

TRANSPARENCY AT EXCELSIOR

Bachelor of Science in Cybersecurity

Program / Student Learning Outcomes: What Will I Learn?

- 1. Describe defensive network architecture that use multiple layers of protection.
- 2. Analyze technologies and processes that monitor, maintain, and protect the data of an institution.
- 3. Evaluate and apply industry tools to respond to cyber incidents.
- 4. Create and disseminate cybersecurity reports to stakeholders.
- 5. Conduct risk and vulnerability assessments of existing and proposed security systems.
- 6. Develop and implement organizational cybersecurity policies and procedures.
- 7. Demonstrate the ability to understand professional, ethical, and social responsibility, including the effect of culture, diversity, and interpersonal relations.
- 8. Demonstrate proficiency in communicating technical information in formal reports, documentation, and oral presentations to users and information technology professionals.
- 9. 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 Alumni Survey	One-Year Post-graduation Alumni Survey*
Metrics	The percentage of students who receive a grade of	The percentage of the students who receive a grade of	The mean of the graduates' perceptions of their	The mean of the graduates' perceptions of their

TRANSPARENCY AT EXCELSIOR

	B or better on the Capstone Rubric for its designated program outcome.	B or better on selected course embedded assessments.	achievement of the related program outcomes (on a 6-pt Likert-type scale).	achievement of the related program outcomes (on a 6- pt Likert-type scale).
Highly Achieved	≥ 85%		Mean ≥ 5%	
Meets Standard	70 - 84%		4.0 - 4.99	
Needs Improvement	< 70%		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 (Student) Outcome Achievement Results

May 2021 Term through March 2022 Term

Program Outcome		Direct Measure(s)	Indirect Measures	
1	Describe defensive network architecture that use multiple layers of	CYS 496 M7A1	Exit Survey	One-Year Survey
	protection.	100%	*	*
		n = 6		
2	Analyze technologies and processes that monitor, maintain, and protect the	CYS 496 M3A1	Exit Survey	One-Year Survey
	data of an institution.	100%	*	*
		n = 6		
3	Evaluate and apply industry tools to respond to cyber incidents.	CYS 496 M4A1	Exit Survey	One-Year Survey
		100%	*	*
		n = 6		
4	Create and disseminate cybersecurity reports to stakeholders.	CYS 496 M2A1	Exit Survey	One-Year Survey
		83%	*	*
		n = 6		

TRANSPARENCY AT EXCELSIOR

Program Outcome		Direct Measure(s)	Indirect Measures	
5	Conductrisk and vulnerability assessments of existing and proposed security systems.	CYS 496 M1A1 **	Exit Survey	One-Year Survey
6	Develop and implement organizational cybersecurity policies and procedures.	CYS 496 M5A1 100%	Exit Survey	One-Year Survey
7	Demonstrate the ability to understand professional, ethical, and social responsibility, including the effect of	n = 6 CYS 496 M6A1	Exit Survey	One-Year Survey
	culture, diversity, and interpersonal relations.	100% n = 6	*	*
8	Demonstrate proficiency in communicating technical information in formal reports, documentation, and	CYS 496 M8A1 M8A3	Exit Survey	One-Year Survey
	oral presentations to users and information technology professionals.	100% 100% n = 5	*	*
		n = 5		
9	Demonstrate a commitment to professional development and to	CYS 496 M8A2	Exit Survey	One-Year Survey
	continue to engage in lifelong learning.	100% n = 6	*	*

^{*}An insufficient number of responses (i.e., less than 5) were received so no data is reported.

**The rubric was not attached to the assignment, so no data was collected. The error has been fixed and data is expected next year.