

# COMPUTER INFORMATION SYSTEMS - NETWORK INFRASTRUCTURE TECHNOLOGIES/CCNA, SHORT-TERM TECHNICAL CERTIFICATE

Curriculum Code #6606

Effective May 2024

Division of Engineering, Business and Information Technologies (<http://catalog.lorainccc.edu/academic-programs/engineering-business-information-technologies/>)

The short-term technical certificate in network infrastructure technology provides the certificate holder a foundation in the support and implementation of data communication networks. The certificate demonstrates that the student has developed an understanding and hands-on competence in local area wireless and wide-area network technologies which are deployed throughout the diversity of organizations. Students who have completed the certificate can apply network implementation and troubleshooting skills to converged networks that support voice, video and data while adhering to fundamental security guidelines. Successful completion of the certificate will prepare students to take the Cisco Certified Network Association (CCNA) exam. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

Code	Title	Hours
CISS 121	MICROCOMPUTER APPLICATIONS I	3
CISS 125	OPERATING SYSTEM INTERFACES <sup>1</sup>	3
CISS 165	CISCO CCNA V7 INTRODUCTION TO NETWORKING <sup>1</sup>	3
CISS 166	CISCO CCNA V7 LOCAL AREA NETWORK OPERATIONS <sup>1</sup>	3
CISS 167	CISCO CCNA V7 ROUTING AND WIDE AREA NETWORK OPERATIONS <sup>1</sup>	3
CISS 145	LOCAL AREA NETWORKS <sup>1</sup>	4
SDEV 101	INTRODUCTION TO THE LCCC COMMUNITY <sup>2</sup>	1
<b>Total Hours</b>		<b>20</b>

1

Indicates that this course has a prerequisite.

2

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of thirteen or more credit hours.

While completion of this certificate may aid in obtaining employment, many employers recommend the minimum completion of a computer

information systems degree program to gain employment in an IT-related field.

Program Contact(s):

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For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (<https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling/>).

More program information can be found on our website. (<https://www.lorainccc.edu/it/network-systems/computer-information-systems-network-infrastructure-technologiesccna-short-term-certificate/>)

Credit for Prior Learning (PLA) options may be available for your program. For more information, please visit our website: [www.lorainccc.edu/PLA](http://www.lorainccc.edu/PLA) (<http://www.lorainccc.edu/PLA/>)

Program Learning Outcomes

1. Describe the conceptual framework and the importance of the OSI 7-layer model
2. Describe the role and configuration elements of a local area network switch
3. Explain the role and characteristics of network media, copper, fiber and wireless.
4. Explain the role and configuration characteristics of a router.
5. Construct an integrated network using routers and switches properly configured.