

Annual Academic Assessment Report

Bachelor of Science in Computer Engineering (CENGBS)

Student Learning Outcomes:

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.

Assessment and Evaluation: AY 2023-2024 The Department of Electrical Engineering and Computer Science (EECS) evaluated Student Learning Outcome assessments. The results of the analysis include the following:

- **Outcome CE1:**
 - The outcome measured in courses indicates students are achieving the Outcome at the desired target level.
- **Outcome CE2:**
 - The outcome measured in courses indicates students are achieving the Outcome at the desired target level.
- **Outcome CE3:**
 - The outcome measured in courses indicates students are achieving the Outcome at the desired target level.
- **Outcome CE4:**

- The outcome measured in courses indicates students are achieving the Outcome at the desired target level.
- **Outcome CE5:**
 - The outcome measured in courses indicates students are achieving the Outcome at the desired target level.
- **Outcome CE6:**
 - The outcome measured in courses indicates students are achieving the Outcome at the desired target level.
- **Outcome CE7.**
 - 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. In November 2023, the faculty voted that 12 hours of Computer Engineering technical electives are now defined as any CSCE 40000-level or higher course not required for the degree except for CSCE 4900V Individual Study. Thus, certain courses outside the department that were listed in the handbook can no longer count towards these 12 hours. In addition, 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, some technical electives could be shared between computer engineering and electrical engineering. 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.