



Annual Assessment Report for Academic Programs

The University Assessment Team advocates for the enhancement of student learning through purposeful, meaningful, and feasible student-outcomes assessment practices. The Assessment Team seeks to collaborate with programs, departments, and units to ensure that effective assessment of student learning occurs across the University. To assist in meeting this goal, the Team requests that you complete this Annual Assessment Report form to document student learning in your program. A PDF version of this completed form will be posted to the Academic Affairs Assessment website. Please note that this Annual Assessment Report form should only be completed after you have an Assessment Plan for Academic Programs forms on file with the University Assessment Team. The plan is completed once and only updated when revisions have been made to components of the plan.

- 1. Degree Level and Program Name:** Bachelor of Robotic and Mechatronic Systems Engineering with a Concentration in Electrical Engineering (BEE)
- 2. College/School:** College of Engineering & Science
- 3. Assessment Overview** - Briefly share how student learning outcomes assessment is conducted within your program/department (e.g. number of outcomes, examples of assignments used, and frequency of assessment).

The RMSE/wEE bachelor program has 7 student learning outcomes, with two or three outcomes assessed each year. Faculty assess student learning outcomes using direct measures from embedded assignments (e.g. exams, quizzes, and projects using rubrics)

- 4. Student Learning Outcomes & Benchmarks** -Which student learning outcome(s) from the assessment plan filed with the University Assessment Team is/are being reported on in this report? Include the corresponding benchmark(s) for each outcome.

Referencing the Bachelor of RMSE /wEE Program Assessment Plan on file with the University Assessment Team, three outcomes are being assessed in this cycle. Student Learning Outcome #1: An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics. Outcome #3: an ability to communicate effectively with a range of audiences. For quantitative assessment methods, a score of 3.5/5 (i.e., 70%) or better is considered as having achieved the program outcome. For rubric-based assessment methods, students achieving a level of 3/4 (i.e., 75%) or better are considered to have performed satisfactorily. The details on assessment measures are provided in the attached worksheets.

- 5. Institutional Outcomes** - For which institutional outcome(s) do the reported student learning outcome(s) align?

SLO Outcome Alignment	Institutional Outcome
	I. Jesuit & Mercy Values
	II. Diversity & Cultural Awareness
Yes	III. Critical Thinking & Problem Solving
Yes	IV. Communication
	V. Professionalism
Yes	VI. Lifelong Learning



6. **Assessment Period:** Select the academic year for which you are reporting results (i.e. when data were collected):

2024-2025

7. **Program Assessment Results** -Briefly summarize the assessment results and how they relate to benchmark(s).

Outcome 1:

Performance was mixed. The first indicator (problem identification/formulation) met the benchmark with an average of 3.53/5 (~70.6%). However, the second indicator (problem solving) did not meet the benchmark, with an average of 2.82/5 (~56.4%). Results are based on a single RMSE student, limiting statistical reliability, though comparison with EE students suggests this may be an outlier rather than a systemic issue.

Outcome 3:

The benchmark was met. The RMSE student achieved 75% (3.75/5) on the written report and 76% (3.04/4) on rubric-based oral/demo assessments, meeting minimum thresholds. However, performance was only marginally above the benchmark, with noted issues related to improper use of AI tools and lack of depth in understanding.

8. **Planned Actions and/or Actions Taken in Response to Assessment Results** - Briefly summarize how you are using the assessment results to enhance student learning and improve program quality.

Action plans for outcome 1:

Reinforce problem-solving skills through additional structured practice and guided problem-solving activities. Introduce periodic low-stakes assessments (e.g., quizzes) to encourage consistent engagement with course material. Monitor future cohorts to determine whether the observed weakness persists beyond a single-student data point.

Action plans for outcome 3:

Provide clearer expectations and examples of high-quality technical reports. Emphasize proper use and verification of AI-assisted work. Continue incorporating oral assessments to validate individual understanding and reduce over-reliance on generative tools..