Annual Academic Assessment Report Department of Electrical Engineering and Computer Science Master of Science in Computer Engineering June 2024

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 2023-2024

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:

o 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 now under a recent 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. 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.

IV. Changes to the Assessment Process - Planned or Considered

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.
- 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.

There will be an external review of the graduate programs in Computer Engineering during October 2024. The recommendations and comments from the evaluators will be assessed by the EECS Department and College of Engineering. Improvements to the Student Learning Outcomes and assessment process will be considered by the EECS faculty during the 2024-2025 academic year.