Annual Academic Assessment Report Department of Electrical Engineering and Computer Science Master of Science in Computer Engineering June 2025

I. Student Learning Outcomes

The M.S. in Computer Engineering student learning outcomes are identified as CE1 through CE5:

- **CE1.** Solve complex problems in computer engineering.
- **CE2.** Analyze and design system components and processes to meet specific requirements.
- **CE3.** Describe advanced topics in computer engineering.
- **CE4.** Apply advanced methodologies and technologies when solving problems and developing computer engineering systems.
- **CE5.** Assess complex design choices in computer engineering.

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 Master of Science (MS) 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 was 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 MS 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.