

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

I. Student Learning Outcomes

The Ph.D. in Computer Science student learning outcomes are identified as CS1 through CS5:

- CS1.** 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.
- CS2.** Contribute to the body of knowledge in computer science.
- CS3.** Demonstrate mastery of fundamental material in computer science.
- CS4.** Generate a dissertation that meets high academic standards.
- CS5.** Describe advanced topics in computer science 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 CS1:**
 - The outcome measured in courses indicates students are achieving the Outcome at the desired target level.
- **Outcome CS2:**
 - The outcome measured in courses indicates students are achieving the Outcome at the desired target level.
- **Outcome CS3:**
 - The outcome measured in courses indicates students are achieving the Outcome at the desired target level.
- **Outcome CS4:**
 - The outcome measured in courses indicates students are achieving the Outcome at the desired target level.
- **Outcome CS5:**
 - 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 Science 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 Science 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.