

# Cybersecurity Minor

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## About

The Department of Computing Sciences seeks to provide outstanding education, to advance scholarship, and to engage in activities that benefit society as a whole, in accordance to the University mission. The Department aims to equip students with a solid foundation in computer science, and to prepare them for lifelong independent learning and innovative thinking in a constantly changing discipline. Its faculty members strive to maintain professional currency, and to involve students and colleagues in their research investigations. These endeavors support the University mission to transmit, pursue, and discover knowledge in an atmosphere of collegiality in the university community. Supported by a liberal arts education, the Department seeks to develop the total person, sensitive to social and ethical concerns affected by the computing discipline, and committed to addressing the needs of a diverse and interconnected modern society.

**Program:** [Computing Sciences](#)

**Type:** Minor

## MINOR: Cybersecurity (25 credits)

Offered jointly through the Departments of Computing Sciences in the College of Liberal Arts and Sciences and Electrical and Computer Engineering in the College of Engineering. The program provides students with a solid foundation in the principles of cybersecurity; equips students with the technical skills and knowledge to address constantly evolving cybersecurity threat; promotes independent study and self-reliance so students can keep pace with rapid technological advancement; and prepares graduates to enter the workforce as cybersecurity professionals

### *Program Notes:*

- Courses that fulfill minor requirements may be used to fulfill other requirements (i.e., primary major, core curriculum, minors, concentrations, or free electives).
- Computer Science majors: at least two of the courses taken for the minor may *not* also be applied to the major. They must be used as free electives.
- Topics, capstone, and independent study courses must be in the cybersecurity area and approved by the cybersecurity minor curriculum committee.

Course	Title	Credits
	Overview of Cybersecurity	2-3
	Algorithms & Data Structures	8
CSC 1300	Discrete Structures	3
	Core Cybersecurity Electives	9
	Cybersecurity Networks Course	3

## Category Descriptions

### Overview of Cybersecurity

Credits: 2-3

Select one option from those listed.

## Cybersecurity

Course	Title	Credits
CSC 3010	Overview of Cybersecurity	3

## Digital Life Technology

Course	Title	Credits
VIA 2111	Digital Life Technology I	1.5
VIA 2112	Digital Life Technology II	1.5

### Algorithms & Data Structures

Credits: 8

- Students must select one option from CSC 1051 or ECE 1260 & ECE 1261.
- Students must select one option from CSC 1052 or ECE 2160 & ECE 2161.

Course	Title	Credits
	CSC 1051 or ECE 1260 & 1261	4
	CSC 1052 or ECE 2160 & 2161	4

## Core Cybersecurity Electives

Credits: 9

Select three courses from among those listed.

- Topics courses with distinct content may be repeated for additional credit.
- Student can request permission from the Cybersecurity committee to use other courses related to computing as an elective.

Course	Title	Credits
CSC 3080	Info Security & Protection	3
CSC 4450	Digital Forensics	3
ECE 5478	Eng Secure Cyber-Physical Sys	3
ECE 5900	Special Topics	3
CSC 5930	Topics Computer Science	3
CSC 5993	Independent Study	3

## Cybersecurity Networks Course

Credits: 3

Select one course from those listed below.

Course	Title	Credits
CSC 4900	Networks and Security	3
ECE 3180	Computer Networks	3
ECE 3476	Computer and Network Security	3