

COMPUTER INFORMATION SYSTEMS - NETWORK SECURITY FOUNDATIONS, SHORT-TERM TECHNICAL CERTIFICATE

Curriculum Code #6609

Effective May 2025

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

This short term certificate in network security will provide the certificate holder with essential networking knowledge to understand how networks are built and the potential security risks that are inherent in all networks.

The completion of this certificate demonstrates knowledge of network equipment, topology and configuration fundamentals. Students who complete this certificate are well-prepared with the knowledge to pursue a number of cyber security topics.

Preferred Sequence

Semester I		Hours
CISS 121	MICROCOMPUTER APPLICATIONS I	3
CYBR 252	IT SECURITY CONCEPTS	4
SDEV 101	INTRODUCTION TO THE LCCC COMMUNITY ²	1
Hours		8
Semester II		
CISS 125	OPERATING SYSTEM INTERFACES ¹	3
Hours		3
Semester III		
CISS 145	LOCAL AREA NETWORKS ¹	4
Hours		4
Semester IV		
CISS 165	CISCO CCNA V7 INTRODUCTION TO NETWORKING ¹	3
CYBR 251	CYBER DEFENSE METHODS ¹	3
Hours		6
Semester V		
CISS 155	FUNDAMENTALS OF NETWORK SECURITY ¹	3
Hours		3
Total Hours		24

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 12 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.

Student will need access to free Cisco Academy account, and a minimal cost Infosec Learning account.

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/computer-security/computer-information-systems-network-security-foundations-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/>)

1. Describe the role of various network components in building a secure infrastructure and the role a network engineer takes in building a secure network.
2. Describe the risk elements that are inherent in an organizations network topology and implementation.
3. Demonstrate Information Technology infrastructure knowledge, techniques, and fundamental skills utilizing operating systems and networks.