2019-2020

Cybersecurity

Associate of Science (AS) Degree

Program Requirements.....30
General Education/MnTC.....30
Total Credits 60

Program Information

Cybersecurity is one of the fastest-growing career categories in the world and the need for skilled professionals to help prevent damaging and costly security breaches is at an all-time high. The Associate of Science (AS) in Cybersecurity degree program places emphasis on the fundamental skills and knowledge required to safeguard an organization's information and defend systems while preparing students for successful transfer to a four-year institution to continue their studies in computer and/or network security related fields.

Program Goals

By completing this program, students will achieve the following learning goals:

1. Demonstrate knowledge and understanding of essential facts, concepts, design principles, policies, laws, and threats relating to computer and network security;
2. Identify and explain the impact of technology on individuals and organizations, including security and ethical issues;
3. Configure and administer systems and networks with an understanding of vulnerabilities and defensive techniques utilized to keep data secure; and
4. Communicate effectively with individuals in and outside of the field.

Developmental Courses

Some students may need preparatory courses in the areas of English, mathematics or reading. Courses numbered below 1000 will not apply toward this degree.

Completion Requirements

- A minimum of 60 semester credits in courses numbered 1000 or above.
- A minimum cumulative grade point average (GPA) of 2.0 in courses numbered 1000 or above at ARCC.
- Satisfy residency requirements.
- A minimum grade of C must be earned in all program requirements.
- Completion of specific degree requirements.
- To receive your diploma, you must apply to graduate.
- The requirements of this program are subject to change without notice.

Program Requirements: 30 credits

☐ CNET 1100	Introduction to Information Technology	3
☐ CNET 1105	Introduction to Cybersecurity	1
☐ CNET 2101♦	Introduction to Networks (CCNA 1)	3
☐ CNET 2110♦	Principles of IT Security	3
☐ CNET 2114	Fundamentals of Linux/UNIX	3
☐ CNET 2125	System Virtualization	3
☐ CNET 2200♦	Network Forensics	2
☐ CNET 2215♦	Managing Network Security	3
☐ CNET 2230♦	Ethical Hacking	3
☐ CNET 2301♦	Routing and Switching Essentials (CCNA 2)	3
☐ CSCI 1101♦	Introduction to Computer Science and Problem-Solving	3

General Education/MnTC Requirements: 30 credits

Complete at least 30 credits from the Minnesota Transfer Curriculum (MnTC), including all courses listed. You must complete at least one course in six of the ten goal areas. One course may satisfy more than one goal area, but the course credits may be counted only once.

☐ 1. Communication
- ☐ ENGL 1120♦ ***OR*** ENGL 1121♦ 4
- ☐ CMST 1110 ***OR*** CMST 2215 ***OR*** CMST 2220 3

☐ 2. Critical Thinking
☐ 3. Natural Science
☐ 4. Mathematical/Logical Reasoning
- ☐ MATH 1200♦ ***OR*** PHIL 1105 3

☐ 5. History/Social/Behavioral Sciences
- ☐ ECON 2205 3

☐ 6. Humanities/Fine Arts
☐ 7. Human Diversity
☐ 8. Global Perspective
☐ 9. Ethical/Civic Responsibility
☐ 10. People and the Environment

Program Sequence:

The sequence that follows is suggested for full-time students. Part-time students will need more time to complete this program; many courses are offered in the evening.

	Fall Semester		Spring Semester	
1st YEAR	CNET 1100	3	CNET 2101	3
	CNET 1105	1	CNET 2301	3
	CSCI 1101	3	Gen Ed	8-10
	Gen Ed	7-9	**TOTAL**	**14-16**
	TOTAL	**14-16**		
2nd YEAR	Fall Semester		Spring Semester	
	CNET 2110	3	CNET 2200	2
	CNET 2114	3	CNET 2215	3
	CNET 2125	3	CNET 2230	3
	Gen Ed	5-7	Gen Ed	6-8
	TOTAL	**14-16**	**TOTAL**	**14-16**

♦ ***Course has prerequisite - see course schedule or catalog description.***
^ ***Course requires Instructor permission.***

NOTE: You are encouraged to contact an academic advisor at 763-433-1230 for course planning assistance and information about transfer credit evaluation and transfer options.