

**Annual Academic Assessment Report  
Department of Electrical Engineering and Computer Science  
Ph.D. in Computer Engineering  
June 2025**

**I. Student Learning Outcomes**

The Ph.D. in Computer Engineering student learning outcomes are identified as CE1 through CE5:

- CE1.** Identify and formulate a research-related problem, complete a literature search related to the problem, generate and analyze results, and develop and defend a proposal project plan.
- CE2.** Contribute to the body of knowledge in computer engineering.
- CE3.** Demonstrate mastery of fundamental material in computer engineering.
- CE4.** Generate a dissertation that meets high academic standards.
- CE5.** Describe advanced topics in computer engineering to a variety of audiences and through multiple modes.

**II. Assessment and Evaluation: AY 2024-2025**

The Department of Electrical Engineering and Computer Science (EECS) evaluated Student Learning Outcome assessments. The results of the analysis are summarized in 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.

**III. Changes to the Degree Program- Planned or Considered**

There are no changes in the Ph.D. in Computer Engineering degree program planned or considered based on the assessment and evaluation process. The program is under the 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. It is anticipated there may be program changes in the future. For example, the EECS

faculty may consider graduate courses that could be shared between the Computer Engineering, Computer Science and Electrical Engineering degree programs. Consideration for continuing improvements will be considered by the faculty during the 2025-2026 academic year.

#### **IV. Changes to the Assessment Process - Planned or Considered**

There were no changes to the assessment process during the 2024-2025 academic year. The Ph.D. in Computer Engineering program outcomes are assessed using the following tools:

1. **Course Evaluation:** Evaluations of the course content pertaining to specific outcomes by students and faculty. These are assessed numerically in the following levels:
  - (1) Not improved after taking the course
  - (2) Slightly improved after taking the course
  - (3) Improved after taking the course
  - (4) Significantly improved after taking the course
  - (5) Greatly improved after taking the course
2. **Final Presentation/Thesis/Dissertation Defense Evaluation:** These are assessed at the final comprehensive exam presentation or thesis/dissertation defense through a questionnaire filled out by the student's advisory/thesis/dissertation committee members and their major advisor. Each of the outcomes is assessed numerically in the following levels:
  - (1) Needs significant improvement
  - (2) Needs improvement
  - (3) Acceptable
  - (4) Very good
  - (5) Excellent

During the 2024-2025 academic year, average course evaluations were at or above (4). During the 2024-2025 academic year, average final presentation scores were at or above (4). Improvements to the Student Learning Outcomes and assessment process will be considered by the EECS faculty during the 2025-2026 academic year.