



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: Master of Science in Technical Management

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 Master of Science in Technical Management has 5 student learning outcomes. We assess two student learning outcomes #1 and #2 in year one, two student learning outcomes #3 & #4 in year two and one student learning outcome #5 in year 3. The 2024 assessment is for year 3 student learning outcome #5.

4. Student Learning Outcomes -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.

Per the Master of Science in Technical Management Assessment Plan we are assessing one outcome in this cycle. Student Learning Outcome (5) – Foster innovation and creativity via leadership and by example.

Student will demonstrate both qualitative and quantitative academic/business knowledge of technologies in practice related to international 'All' Electric vehicle designs and competitive business models.

Assessment Methods: Research Projects, Team SWOT Analysis Preparations, and Final Exam.

The benchmark for success is to have at least 70% of the students earn a rubric equivalent score of a C or better on the research project in EMGT 5040 – Administration of Technical Businesses.



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
	III. Critical Thinking & Problem Solving
Yes	IV. Communication
	V. Professionalism
	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. Results, Planned Actions, and/or Actions Taken -Briefly summarize the assessment results, how they relate to benchmark(s), and how you are using them to enhance student learning and improve program quality.

Assessment Methods: Research Projects, Team SWOT Analysis Preparations, and Final Exam.

Six graduate engineering students were enrolled in EMGT 5040 Administration of Technical Businesses in the Fall 2024 Semester.

Quantitative assessment score = 4.5/5.0 90%

Qualitative assessment score = 3.9/4.0 98%

Technical design/specification assessment of ICE versus 'All' electric vehicle completed.

Completed research analyzing vertical integration in the product development process.

(Example; Raw materials, batteries, EV design, EV validation, EV production, & EV marketing).

Established a database of EV battery technology, materials, minerals, rare earth, and supply chain requirements.

Completed research on the application of emerging AI technologies into the integration of EV designs and validation.

Organized team study to investigate Nvidia, Open AI, etc. future technical advancements.

Concrete evidence – Research projects completed documents and Final Exam completed documents.

Attachment(s):

None