



## Cyber Security Certificate - 18 credits

Program Area: Computer Information Systems (Fall 2017)

**\*\*\*REMEMBER TO REGISTER EARLY\*\*\***

### Program Description

The Cyber Security certificate is designed to prepare participants with prior computer experience or a previous networking degree with fundamental requisite security concepts and best practices required to implement, administer, and harden operating systems. The curriculum in this program will help prepare students for the EC-Council Certified Ethical Hacker (CEH) certification.

*The 18-credit Cyber Security Certificate transfers seamlessly into LSC's Cyber Defense Certificate (30 credits), Network Administration and Security Diploma (58 credits), and AAS degree (72 credits).*

### Program Outcomes

- Determine the factors involved in developing a secure information security strategy
- Describe and identify common security threats and attacks and describe how to safeguard against them
- Apply a common ethical hacking methodology to carry out a penetration test and describe how to implement countermeasures for these types of attacks

### Required Courses

Number	Name	Credits	Term
CIS 1402	Foundations of CIS	3	
CIS 1810*	Network Administration: Security	3	
CIS 2811*	Intrusion Detection/Prevention Systems Fundamentals	3	
CIS 2812*	Network Forensics and Incident Response	3	
CIS 2813*	Network Security Fundamentals	3	
CIS 2814*	Ethical Hacking and Systems Defense	3	

**Total Credits** **18**

\*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:

- 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 may be taken concurrently with Semester I coursework.

*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](mailto:pat@lsc.edu) or 218-733-7601*



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For more information about the Cyber Security Certificate (18 credits) including course descriptions, course prerequisites, the gainful employment disclosure, and potential career opportunities, see program Website: <https://degrees.lsc.edu/cyber-security/>

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Contact Faculty Advisors, Tom Gustafson: [t.gustafson@lsc.edu](mailto:t.gustafson@lsc.edu) or 218-733-7773,  
Valarie McLain: [v.mclain@lsc.edu](mailto:v.mclain@lsc.edu) or 218-733-7763



MINNESOTA STATE

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