

Degree: BS Computer Science***2023-2024 Assessment Plan**

*BS Computer Science is a ABET accredited program assessed based on ABET requirements.

	Program Educational Objective #1	Graduates of the Computer Science Program will develop the professional skills and the necessary technical knowledge both in breadth and in-depth to prepare them for employment and advanced study in Computer Science. Curriculum Outcomes 1, 2 and 3 /Department of Computer Science This is explained in Section 3 of the Annual ABET report for the program dated August 30, 2024. • Graduates of the program will have the ability to analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions. • Graduates of the program will have the ability to design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline. • Graduates of the program will have an ability to apply computer science theory and software development fundamentals to produce computing-based solutions.
PLAN	Assessment Method(s)	Rubric and Project CPSC 4317 and COSC 4310 Selected Questions on Final Exam CPSC 4360 All rubrics are defined by each instructor in their course.
	Proficiency	>80% Using the instructor defined assessment rubrics in each course/s which are the context for assessment of each of the above criteria, the average score of all students in all the courses for both fall and spring semesters, our department target is 80% of students will demonstrate a working understanding of the specified criteria. All criteria are specified as learning objectives in Table E.1 of the Annual ABET report

DO	Benchmark	[1.1] 95.00% [1.2] 93.00% [1.3] 100.00% [1.4] 84.11% [1.5] 83.26% [1.6] 90.06% [1.7] 90.75% [2.1.1] 89.77% [2.1.2] 75.00% Target Not Met [2.1.3] 85.00% [2.2.1] 81.00% [2.2.2] 80.00% [2.2.3] 83.00% [2.2.4] 80.00% [2.3.1] 85.00% [2.3.2] 76.00% Target Not Met [2.3.3] 78.00% Target Not Met [2.3.4] 83.00% [2.3.5] 92.00% [2.3.6] 82.00% [2.4.1] 84.55% [2.4.2] 84.55% [2.4.3] 84.55% [2.4.4] 84.55% [2.5.1] 83.00% [2.5.2] 79.00% Target Not Met [2.5.3] 100.00%
----	-----------	--

		[2.6.1] 84.00% [2.6.2] 84.00% [2.6.3] 84.00% [2.7.1] 74.00% Target Not Met [2.7.2] 80.00% [2.7.3] 80.00% [3.1] 92.23% [3.2] 92.23% [3.3] 92.23% [3.4] 88.99% This data is taken from Table G.2 in the Annual ABET report for the program dated August 30, 2024.
	Results of Assessment	Five of 37 criteria did not meet their direct assessment targets.
S T U D Y	Analysis of Results	The department assessment has never achieved a perfect score of 37 out of 37 criteria meeting their direct assessment targets. Last year there were 6 criteria that did not meet targets. Overall, this is a slight improvement from last academic year.
ACT	Improvement Plan for 2024-2025	<u>Outcome 1</u> All criteria met assessment targets. <u>Outcome 2.1</u> Criteria 2.1.2 was very close to meeting the target, so no actions were deemed necessary this year. We will monitor next year. <u>Outcome 2.2</u>

		All criteria met assessment targets. <u>Outcome 2.3</u> Two criteria were very close to meeting the targets, less than 5% each, so no actions were deemed necessary this year. We will monitor next year. <u>Outcome 2.4</u> All criteria met their direct assessment targets. <u>Outcome 2.5</u> Criteria 2.5.2 was very close to meeting the target, by 1%, so no actions were deemed necessary this year. We will monitor next year. Second Cycle Results: Last year we did not meet the target for criteria 2.5.1. This year that target was met. It appears our action plan last year was successful. <u>Outcome 2.6</u> All criteria met their direct assessment targets. <u>Outcome 2.7</u> Criteria 2.6.1 was very close to meeting the target, by 6%. We will discuss the results with the instructor in order to enable the instructor to put an action plan into place for course revisions as needed. Second Cycle Results: Last year we did not meet the targets for criteria 2.6.2 and 2.6.3. This year those targets was met. It appears our action plan last year was successful. <u>Outcome 3</u> All criteria met their direct assessment targets.
--	--	---

Degree: BS Computer Science
2023-2024 Assessment Plan

	Program Educational Objective #2	Graduates of the Computer Science Program will have sufficient awareness of the local and global societal impact of technology and of the related legal and ethical issues in computer science to make decisions regarding their personal and professional responsibilities. Curriculum Outcomes 4 and 5 /Department of Computer Science This is explained in Section 3 of the Annual ABET report for the program dated August 30, 2024. • Graduates of the program will have an ability to recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
PLAN	Assessment Method(s)	Exam Questions COSC 3325, CPSC 4317 COSC 4360 Each instructor used their own scoring methodology for exam questions in their courses.
	Proficiency	>80% Using the instructor defined assessment rubrics in each course/s which are the context for assessment of each of the above criteria, the average score of all students in all the courses for both fall and spring semesters, our department target is 80% of students will demonstrate a working understanding of the specified criteria. All criteria are specified as learning objectives in Table E.1 of the Annual ABET report for the program dated August 30, 2024.
DO	Benchmark	[4.1] 100.00% [4.2] 100.00% [4.3] 100.00% [4.4] 94.98%

		[5.1] 100.00% [5.2] 92.00% [5.3] 100.00% [5.4] 100.00% [5.5] 100.00% This data is taken from Table G.2 in the Annual ABET report for the program dated August 30, 2024.
	Results of Assessment	All criteria met their direct assessment targets.
S T U D Y	Analysis of Results	No actions are needed for the 2024-2025 academic year.
ACT	Improvement Plan for 2024-2025	N/A

	Program Educational Objective #3	Graduates of the Computer Science Program will have the critical thinking, communication, teamwork, and leadership skills necessary to function productively and professionally. Curriculum Outcomes 6, 7 and 8. /Department of Computer Science This is explained in Section 3 of the Annual ABET report for the program dated August 30, 2024. • Graduates of the program will have the ability to communicate effectively in a variety of professional contexts. • Graduates of the program will have the ability to function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
PLAN	Assessment Method(s)	Rubrics CPSC 4340, CPSC 4360, Rubrics COSC 3325 COSC 4272 Rubrics CPSC 4360, COSC 4302 All rubrics are defined by each instructor in their course.
	Proficiency	>80% Using the instructor defined assessment rubrics in each course/s which are the context for assessment of each of the above criteria, the average score of all students in all the courses for both fall and spring semesters, our department target is 80% of students will demonstrate a working understanding of the specified criteria. All criteria are specified as learning objectives in Table E.1 of the Annual ABET report for the program dated August 30, 2024.
DO	Benchmark	[6.1] 93.02% [6.2] 90.02% [6.3] 97.39% [6.4] 97.39% [7.1] 100.00% [7.2] 100.00%

		[7.3] 100.00% [7.4] 100.00% [8.1] 89.70% [8.2] 89.70% [8.3] 89.70% [8.4] 89.70% [8.5] 89.70% This data is taken from Table G.2 in the Annual ABET report for the program dated August 30, 2024.
	Results of Assessment	All criteria met their direct assessment targets.
S T U D Y	Analysis of Results	No actions are needed for the 2024-2025 academic year.
ACT	Improvement Plan for 2024-2025	N/A

Degree: BS Computer Science
2023-2024 Assessment Plan

	Program Educational Objective #4	Graduates of the Computer Science Program will be able to demonstrate intellectual curiosity and the independent study skills necessary for life-long learning. Curriculum Outcomes 6, 7 and 8. /Department of Computer Science This is explained in Section 3 of the Annual ABET report for the program dated August 30, 2024. • Graduates of the program will have an ability to independently acquire new computing related skills and knowledge to pursue either further formal or informal learning after graduation.
PLAN	Assessment Method(s)	Rubrics COSC 3325 and COSC 4272 All rubrics are defined by each instructor in their course.
	Proficiency	>80% Using the instructor defined assessment rubrics in each course/s which are the context for assessment of each of the above criteria, the average score of all students in all the courses for both fall and spring semesters, our department target is 80% of students will demonstrate a working understanding of the specified criteria. All criteria are specified as learning objectives in Table E.1 of the Annual ABET report for the program dated August 30, 2024.
DO	Benchmark	[9.1] 100.00% [9.2] 100.00% [9.3] 100.00% This data is taken from Table G.2 in the Annual ABET report for the program dated August 30, 2024.
	Results of Assessment	All criteria met their direct assessment targets.

S T U D Y	Analysis of Results	No actions are needed for the 2024-2025 academic year.
ACT	Improvement Plan for 2024-2025	N/A