

Annual Assessment Report 2020-2021

BS Chemical Engineering
Chemicals and Materials
College of Engineering

CONTACT

Name of Program Assessment Lead Laila Jallo Name of Person Completing Report Laila Jallo

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 required learning outcomes, so we use them.

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

• Department Website - provide URL: https://www.cpp.edu/engineering/cme/outcomes.shtml

ASSESSMENT ACTIVITIES IN 2020-2021

This section provides the opportunity for programs to share and discuss assessment activities conducted in **AY 2020-2021.** 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 2020-2021?

• My program assessed SLOs in AY 2020-2021

Please list the SLOs examined

• SLO #1: 1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

Student Learning Outcome (SLO): SLO 1: 1. 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	Assignment/exam/paper as part of regular coursework 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.)		

Findings				
N of Artifacts	Criterion Used	Goal Met	Eye-opening Result	
Comprehensive exam for 60 graduating seniors, embedded assessment questions in final exam for 60 juniors and evaluation of capstone design project of 60 students.	A benchmark of 60% was used to assess the average scores of each course in the comprehensive exam, and a passing score of 2.5 out of 5 was used to assess the rest.	Yes. All of the average scores were above the benchmarks. However, certain questions had average scores below the benchmark.	The subpar performance in certain concepts that they usually do well in mini exam and quizzes.	

IMPROVING THROUGH ASSESSMENT

Overall, what best describes how the program used the results in 2020-2021? Select all that apply.

- Results indicated no action needed because students met expectations
- Other, please explain: However, the faculty will pay attention to the concepts that seem to be harder for the students in the comprehensive exam.

Ideas to improve student learning can come from different constituents. With whom did the program discuss assessment planning and/or share results during AY 2020-2021? Select all that apply.

Program/department faculty as whole

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 2020-2021 so that others may learn from your experiences.

The college of engineering assessment committee designed an assignment that can be used to access critical thinking, written communication, lifelong learning and information literacy. In the 2019-20 AY, the college assessment committee collected pilot data to assess critical thinking, scored and analyzed the data, discussed the results and implemented close-the-loop strategies. In the 2020-21 AY, the college collected data from all seniors in the college, scored and analyzed the results. There was significant improvement in students' performance. This year the college will collect data and assessment for written communication skills in place of the GWT (Using the GWT rubric.).

<u>CPP's GI2025 goals</u> focus on eliminating equity gaps. What plans do you already implement, or would implement to support the campus' diversity, equity, and inclusion (DEI) efforts? (e.g., planned or current disaggregation of assessment data by race/ethnicity, etc.)

We plan to disaggregate the data in the future to help us implement better strategies to benefit our students.

The most current assessment plan and curriculum matrix we have on file for your program may be found <u>here</u>. 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