

Master of Science in Cybersecurity

Program learning outcomes: What Will I Learn?

1. Continuously monitor, maintain, and enhance the protection of enterprise-wide information assets through effective industry accepted information management and risk management techniques.
2. Detect, analyze, and respond to cyber attacks on networks and computer systems.
3. Conduct risk and vulnerability assessments of existing and proposed information systems.
4. Utilize best sources of information available related to cyber security issues, threats, and recovery.
5. Demonstrate the ability to understand professional, ethical, and social responsibility, including the effect of culture, diversity, and interpersonal relations.
6. Demonstrate proficiency in communicating technical information in formal reports, documentation, and oral presentations to users and information technology professional.
7. Demonstrate a commitment to professional development and to continue to engage in lifelong learning.

Assessment Methodology

Metrics, Assessments, and Levels of Achievement

The table below provides a brief overview of the measures selected to assess program outcomes for the program. Assessment of program outcomes includes both direct and indirect measures. Benchmarks have been established to differentiate between three levels of program outcome achievement (highly achieved, meets standard, and needs improvement). These three levels of achievement are color coded and used in the section below to indicate the level of achievement for each measure, for each learning outcome.

Metric Type	Direct Measures		Indirect Measures	
	Assessments	Capstone Course	Course-Embedded	Exit Survey
Metrics	The percentage of students who receive a grade of B or better on the Capstone Rubric for its designated program outcome.	The percentage of the students who receive a grade of B or better on selected course embedded assessments.	The mean of the graduates' perceptions of their achievement of the related program outcomes (on a 6-pt Likert-type scale).	The mean of the graduates' perceptions of their achievement of the related program outcomes (on a 6-pt Likert-type scale).
Highly Achieved	≥ 90%		Mean ≥ 5%	
Meets Standard	80 - 89%		4.0 - 4.99	

Needs
Improvement

< 80%

Mean < 4

Note: The results of the one year post-graduation survey are used as a reference to provide a longitudinal perspective on students' attainment of program (student) outcomes.

Program Outcome Achievement Results

Summer I (May) 2020 Term to Spring II (March) 2021 Term

Program Outcome		Direct Measure(s)			Indirect Measures	
1	Continuously monitor, maintain, and enhance the protection of enterprise-wide information assets through effective industry accepted information management and risk management techniques.	CYS 596 M3A1	CYS 596 M2A1		Exit Survey	One- Year Survey
		100%	100%		5.43	*
		n = 44	n = 45		n = 7	
2	Detect, analyze, and respond to cyber attacks on networks and computer systems.	CYS 596 M6A1			Exit Survey	One- Year Survey
		98%			5.14	*
		n = 43			n = 7	
3	Conduct risk and vulnerability assessments of existing and proposed information systems.	CYS 596 M4A1			Exit Survey	One- Year Survey
		98%			5.29	*
		n = 41			n = 7	
4	Utilize the best sources of information available related to cyber security issues, threats, and recovery.	CYS 596 M5A1			Exit Survey	One- Year Survey
		98%			5.29	*
		n = 46			n = 7	
5	Demonstrate the ability to understand professional, ethical, and social responsibility, including the effect of culture, diversity, and interpersonal relation.	CYS 596 M7A3			Exit Survey	One- Year Survey
		100%			5.57	*
		n = 43			n = 7	
6	Demonstrate proficiency in communicating technical information in formal reports, documentation, and oral presentations to users and information technology professionals.	CYS 596 M6A1	CYS 596 M7A1	CYS596 M8A1	Exit Survey	One- Year Survey
		98%	98%	98%	5.29	*
		n = 43	n = 43	n = 43	n = 7	
7	Demonstrate a commitment to professional development and to continue to engage in lifelong learning.	CYS 596 M8A2	CYS 596 M7A1		Exit Survey	
		100%	98%		5.57	
		n = 42	n = 43		n = 7	

*Insufficient n.