



## Cyber Security Certificate - 18 credits

Program Area: Computer Information Systems (Fall 2022)

\*\*\*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*	Security Fundamentals	3	
CIS 2811*	Intrusion Detection/Prevention Systems Fundamentals	3	
CIS 2812*	Network Security	3	
CIS 2813*	Forensics and Incident Response	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:

- 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](http://lsc.edu/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](mailto:advising@lsc.edu) (advising@lsc.edu) or 218-733-7601



**Cyber Security Certificate - 18 credits**  
Program Area: Computer Information Systems (Fall 2022)

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

---

For more information about the Cyber Security Certificate including course descriptions, course prerequisites, the program report, and potential career opportunities, see the [program website](https://degrees.lsc.edu/cyber-security/) (https://degrees.lsc.edu/cyber-security/)

or

Contact Faculty Advisors, [Tom Gustafson](mailto:thomas.gustafson@lsc.edu) (thomas.gustafson@lsc.edu) at 218-733-7773 or [Matthew McCullough](mailto:matthew.mccullough@lsc.edu) (matthew.mccullough@lsc.edu) at 218-733-6943



MINNESOTA STATE

CIP Code: 11.1001  
Minnesota State Program ID: 13-477-2016  
LSC Major ID: 1562

Created: 12/2/15  
AASC Approval: 2/17/21  
Updated: 2/1/22

*All courses in diploma and/or certificate programs are acceptable for credit toward Lake Superior College degree programs as indicated on individual program planners. This is not a contract; Lake Superior College reserves the right to change the planner as necessary. This document is available in alternative formats upon request, by contacting [Disability Services](#) or (218) 733-7650 or MRS/TTY (800) 627-3529.*