



## Annual Assessment Report 2023-2024

### Computer Science BS Department of Computer Science College of Science

#### CONTACT

Name of Program Assessment Lead Hao Ji

Name of Person Completing Report Hao Ji

DISCIPLINARY ACCREDITATION Yes

#### DEVELOPMENT AND DOCUMENTATION OF STUDENT LEARNING OUTCOMES

How were the program's SLOs developed? (select all that apply)

- Our disciplinary accrediting agency has required learning outcomes, so we use them.

Other than the CPP Catalog and the Office of Assessment and Program Review website, where else are your SLOs published? Select all that apply.

- Department Website - provide URL: <https://www.cpp.edu/sci/computer-science/program-evaluation/accreditation-and-assessment.shtml>

#### ASSESSMENT ACTIVITIES IN 2023-2024

This section provides the opportunity for programs to share and discuss assessment activities conducted in **AY 2023-2024**. This includes data collection, rubric development, data analysis, discussion of findings, development or implementation of closing the loop improvement strategies, update of your assessment plan and/or curriculum matrix, etc.

How many total SLOs does your program assess according to your assessment plan?

- 6

**How many SLOs did your program assess this past year in 2023-2024?**

- My program assessed SLOs in AY 2023-2024 (e.g., artifact collection, scoring, closing the loop, etc.).

**Please list the SLOs examined**

- SLO #1: Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions
- SLO #2: Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline
- SLO #3: Communicate effectively in a variety of professional contexts
- SLO #4: Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles
- SLO #5: Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline
- SLO #6: Apply computer science theory and software development fundamentals to produce computing-based solutions

**Student Learning Outcome (SLO):** Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
<ul style="list-style-type: none"> <li>Collected/Analyzed/Developed/Modified/Discussed assessment tools</li> </ul>	<ul style="list-style-type: none"> <li>Assignment/exam/paper completed as part of regular coursework (Direct)</li> <li>Student survey/interview/focus group with self-reports of SLO achievement (Indirect)</li> <li>Alumni survey/interview/focus group that contains self-report of SLO achievement</li> <li>Employer meetings/discussions/survey/interview of student SLO achievement</li> </ul>	<ul style="list-style-type: none"> <li>Scored exams/tests/quizzes</li> </ul>

Findings			
N of Artifacts	Criterion Used	Goal Met	Eye-opening Result
220	70%	Yes	N/A

**Student Learning Outcome (SLO):** Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
<ul style="list-style-type: none"> <li>Collected/Analyzed/Developed/Modified/Discussed assessment tools</li> </ul>	<ul style="list-style-type: none"> <li>Assignment/exam/paper completed as part of regular coursework (Direct)</li> <li>Student survey/interview/focus group with self-reports of SLO achievement (Indirect)</li> <li>Alumni survey/interview/focus group that contains self-report of SLO achievement</li> <li>Employer meetings/discussions/survey/interview of student SLO achievement</li> </ul>	<ul style="list-style-type: none"> <li>Scored exams/tests/quizzes</li> </ul>

Findings			
N of Artifacts	Criterion Used	Goal Met	Eye-opening Result
220	70%	Yes	N/A

**Student Learning Outcome (SLO): Communicate effectively in a variety of professional contexts**

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
<ul style="list-style-type: none"> <li>Collected/Analyzed/Developed/Modified/Discussed assessment tools</li> </ul>	<ul style="list-style-type: none"> <li>Assignment/exam/paper completed as part of regular coursework (Direct)</li> <li>Student survey/interview/focus group with self-reports of SLO achievement (Indirect)</li> <li>Alumni survey/interview/focus group that contains self-report of SLO achievement</li> <li>Employer meetings/discussions/survey/interview of student SLO achievement</li> </ul>	<ul style="list-style-type: none"> <li>Scored exams/tests/quizzes</li> </ul>

Findings			
N of Artifacts	Criterion Used	Goal Met	Eye-opening Result
213	70%	Yes	N/A

**Student Learning Outcome (SLO):** Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
<ul style="list-style-type: none"> <li>Collected/Analyzed/Developed/Modified/Discussed assessment tools</li> </ul>	<ul style="list-style-type: none"> <li>Assignment/exam/paper completed as part of regular coursework (Direct)</li> <li>Student survey/interview/focus group with self-reports of SLO achievement (Indirect)</li> <li>Alumni survey/interview/focus group that contains self-report of SLO achievement</li> <li>Employer meetings/discussions/survey/interview of student SLO achievement</li> </ul>	<ul style="list-style-type: none"> <li>Scored exams/tests/quizzes</li> </ul>

Findings			
N of Artifacts	Criterion Used	Goal Met	Eye-opening Result
222	70%	Yes	N/A

**Student Learning Outcome (SLO):** Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
<ul style="list-style-type: none"> <li>Collected/Analyzed/Developed/Modified/Discussed assessment tools</li> </ul>	<ul style="list-style-type: none"> <li>Assignment/exam/paper completed as part of regular coursework (Direct)</li> <li>Student survey/interview/focus group with self-reports of SLO achievement (Indirect)</li> <li>Alumni survey/interview/focus group that contains self-report of SLO achievement</li> <li>Employer meetings/discussions/survey/interview of student SLO achievement</li> </ul>	<ul style="list-style-type: none"> <li>Scored exams/tests/quizzes</li> </ul>

Findings			
N of Artifacts	Criterion Used	Goal Met	Eye-opening Result
263	70%	Yes	N/A

**Student Learning Outcome (SLO):** Apply computer science theory and software development fundamentals to produce computing-based solutions

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
<ul style="list-style-type: none"> <li>Collected/Analyzed/Developed/Modified/Discussed assessment tools</li> </ul>	<ul style="list-style-type: none"> <li>Assignment/exam/paper completed as part of regular coursework (Direct)</li> <li>Student survey/interview/focus group with self-reports of SLO achievement (Indirect)</li> <li>Alumni survey/interview/focus group that contains self-report of SLO achievement</li> <li>Employer meetings/discussions/survey/interview of student SLO achievement</li> </ul>	<ul style="list-style-type: none"> <li>Scored exams/tests/quizzes</li> </ul>

Findings			
N of Artifacts	Criterion Used	Goal Met	Eye-opening Result
263	70%	Yes	N/A



## IMPROVING THROUGH ASSESSMENT

Ideas to improve student learning can come from different constituents. With whom did the program discuss assessment planning and/or share results during AY 2023-2024? Select all that apply.

- Program/department faculty as whole
- Program/department assessment committee

The past academic year posed both challenges and opportunities. Please share any assessment discoveries (e.g., insights about assessment procedures, great achievements, etc.) regarding program assessment in 2023-2024 so that others may learn from your experiences.

AY2023-2024 assessment marks the fourth year of assessment activities aligned with the revised assessment plan introduced in Fall 2020. Throughout this year, our department has continued its evaluation of student learning outcomes with a combination of both direct and indirect assessment measures. Upon being reviewed by the assessment committee, the assessment results with its recommendations for action is forwarded to the department for discussion and approval.

Please share how the program triangulates various data sources to determine student success. Consider assessment findings, [CPP's GI2025](#) markers, [CSU Dashboard](#), CPP's [Student Success Dashboard](#) on Tableau, [CPP's Graduating Senior Survey](#) on Tableau, course evaluations, etc.

Both direct and indirect assessment measures were used to evaluate student learning outcomes, including course performance assessment data, graduating student survey data, alumni survey data, and industry advisory board survey data.

Does the program offer a certificate or credential (e.g., teaching credential)?

- No

The most current assessment plan and curriculum matrix we have on file for your program may be found [here](#). To ensure we have the most updated assessment plan and curriculum matrix for your program, and for posting on our website, please upload the following documents:

Assessment Plan - Yes

Curriculum Matrix - Yes