Annual Academic Assessment Report

MS / Biological Engineering
June 1, 2025

The following summarize the assessment measures used for this report. The results pertaining to the academic year (AY) 2024-2025 are presented and analyzed with regard to student leaning outcomes.

1. *Graduating student cumulative GPA*: SLO-1
2. *Annual graduate student academic reviews and progress reports*: SLO-1
3. *Number of publications and conference*: SLO-4
4. *Proposal defense – MS thesis proposal*: SLO-2 and 4
5. *Final examination – MS thesis defense*: SLO-3 and 4
6. *Exit reviews*: all outcomes

1. Cumulative GPA

MS: SLO-1 – Progress toward the degree and preparation of conducting thesis research (*i.e.*, academic progress)

Table 1 provides the cumulative GPA for a student graduating with MS degree in AY 2024 – 2025. The metric for success is for 100% students to achieve at least 3.0 cumulative GPA. According to the data in **Table 1**, we have achieved the stated criterion.

Table 1. Cumulative GPA for graduating BENG students for 2024 – 2025. [Linda – Please complete the table!]

Student Count	Degree	Graduating Term	Cumulative GPA
1	BENGMS	Summer 2024	3.880
2	BENGMS	Spring 2025	3.640

2. Annual Graduate Student Academic Reviews and Progress Reports

MS: SLO-1 – Progress toward the degree and preparation of conducting thesis research (*i.e.*, academic progress)

Table 2 provides the results from the annual graduate student academic reviews and progress reports of BENG MS students for Fall 2024 – Spring 2025. Note that there **are 4 additional MS students** in CEMB (0), ENDY (2), FDSC (1), MEEG (1) and MSEN (0) whose annual reviews were done through the interdisciplinary program.

This form, administered by the UA Graduate School, provides for a rating of satisfactory or unsatisfactory. The metric for success is 100% of students to achieve a “satisfactory” outcome. According to the data in **Table 2**, all students achieved “satisfactory” outcomes. Hence, there appears to be no issues or concerns through review of this measure.

Table 2. Annual graduate student academic reviews and progress reports for 2024 – 2025. [Linda – Please complete the table!]

Academic Year	Number "Satisfactory"	Number "Unsatisfactory"
2024 – 2025		

3. Number of Publications and Conference Presentations

MS: SLO-4 – Communicate effectively (oral)

Table 3 provides the number of peer-reviewed publications and conference presentations for all students in MS program in AY 2024-2025. The metric for success is for 100% of students to present at least once in international/national/state conferences and meetings before their graduations. Our single MS graduate in AY 2024-2025 presented one presentation in an international/national/state conference and meeting and published two peer-reviewed articles. Our continuing students are making solid progress on both fronts as well.

Table 3. Number of publications and conference presentations for BENG students for 2024 – 2025. [Linda – Please complete the table!]

Student Count	Degree	Graduating Term	Number of Peer-Reviewed Publications	Number of Conference Presentations
1	MS	Summer 2024		
2	MS	Spring 2025		

4. Proposal Defense

MS: SLO-2 & 4 – Plan thesis research which meets high academic standards and constitutes a significant contribution to Biological Engineering (*i.e.*, understanding of field and contribution to new knowledge); communicate effectively (oral and writing)

We did not have any MS students complete a proposal defense in AY 2024-2025.

5. Final Examination: MS Thesis Defense

MS: SLO-3 & 4 – Write a thesis which meets high academic standards and constitutes a significant contribution to Biological Engineering (*i.e.*, understanding of field and contribution to new knowledge); communicate effectively (oral and writing)

Table 4 provides the students' performances in MS thesis defense in 2024-2025. Our single MS graduate scored an average score of 3 or less and passed the examination. Hence, there appears to be no issues or concerns through review of this measure. However, improvements will be made for timely collections of rubrics by working with faculty.

Table 4. Performance of students in MS thesis defense for 2024 – 2025. [Linda – Please complete the table!]

Student Count	Degree	Result	Evaluation Score (Average)
1	MS	Pass	1
2	MS	Pass	1

6. Exit Review

MS: All outcomes

Winfred Yeboah was interviewed by the BAEG Department Head after his MS degree was completed. Mr. Yeboah indicated that he had a positive experience in the program and that his learning objectives were met. He indicated that increased numbers of students and opportunities for networking would have been beneficial. He was complimentary of the courses in the department and the faculty interactions that he had. – Any exit interview by Terry? If so, please add comments similar to this.

7. Conclusion

Based on the given assessment measures, it appears that SLOs were met by the BENG graduate program at MS levels for AY 2024 – 2025. Future assessments will be strengthened through the timely implementation of the evaluation rubrics as well as the graduate student exit reviews.

8. Program Changes

Two new MS programs, the MSBE with a non-thesis option and the Accelerated MSBE, were approved and launched in Fall 2024. While it is too early to assess their full impact, we anticipate that both will significantly enhance the BENG graduate program. The non-thesis MSBE is expected to attract a broader range of applicants, including those pursuing industry-focused careers and non-traditional students. The Accelerated MSBE aims to retain high-achieving BSBE undergraduates by offering a streamlined path to earn their MSBE degree. Together, these programs are poised to strengthen enrollment, diversity, and academic continuity within our graduate offerings.

9. Assessment Process Changes

Faculty will discuss consequential assessment process changes for the timely implementation and completion of the required assessments during faculty meetings.