
11/2/25	<a href="#">4.3.8 Packet Tracer - Configure Layer 3 Switching and Inter-VLAN Routing</a>	Assignment	24
11/2/25	<a href="#">4.5.2 Lab - Implement Inter-VLAN Routing</a>	Assignment	100
11/3/25	<a href="#">Modules 1-4: Switching Concepts, VLANs, and InterVLAN Routing Exam</a>	Assignment	100
11/5/25	<a href="#">5.1.9 Packet Tracer - Investigate STP Loop Prevention</a>	Assignment	100
11/8/25	<a href="#">6.2.4 Packet Tracer - Configure EtherChannel</a>	Assignment	100

Due Date	Assignment Name	Assignment Type	Points
11/8/25	<a href="#">6.3.4 Packet Tracer - Troubleshoot EtherChannel</a>	Assignment	100
11/8/25	<a href="#">6.4.2 Lab - Implement Etherchannel</a>	Assignment	100
11/9/25	<a href="#">Modules 5-6: Redundant Networks Exam</a>	Assignment	100
11/11/25	<a href="#">7.2.10 Packet Tracer - Configure DHCPv4</a>	Assignment	103
11/11/25	<a href="#">7.4.1 Packet Tracer - Implement DHCPv4</a>	Assignment	34
11/11/25	<a href="#">7.4.2 Lab - Implement DHCPv4</a>	Assignment	100
11/14/25	<a href="#">8.5.1 Lab - Configure DHCPv6</a>	Assignment	100
11/17/25	<a href="#">9.3.3 Packet Tracer - HSRP Configuration Guide</a>	Assignment	10
11/18/25	<a href="#">Modules 7-9: Available and Reliable Networks Exam</a>	Assignment	100
11/23/25	<a href="#">11.1.10 Packet Tracer - Implement Port Security</a>	Assignment	100
11/23/25	<a href="#">11.6.1 Packet Tracer - Switch Security Configuration</a>	Assignment	134



Due Date	Assignment Name	Assignment Type	Points
11/23/25	<a href="#">11.6.2 Lab - Switch Security Configuration</a>	Assignment	100
11/29/25	<a href="#">13.1.10 Packet Tracer - Configure a Wireless Network</a>	Assignment	20
11/29/25	<a href="#">13.2.7 Packet Tracer - Configure a Basic WLAN on the WLC</a>	Assignment	9
11/29/25	<a href="#">13.3.12 Packet Tracer - Configure a WPA2 Enterprise WLAN on the WLC</a>	Assignment	29
11/29/25	<a href="#">13.4.5 Packet Tracer - Troubleshoot WLAN Issues</a>	Assignment	6
11/30/25	<a href="#">Modules 10-13: L2 Security and WLANs Exam</a>	Assignment	100
12/2/25	<a href="#">14.3.5 Packet Tracer - Basic Router Configuration Review</a>	Assignment	98
12/5/25	<a href="#">15.6.1 Packet Tracer - Configure IPv4 and IPv6 Static and Default Routes</a>	Assignment	16
12/5/25	<a href="#">15.6.2 Lab - Configure IPv4 and IPv6 Static and Default Routes</a>	Assignment	100

Due Date	Assignment Name	Assignment Type	Points
12/8/25	<a href="#">16.3.1 Packet Tracer - Troubleshoot Static and Default Routes</a>	Assignment	100
12/8/25	<a href="#">16.3.2 Lab - Troubleshoot IPv4 and IPv6 Static and Default Routes</a>	Assignment	100
12/10/25	<a href="#">Modules 14-16: Routing Concepts and Configuration Exam</a>	Assignment	100
12/13/25	<a href="#">Final Exam for Switching, Routing, and Wireless Essentials Course</a>	Assignment	200

## Grading Scale

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A 94-100%; A- 90-93.99%

B+ 87-89.99%; B 84-86.99%; B- 80-83.99%

C+ 77-79.99%; C 74-76.99%; C- 70-73.99%

D+ 67-69.99%; D 64-66.99%; D- 60-63.99%

E 0-59.99%

## How to Navigate to Canvas

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## Online Tutoring

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Students at SLCC have access to online tutoring through Canvas. From your Canvas course click Online Tutoring in the course navigation and follow the steps to set up an appointment. If this is your first time using the Online Tutoring we recommend you click "Take a Tour" to familiarize yourself with the service.

Note that students only receive 480 minutes of tutoring time each semester. After that we encourage you to use the resources found through this link:

<https://www.slcc.edu/tutoring/index.aspx>

If you have any additional questions reach out to [elarningsupport@slcc.edu](mailto:elarningsupport@slcc.edu).

## Institutional Policies

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As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the [Institutional Syllabus](#) page.

## Learning Support and Tutoring Services

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We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the [Institutional Syllabus](#) page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

## Advising and Counseling Support Services

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At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the [Institutional Syllabus](#) page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

## Student Academic Calendar

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As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)

## Additional Policies

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None