

# CYBERSECURITY, A.S.

## Overview

The Cybersecurity Associate of Science Degree is designed to equip students with the technical and theoretical knowledge necessary to secure and defend computer systems, networks, and data from cyber threats. This comprehensive program prepares graduates for entry-level positions such as Cybersecurity Analyst, Network Security Specialist, System Administrator, and Ethical Hacker by providing a strong foundation in information security, network administration, ethical hacking, and systems analysis. Throughout four semesters, students gain hands-on experience and industry-relevant certifications like CCNA and CompTIA Security+, while also developing critical communication, analytical, and ethical skills essential for navigating the complex digital landscape. Coursework in areas such as network security, Linux administration, cyber operations, and ethical hacking ensures that graduates are well-prepared to protect computer systems and pursue a career in cybersecurity and network administration.

AS.CIS.SECURITY

## Program Map

### Design Your Future!

Begin by exploring MSJC program maps to find career or transfer (<https://msjc.emsicc.com/?radius=&region=All%20Regions>) opportunities. Program maps show the recommended course sequence that leads to graduation or transfer. The maps were developed by program experts to give you the skills and knowledge you need to succeed.

- **Starting in Spring?** Choose Fall Semester 1 courses.
- **Are you a part-time student?** Start Fall Semester 1 courses and follow the course sequence.

## MSJC Local General Education

Fall Semester 1		Units
ENGL-C1000	Academic Reading and Writing	3
STAT-C1000	Introduction to Statistics	3
CSIS-160	Information Security Systems	3
CSIS-523	Linux System Administration (formerly CSIS-223A)	3
CSCR-100	College Success and Career Readiness	3
<b>Units</b>		<b>15</b>
Spring Semester 1		Units
POLS-C1000	American Government and Politics	3
CSIS-202	CCNA 1 Computer Networks	3
CSIS-580	Computer Hardware	4
CSIS-581	OS Installation and Configuration	3
ART-100	Art Appreciation	3
<b>Units</b>		<b>16</b>
Fall Semester 2		Units
CSIS-791	CCNA 2: Switching, Routing, and Wireless Essentials	3
CSIS-592	CCNA 3 Enterprise Networking, Security, and Automation	3
CSIS-594	Cyber Security Operations	3

PHIL-103 or ENGL-C1001	Logic or Critical Thinking and Writing	3
ETHS/PS-103 or ETHS-112 or ETHS/SJS-113 or ETHS/HIST-160  or ETHS/LIT-240 or ETHS/LIT-275 or ETHS/LIT-280 or ANTH/ HIST-121	Ethnic Politics in America or Introduction to Chicana/o/x Studies or Introduction to Black Studies or Black History in the American Context or American Indian Literature or Latinx/Chicanx Literature or Ethnic American Literature or Indigenous Peoples of California	3
<b>Units</b>		<b>15</b>
Spring Semester 2		
CSIS-164	Cybersecurity: Ethical Hacking	3
CSIS-116E	Python Programming - Level 1	3
CSIS-201	System Analysis and Design	3
PHY-100	Physical Science in Modern Society (formerly Conceptual Physics)	3
ECON-C2002 or PSYC-C1000	Principles of Macroeconomics or Introduction to Psychology	3
<b>Units</b>		<b>15</b>
<b>Total Units</b>		<b>61</b>

## Requirements

Course	Title	Credits
<b>MSJC Local General Education (<a href="https://catalog.msjc.edu/degrees-certificates-curricula/general-education-option-a/">https://catalog.msjc.edu/degrees-certificates-curricula/general-education-option-a/</a>)</b>		<b>27</b>
<b>Required Computer Information Systems Courses</b>		<b>34</b>
<b>Electives (as needed to reach 60 units)</b>		

Course	Title	Credits
CSIS-116E	Python Programming - Level 1	3
CSIS-160	Information Security Systems	3
CSIS-164	Cybersecurity: Ethical Hacking	3
CSIS-201	System Analysis and Design	3
CSIS-202	CCNA 1 Computer Networks	3
CSIS-523	Linux System Administration (formerly CSIS-223A)	3
CSIS-580	Computer Hardware	4
CSIS-581	OS Installation and Configuration	3
CSIS-592	CCNA 3 Enterprise Networking, Security, and Automation	3
CSIS-594	Cyber Security Operations	3
CSIS-791	CCNA 2: Switching, Routing, and Wireless Essentials	3
<b>Total Units</b>		<b>34</b>

## Career Exploration

Discover information about careers that interest you!

1. Take a **Career Quiz** (<https://msjc.emsicc.com/assessment/>) to learn about yourself and receive career suggestions based on your interests.

2. Search available **in-demand jobs** (<https://msjc.emsicc.com/browse-careers/>) in your career areas of interest and find up-to-date salaries and education requirements.
3. Find the **MSJC Program** (<https://msjc.emsicc.com/browse-programs/>) that connects your interests to a career.

Note: There are no guaranteed positions for students completing these programs. Education and work experience required will vary by employer. The salary and benefits for specific occupations will be dependent on work experience, education, background, and employer.