



Network Administration and Security Certificate - 30 credits

Program Area: Computer Information Systems (Fall 2016)

*****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+), Microsoft MCP, and Cisco CCENT.

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)

Pre-program Requirements

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

English/Reading:

- A score of 78 or higher on the reading comprehension portion of the Accuplacer, or
- Completion of ENGL/READ 0950 or 0955 (or equivalent course or higher). ENGL/READ 0955 may be taken concurrently with Semester I coursework.

Mathematics:

- A score of 71 or higher on the **Elementary Algebra Skills** portion of the Accuplacer, or
- Completion of MATH 0460 (or equivalent course or higher). MATH 0460 can be taken concurrently with Semester I coursework.

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	Network Administration: Windows Client	3	
CIS 1745	Network Administration: UNIX	3	
CIS 1810*	Network Administration: Security	3	
CIS 1947*	CISCO Networking II	3	
CIS 1952*	Network Administration: Windows Server	3	
<i>Choose one of the following Technical Electives:</i>			
CIS 1500*: Computer User Support			
CIS 2972*: Network Administration: SQL			
CIS 2560*: Web Server Administration			
CIS 2811*: Intrusion Detection and Prevention Systems Fundamentals		3	
CIS 2812*: Network Security Fundamentals			
CIS 2813*: Network Forensics and Incident Response			
CIS 2814*: Ethical Hacking and Systems Defense			
CIS 2973*: Network Administration: Server Virtualization			
TOTAL CREDITS		30	

**Requires a prerequisite or a concurrent course*



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*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 at pat@lsc.edu or 218-733-7601*

For more information about the Network Administration and Security Certificate including course descriptions, course prerequisites, the gainful employment disclosure, and potential career opportunities, see program Website: <https://degrees.lsc.edu/ccna/>

- or -

Contact Faculty Advisors, Tom Gustafson: t.gustafson@lsc.edu or 218-733-7773;
Valarie McLain: v.mclain@lsc.edu or 218-733-7778



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