Annual Academic Assessment Report Department of Electrical Engineering and Computer Science Cybersecurity Graduate Certificate June 2025

I. Student Learning Outcomes

The Cybersecurity Graduate Certificate student learning outcomes are identified as CY1 through CY2:

- **CY1.** An ability to apply security principles and practices to the environment, hardware, software, and human components of a system.
- **CY2.** Be able to analyze and evaluate systems with respect to maintaining operations in the presence of risks and threats.

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 CY1:
 - The outcome measured in courses indicates students are achieving the Outcome at the desired target level.
- Outcome CY2:
 - 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 Cybersecurity Graduate Certificate (CYBRGC) 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 Cybersecurity Graduate Certificate (CYBRGC) 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

During the 2024-2025 academic year, average course evaluations 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.