Lake Superior College
A member of Minnesota State

REMEMBER TO REGISTER EARLY

Program Description

The Computer Networking Certificate is designed to prepare participants with foundation level skills for a job in computer networking. Students are prepared for CompTIA (A+, Network+, Security+), and Cisco RSTECH.

This 30-credit certificate seamlessly transfers to the Network Administration and Cybersecurity Diploma (58 credits) and the AAS (72 credits).

Program Outcomes

- Perform PC configuration and maintenance tasks, including hardware and OS installation and troubleshooting, and configuration for network services
- Describe the OSI Reference Model, layered communications principles, and routing, bridging and switching principles and devices, and use these concepts effectively in verbal and written communication
- Manage Cisco router hardware and the Cisco Internet Operating System (IOS), including planning, installation, configuration, management, upgrading and troubleshooting of routers and switches
- Analyze organizational networking needs, and design and implement Local Area and Wide Area Networks (LANs and WANs), including hardware and software configuration and management, and security (access control)

Required Courses

Number	Name	Credits	Term
CIS 1402*	Foundations of CIS	3	
CIS 1521*	A+ Operating Systems Technologies	3	
CIS 1522*	A+ Core Hardware	3	
CIS 1946*	CISCO Networking I	3	
CIS 1950*	Windows Client Administration	3	
CIS 1745*	UNIX System Administration	3	
CIS 1810*	Security Fundamentals	3	
CIS 1947*	CISCO Networking II	3	
CIS 1952*	Windows Server Administration	3	
Technical Electives *CIS 1500** CIS 2560* CIS 2811* CIS 2812* CIS 2813* CIS 2814* CIS 2815* CIS 2973*	Choose one of the following: Computer User Support Web Server Administration Intrusion Detection and Prevention Systems Fundamentals Network Security Forensics and Incident Response Ethical Hacking and Systems Defense Cloud Computing Server Virtualization	3	

Total Credits   **30**

*Requires a prerequisite or a concurrent course

Pre-program Requirements

Successful entry into this program requires a specific level of skill in the areas of English/reading and mathematics.

English/Reading:
- Eligible for ENGL 1106 - College Composition I, or
- Completion of ENGL/READ 0950/0955 (or equivalent or higher). ENGL/READ 0950/0955 may be taken concurrently with Semester I coursework.

Mathematics:
- Eligible for MATH 0970 - Intermediate Algebra, or
- Completion of MATH 0950/0955 (or equivalent or higher). MATH 0950/0955 may be taken concurrently with Semester I coursework.

There are other ways to qualify. Visit Course Placement (lsc.edu/course-placement) to find out more.

For interpretation of test results and selection of appropriate coursework; or general information about the program, admissions, financial aid, and getting started at LSC, contact the professional advising team (advising@lsc.edu) or 218-733-7601

For more information about the Network Administration and Security Certificate including course descriptions, course prerequisites, the program report, and potential career opportunities, see the program website (https://www.lsc.edu/degrees/network-administration-and-security-ccna-certificate/)

or

Contact Faculty Advisors