		Degree: Cybersecurity Computer Science 2023-2024 Assessment Plan	
PLAN	**Student Learning Outcome #1**	Students will have a solid knowledge of cybersecurity fundamentals	
	Assessment Method(s)	Direct: Rubrics of COSC 2336, 3304, 3325, 4302, 4317, and CPSC 4326, 4340, 4360, 4370; Indirect: Student Evaluation, Exit Interview, Alumni Survey, ETS Scores	
	Proficiency	Direct: pass a course and meet the performance criterion of the course. Indirect: Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4	**Commented [JR1]:** Passing a course/course grades isn't typically a good direct measure. You also mentioned using rubrics, which don't reflect final course grades, although it does seem you are addressing this in your improvement plan.
DO	**Benchmark**	Direct: 80% of students are expected to achieve the proficiency Indirect: 80% of students are expected to achieve the proficiency	
	Results of Assessment	Above 80% students achieve the proficiency both directly and indirectly.	**Commented [JR2]:** Would be helpful to list out specific numbers, such as 84% and 87%. Also listing the number of students
STUDY	**Analysis of Results**	Students after taking the listed courses have gained a solid foundation knowledge for the cybersecurity study. They are prepared with mathematics and programming skills for the higher end courses in this field.	

ACT	Improvement Plan for 2024-2025	We will use the rubrics of Quiz 1 and Project 1 in CPSC 4363 as the assessment method for this outcome. It will be more intuitive and conclusive.

Commented [JR3]: You reference using only specific courses going further, is this to replace the current method of rubrics from 8 or so classes?

		Degree: Cybersecurity Computer Science 2023-2024 Assessment Plan	
	Student Learning Outcome #2	Students will be able to demonstrate cybersecurity technology skills	
PLAN	**Assessment Method(s)**	Direct: Rubrics of COSC 4345, 4272, and CPSC 4361, 4363, CRIJ 4333; Indirect: Student Evaluation, Exit Interview, Alumni Survey, ETS Scores	
	Proficiency	Direct: pass a course and meet the performance criterion of the course. Indirect: Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4	**Commented [JR4]:** Same comments about final course grade/passing courses from above and applies to all SLOs
DO	**Benchmark**	Direct: 80% of students are expected to achieve the proficiency Indirect: 80% of students are expected to achieve the proficiency	
	Results of Assessment	82.6%~92.8% students passed the core courses in this program. Above 80% students achieved the indirect proficiency.	
STUDY	**Analysis of Results**	COSC 4345 is the most challenging course in this degree plan, then the CPSC 4363. Both involve lots of hands-on labs and coding projects. Our students achieved 82.6% and 89.6% passing rate for the two courses, respectively, in this year. They have demonstrated strong technology skills in system and network defenses.	

ACT	Improvement Plan for 2024-2025	We will use more specific rubrics to evaluate this outcome, including Project 2 in CPSC 4363 and Labs (a selection from Lab 1-6) in COSC 4345.

Degree: Cybersecurity Computer Science 2023-2024 Assessment Plan		
	Student Learning Outcome #3	Students will be able to employ scientific methods to solve problems
PLAN	**Assessment Method(s)**	Rubrics of COSC 1336, 1337, 2336, 3302, 3304, 3325, 4302, 4317, and 4272; Indirect: Student Evaluation, Exit Interview, Alumni Survey, ETS Scores
	Proficiency	Direct: pass a course and meet the performance criterion of the course. Indirect: Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4
DO	**Benchmark**	Direct: 80% of students are expected to achieve the proficiency Indirect: 80% of students are expected to achieve the proficiency
	Results of Assessment	Above 80% students achieve the proficiency both directly and indirectly.
STUDY	**Analysis of Results**	After four years study, students are able to solve problem in this field with various scientific methods in a mix of mathematics, programming, and simulation.

ACT	Improvement Plan for 2024-2025	We will revise this outcome as "Students will be able to employ scientific methods to solve cybersecurity problems." By emphasizing "cybersecurity problems," we can evaluate students with further specific rubrics in the core courses, including some questions in the mid-term and final exams.

		Degree: Cybersecurity Computer Science 2023-2024 Assessment Plan	
PLAN	**Student Learning Outcome #4**	Students will be equipped with collaborative work skills	
	Assessment Method(s)	Rubrics of COSC 1336, 1337, 2336, 3302, 4302, 4317, 4272, and CPSC 4340, 4360; Indirect: Student Evaluation, Exit Interview, Alumni Survey, ETS Scores	
	Proficiency	Direct: pass a course and meet the performance criterion of the course. Indirect: Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4	
DO	**Benchmark**	Direct: 80% of students are expected to achieve the proficiency Indirect: 80% of students are expected to achieve the proficiency	
	Results of Assessment	Above 80% students achieve the proficiency both directly and indirectly.	
STUDY	**Analysis of Results**	Students are good at teamwork and know how to collaborate in a efficient way.	

ACT	**Improvement Plan for 2024-2025**	Core courses may consider to add some group projects in the future.

Commented [JR5]: Which courses do have a group assignment?

		Degree: Cybersecurity Computer Science 2023-2024 Assessment Plan	
PLAN	**Student Learning Outcome #5**	Students will have strong oral and written communication skills	
	Assessment Method(s)	Rubrics of COSC 1336, 1337, 2336, 3302, 4302, 4345, 4272, and CPSC 4360, 4363; Indirect: Student Evaluation, Exit Interview, Alumni Survey, ETS Scores	
	Proficiency	Direct: pass a course and meet the performance criterion of the course. Indirect: Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4	
DO	**Benchmark**	Direct: 80% of students are expected to achieve the proficiency Indirect: 80% of students are expected to achieve the proficiency	
	Results of Assessment	Above 80% students achieve the proficiency both directly and indirectly.	
S T U D Y	**Analysis of Results**	The lab reports in COSC 4345 and CPSC 4363 written by most students are detailed and well-organized. Their demo videos are easy to read and often used as the tutoring videos or sample solutions for the future students. The strong oral and written communication skills showed our students are well prepared for the job market.	

ACT	Improvement Plan for 2024-2025	We will specify the assessment methods by using the rubrics of lab/project reports and demo videos in COSC 4345 and CPSC 4363. It will reveal students oral and written communication skills especially for cyber topics.

		Degree: Cybersecurity Computer Science 2023-2024 Assessment Plan	
	Student Learning Outcome #6	Students will demonstrate the ability for continuing education and lifelong learning	
PLAN	**Assessment Method(s)**	Rubrics of COSC 1336, 1337, 2336, 3302, 3304, 3325, 4302, 4317, 4272, CPSC 4360, CRIJ 4333; Indirect: Student Evaluation, Exit Interview, Alumni Survey, ETS Scores	
	Proficiency	Direct: pass a course and meet the performance criterion of the course. Indirect: Student Evaluation > 3.75 Exit Interview: Program Quality > 7.5 and Department Student Outcomes > 3.75 Exit Interview: > 3.75 Alumni Survey: Program Quality >=8 and Department Student Outcomes >= 4	**Commented [JR6]:** How is this measured directly for continuing education and lifelong learning?
DO	**Benchmark**	Direct: 80% of students are expected to achieve the proficiency Indirect: 80% of students are expected to achieve the proficiency	**Commented [JR7]:** How is 80% determined? At least 80% of students who email you or let you know what is going on after graduation? Or is this 80% of all graduated students?
	Results of Assessment	Above 80% students achieve the proficiency both directly and indirectly.	
S T U D Y	**Analysis of Results**	In addition to the exit and alumni survey, we often received emails from students told us they passed the CISCO or other cyber certificates, won the scholarship from the cyber contest held in Houston, or even technical discussions related to their working field. All these showed our students have gained lifelong learning interests and abilities.	

ACT	Improvement Plan for 2024-2025	We will add a follow-up suggestion certificate and a survey to track their continuing study performance.