

**Assurance of Student Learning Reflection
2025-2026**

Ogden College of Science & Engineering

School of Engineering & Applied Sciences

Mechatronics Engineering Technology (5015 :)

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Is this an online program? ☐ Yes ☐ No

Please make sure the Program Learning Outcomes listed match those in CourseLeaf. Indicate verification here
☐ Yes, they match! (If they don't match, explain on this page under **Evaluation**)

Instructions: For the 2024-25 assessment, we are asking you to reflect on the last three-year cycle rather than collect data. It's important to take time to look over the results from the last assessment cycle and really focus on a data-informed direction going forward. In collaboration with your assessment team and program faculty, review each submitted template from 2021-2024 and consider the following for each Program Learning Outcome, add your narrative to the template, and submit the draft to your **ASL Rep** by **May 15, 2025**.

Program Student Learning Outcome 1

Program Student Learning Outcome

Program Student Learning Outcome 1: Graduates will possess/ demonstrate the ability to identify, formulate strategies and solve technical problems.

Evaluation

Using the last three assessment cycles, is this program learning outcome still relevant, or should it be changed? - **Still relevant**
If it has recently changed, please explain. Other things to examine: Is the outcome measurable? We put a Lot of emphasis on the ATMAE Accreditation and the feedback from the ATMAE **Certified Manufacturing Specialist (CMS) examination.**

Measurement Instruments

Certified Manufacturing Specialist (CMS) examination Sections on Communication

Criteria & Targets

Does Criteria for Success (level of performance students will have achieved for your program to have been successful—60% pass rate for these sections with the seniors on the **Certified Manufacturing Specialist (CMS) examination. The national Average is 58%.**

Results & Conclusion

Results: Are the results what was expected or not? Yes
What stood out in the assessment cycle over the past three years? Explain

Over the years 2021 through 2024 the students were at a pass rate on the Certified Manufacturing Specialist (CMS) examination of:
2021- 45%- We adjusted who the instructors were in some of the coursework to work from strengths of the instructors
2022- 47% - we were collecting information to see if adjustments were working
2023 – 52% - adjustments from 2021 seemed to be helping in the correct direction
2024 - 56% - the adjustments we made in 2021 appear to be helping students get closer to the goal of 60% pass rate.

	We are not adjusting anything else until such time as we have reached this goal. We have a new faculty starting in the Fall 2025 and will see how they will fit into the curriculum.
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	We are not adjusting anything else until such time as we have reached this goal. We have a new faculty starting in the Fall 2025 and will see how they will fit into the curriculum.

Program Student Learning Outcome 2	
Program Student Learning Outcome	Graduates will demonstrate an ability to communicate effectively.
Evaluation	MFGE 490A Senior Research Final Presentation Evaluation
Measurement Instruments	Members from the Mechatronics Engineering Technology Industrial Advisory Board who work in industry have been the evaluators for this goal. They use a 5 point likert scale evaluation instrument in multiple areas.
Criteria & Targets	Students are to have received a 4.25/ 5 in all areas of their presentation criteria to be successful in this section.
Results & Conclusion	<u>Results:</u> Are the results what was expected or not? Results from year to year vary depending upon the group projects/ the team members and the individual team leader What stood out in the assessment cycle over the past three years? Over the past three years there has been some improvement as far as the scores from the evaluators. Although there was a slight downward turn in the 2024 evaluations the trend seems to be heading in the correct direction and there is always a cyclic pattern in improvement plans. <u>The team aspect is important for the students in the MFGE 490A course. What worked best is if there is the ability to do a two semester sequence with the students so they have time to develop their projects in the Fall and refine them in the Spring.</u>
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	The ability for the faculty to work with students and do a two semester sequence with the students so they have time to develop their projects in the Fall and refine them in the Spring is not feasible with the current staffing in the Mechatronics Engineering Technology Program therefore we are satisfied with the current results as we cannot actually complete what we are trying to accomplish unless we can teach the senior capstone in two semesters instead of the current one semester offering.

Program Student Learning Outcome 3	
Program Student Learning Outcome	Graduates will demonstrate the knowledge and capacity to apply managerial/leadership principles and practices to appropriate

Evaluation	Using the last three assessment cycles, is this program learning outcome still relevant, or should it be changed? Yes Still relevant; We put a Lot of emphasis on the ATMAE Accreditation and the feedback from the ATMAE Certified Manufacturing Specialist (CMS) examination.
Measurement Instruments	Certified Manufacturing Specialist (CMS) examination offered by the Association of Technology, Management, and Applied Engineering (ATMAE) sections on technical capabilities
Criteria & Targets	Does Criteria for Success (level of performance students will have achieved for your program to have been successful 60% pass rate for these sections with the seniors on the Certified Manufacturing Specialist (CMS) examination. The national Average is 58%.
Results & Conclusion	2021- 40%- We adjusted who the instructoors were in some of the coursework to work from strengths of the instructors 2022- 46% - we were collecting information to see if adjustments were working 2023 – 51% - adjustments from 2021 seemed to be helping in the correct direction 2024 - 56% - the adjustments we made in 2021 appear to be helping students get closer to the goal of 60% pass rate. We are not adjusting anything else until such time as we have reached this goal. We have a new faculty starting in the Fall 2025 an will see how they will fit into the curriculum.
<u>**IMPORTANT - Plans for Next Assessment Cycle:</u>	We are not adjusting anything else until such time as we have reached this goal. We have a new faculty starting in the Fall 2025 an will see how they will fit into the curriculum.