Annual Academic Assessment Report

Bachelor of Science in Computer Engineering (CENGBS)

<u>Student Learning Outcomes</u>:

CE1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

CE2. 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.

CE3. An ability to communicate effectively with a range of audiences.

CE4. 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.

CE5. 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.

CE6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

CE7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

<u>Assessment and Evaluation: AY 2022-2023</u> The Undergraduate Studies Committee (USC) in the Department of Electrical Engineering and Computer Science (EECS) evaluated Student Learning Outcome assessments. Because of the merger of the Department of Computer Science and Computer Engineering (CSCE) and the Department of Electrical Engineering (EECS), the results were not discussed at the annual faculty meeting, held August 16, 2023. They will be presented at a future meeting in the Fall 2023. The results of the analysis include the following:

- **Outcome CE1**:
    - o The outcome measured in courses indicates students are achieving the Outcome at the desired target level.

- **Outcome CE2**:
    - o The outcome measured in courses indicates students are achieving the Outcome at the desired target level.

- **Outcome CE3:**

- o The outcome measured in courses indicates students are achieving the Outcome at the desired target level.

- **Outcome CE4:**
  - o The outcome measured in courses indicates students are achieving the Outcome at the desired target level.

- **Outcome CE5:**
  - o The outcome measured in courses indicates students are achieving the Outcome at the desired target level.

- **Outcome CE6:**
  - o The outcome measured in courses indicates students are achieving the Outcome at the desired target level.

- **Outcome CE7.**
  - o The outcome measured in courses indicates students are achieving the Outcome at the desired target level.

Changes to the Degree Program – Planned or Considered

There are no changes to the BS in Computer Engineering degree program planned or considered based on the assessment and evaluation process. However, the program is now under a new merger of the Department of Computer Science and Computer Engineering (CSCE) and the Department of Electrical Engineering (ELEG) into the new Department of Electrical Engineering and Computer Science (EECS) that officially began August 14, 2023. This is an organizational change and for now degree programs will not be changed, although we anticipate there may be changes in the future. For example, the faculty is considering renaming all courses to EECS to make it easier to schedule classes and look for opportunities to find classes that could be shared, especially between the computer engineering and electrical engineering programs. Therefore, we do anticipate some changes to the BS in Computer Engineering in the future.

Changes to the Assessment Process – Planned or Completed

The BS in Computer Engineering, BS in Computer Science, and BA in Computer Science programs have a slightly different assessment processes than the BS in Electrical Engineering processes. We anticipate merging the processes, so they are near identical in all four programs.