Annual Assessment Report 2022-2023

BS Computer Engineering

Electrical & Computer Engineering

College of Engineering

CONTACT
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Name of Person Completing Report Anas Salah Eddin

DISCIPLINARY ACCREDITATION Yes

DEVELOPMENT AND DOCUMENTATION OF STUDENT LEARNING OUTCOMES
How were the program's SLOs developed? (select all that apply)
   o   Our disciplinary accrediting agency has <u>required</u> 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/engineering/ece/undergrad_programs/bsce.shtml

ASSESSMENT ACTIVITIES IN 2022-2023

This section provides the opportunity for programs to share and discuss assessment activities conducted in **AY 2022-2023.** 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?
- 7

How many SLOs did your program assess this past year in 2022-2023?

- My program assessed SLOs in AY 2022-2023 (e.g., artifact collection, scoring, closing the loop, etc.). May also have engaged in assessment planning activities unrelated to specific SLOs (e.g., modified curriculum matrix, assessment plan, etc.).

Please list the SLOs examined

- SLO #1: an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- SLO #2: an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- SLO #3: an ability to communicate effectively with a range of audiences.
- SLO #4: an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- SLO #5: an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- SLO #6: an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- SLO #7: an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Student Learning Outcome (SLO): an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
• Collected direct evidence (e.g., student work, exam items, etc.) • Scored direct evidence of student learning • Interpreted and made meaning of findings for direct evidence	• Capstone product (e.g., project, senior thesis, etc.) • Exit exam created by the program	• Used rubric or scoring guide • Scored exams/tests/quizzes
• Discussed assessment results to make program decisions to improve SLO achievement (e.g., design new course, modify assignments, etc.)		

Student Learning Outcome (SLO): an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
• Collected direct evidence (e.g., student work, exam items, etc.) • Scored direct evidence of student learning • Interpreted and made meaning of findings for direct evidence	• Capstone product (e.g., project, senior thesis, etc.)	• Used rubric or scoring guide
• Discussed assessment results to make program decisions to improve SLO achievement (e.g., design new course, modify assignments, etc.)		

Student Learning Outcome (SLO): an ability to communicate effectively with a range of audiences.

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
• Collected direct evidence (e.g., student work, exam items, etc.) • Scored direct evidence of student learning • Interpreted and made meaning of findings for direct evidence	• Exam created by external organization (e.g., professional licensure)	• Used rubric or scoring guide • Scored exams/tests/quizzes
• Discussed assessment results to make program decisions to improve SLO achievement (e.g., design new course, modify assignments, etc.)		

Student Learning Outcome (SLO): an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
• Collected direct evidence (e.g., student work, exam items, etc.) • Scored direct evidence of student learning • Interpreted and made meaning of findings for direct evidence	• Exam created by the program	• Used rubric or scoring guide • Scored exams/tests/quizzes
• Discussed assessment results to make program decisions to improve SLO achievement (e.g., design new course, modify assignments, etc.)		

Student Learning Outcome (SLO): an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
• Collected direct evidence (e.g., student work, exam items, etc.) • Interpreted and made meaning of findings for direct evidence	• Other: CATME	
• Discussed assessment results to make program decisions to improve SLO achievement (e.g., design new course, modify assignments, etc.)		

Student Learning Outcome (SLO): an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
• Discussed assessment results to make program decisions to improve SLO achievement (e.g., design new course, modify assignments, etc.)		

Student Learning Outcome (SLO): an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Assessment Activities	Evidence Used	Evaluation and Interpretation of Evidence
• Collected direct evidence (e.g., student work, exam items, etc.) • Scored direct evidence of student learning • Interpreted and made meaning of findings for direct evidence	• Assignment/exam/paper completed as part of regular coursework	• Used rubric or scoring guide • Scored exams/tests/quizzes
• Discussed assessment results to make program decisions to improve SLO achievement (e.g., design new course, modify assignments, etc.)		

IMPROVING THROUGH ASSESSMENT

Overall, what best describes how the program used the results in 2022-2023? Select all that apply.
- Assessment procedure changes (SLOs, curriculum matrix, rubrics, evidence collected, sampling, communications with faculty, etc.)
- Results indicated no action needed because students met expectations

Ideas to improve student learning can come from different constituents. With whom did the program discuss assessment planning and/or share results during AY 2021-2022? Select all that apply.
- Program/department faculty as whole
- Program/department assessment committee
- Persons or organizations outside the program: ABET Reviewer

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 2022-2023 so that others may learn from your experiences.
All insights are listed in our ABET self study report

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, course evaluations, etc.
<narrative here>

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 - No

Curriculum Matrix - No