Twin Cities Campus

Cyber Security Minor
Technological Leadership Institute
College of Science and Engineering

Link to a [list of faculty](#) for this program.

Contact Information:
Technological Leadership Institute, University of Minnesota, 290 McNamara Alumni Center, 200 Oak Street SE, Minneapolis MN 55455 (612-624-5474; fax: 612-624-7510)
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- Program Type: Graduate free-standing minor
- Requirements for this program are current for Fall 2019
- Length of program in credits (Masters): 8
- Length of program in credits (Doctorate): 12
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The minor in the Cyber Security program is administered by the Technological Leadership Institute (TLI) in the College of Science and Engineering. The program integrates the fields of technology, security, and management, to provide students with the skills and insights to assume a leadership role in cyber security, or continue their field of study with a focus on cyber security and its role in organizations.

The curriculum applies fundamental concepts of business management, organizational leadership, and risk management techniques and strategies, each as applied in the context of cyber security, to empower engineering, technology, and business professionals to adapt and lead in the emerging field of cyber security. Each class will include exercises that inform students on those cyber security topics, and give them an opportunity to practice the fundamental skills of communications, teamwork, and project management.

Program Delivery
This program is available:
- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission
The preferred undergraduate GPA for admittance to the program is 3.00.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements
Use of 4xxx courses towards program requirements is not permitted.

Required Courses
  These core courses are designed to be taken in sequence.
  ST 8661 - Securing Cyberspace (Fundamentals) (3.0 cr)
  ST 8662 - Securing Cyberspace - Advanced (3.0 cr)

Program Sub-plans
Students are required to complete one of the following sub-plans.
Students may not complete the program with more than one sub-plan.

Masters
Elective Courses
  Take 2 or more credit(s) from the following:
  - ST 8113 - Information and Cyber Security (2.0 cr)
  - ST 8513 - Cyber Threat Intelligence (2.0 cr)

- CSCI 5271 - Introduction to Computer Security (3.0 cr)
- CSCI 5471 - Modern Cryptography (3.0 cr)
- CSCI 8271 - Security and Privacy in Computing (3.0 cr)

Doctoral

Elective Courses

Take 6 or more credit(s) from the following:
- ST 8113 - Information and Cyber Security (2.0 cr)
- ST 8513 - Cyber Threat Intelligence (2.0 cr)
- CSCI 5271 - Introduction to Computer Security (3.0 cr)
- CSCI 5471 - Modern Cryptography (3.0 cr)
- CSCI 8271 - Security and Privacy in Computing (3.0 cr)