

Cyber and Information Security

100% online

OVERVIEW

Minnesota State College Southeast's Cyber and Information Security program incorporates network and systems administration with cyber security to prepare students for employment in a very high demand profession.

The online Cybersecurity & Network Administration A.A.S. degree provides graduates with the technical and soft skills necessary to obtain a position in the exciting and lucrative IT Cybersecurity field. This major includes intensive technical training in topics such as cloud security, device hardening, intrusion prevention systems, firewalls, and security threats and countermeasures.

In the Cyber and Information Security A.A.S. degree, the focus is on preventing and investigating computer-related crimes. In addition to technical cyber security skills, students become familiar with the various components of the criminal justice system, learning how to collect and maintain evidence, use interpersonal communication skills, write effectively, present and testify in court, and liaison with criminal justice agencies.

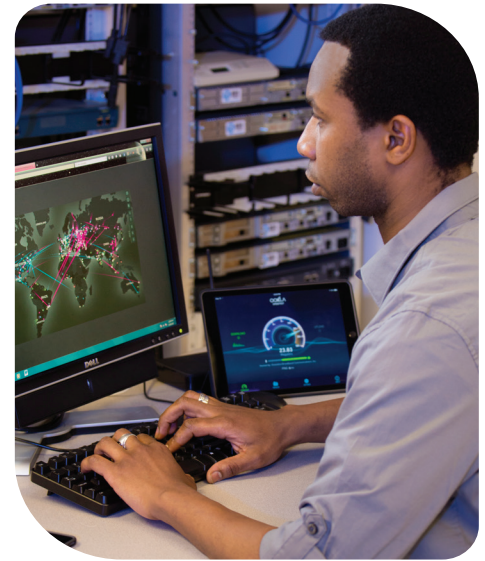
MAJORS WITHIN

Cybersecurity and Network Administration, AAS 60 credits
Cyber and Information Security, AAS 60 credits

Estimated costs for each major including tuition, books and supplies are posted on southeastmn.edu under Academics > Academic Programs by Degree.

PROGRAM OUTCOMES

- Demonstrate the ability to understand fundamental concepts behind cybersecurity that will help them design security systems that can be trusted.
- Demonstrate an understanding of software and hardware components in modern computing environments and their individual functions.
- Demonstrate an understanding of how networks are built and operate with the skills to identify security vulnerabilities and the proficiency to secure them.
- Demonstrate proficiency with the concepts, tools, and security controls that can be used to protect networks, servers, and applications from cybersecurity threats.



PROGRAM HIGHLIGHTS

Acquire proactive skills in protecting and securing private and corporate network digital information

Learn and understand cyber security breaches and mitigation techniques

Emphasis on soft skills includes how to communicate professionally with customers and co-workers.

Coursework is taught online for maximum flexibility.

CAREER OPPORTUNITIES

Private industry cyber security manager

Information security analyst

Security software developer

Cybersecurity consultant

Cyber security private investigator

Cyber and Information Security

Sample Program Plan

Please note that this is a sample program schedule. Your schedule may vary depending upon your needs, goals, and course availability.
Please meet with your advisor to plan your schedule each semester.

Cybersecurity and Network Administration - AAS

Course No.	Course Name	Credits
First Semester (Fall)		
NWAT 1601	Windows Workstation I	2
NWAT 1602	Windows Workstation II	1
NWAT 1607	IT Fundamentals	3
NWAT 1641	Networking Fundamentals	3
NWAT 1650	Cybersecurity Fundamentals	3
ENGL 1215	College Writing I	3
Semester total		15

Second Semester (Spring)

NWAT 1649	Windows Server I	3
NWAT 2120	Network Security I	3
NWAT 2689	Computer Forensic Investigation	3
COMM 1218	College Speech	3
Goal 4	Mathematics	3
Semester total		15

Third Semester (Fall)

NWAT 1800	Scripting Fundamentals	3
NWAT 2220	Network Security II	3
NWAT 2683	Security Threats and Countermeasures	3
NWAT 2684	Windows Server & Desktop Security	3
Goal 6	Humanities and Fine Arts	3
Semester total		15

Fourth Semester (Spring)

NWAT 2110	Cloud Computing	3
NWAT 2125	Server Visualization	3
NWAT 2692	Electronic Devices Forensics	3
NWAT 2900	Cybersecurity Operations	3
Goal 5	History, Social and Behavioral Sciences	3
Semester total		15
Total Required Credits		60

Cyber and Information Security - AAS

Course No.	Course Name	Credits
First Semester (Fall)		
NWAT 1601	Windows Workstation I	2
NWAT 1602	Windows Workstation II	1
NWAT 2689	Computer Forensics Investigation	3
NWAT 1641	Networking Fundamentals	3
NWAT 1650	Cybersecurity Fundamentals	3
ENGL 1215	College Writing I	3
Semester total		15

Second Semester (Spring)

NWAT 1649	Windows Server I	3
NWAT 2683	Security Threats and Countermeasures	3
CJSP 1102	Introduction to Criminal Justice	3
COMM 1218	College Speech	3
Goal 4	Mathematics	3
Semester total		15

Third Semester (Fall)

NWAT 2684	Windows Server & Desktop Security	3
CJSP 2104	Intro to Criminology/Criminal Behavior	3
CJSP 2205	Criminal Law and Procedures	3
CJSP 2140	Crime Victims and Computer Crimes	3
Goal 6	Humanities and Fine Arts	3
Semester total		15

Fourth Semester (Spring)

NWAT 2676	Wireless Communications	3
NWAT 2692	Electronic Devices Forensics	3
NWAT 2693	Website/Applications Security	3
CJSP 2225	Courtroom and Evidence Procedures	3
Goal 5	History, Social and Behavioral Sciences	3
Semester total		15
Total Required Credits		60