Bachelor of Science in Mechanical Engineering (BSME)
2023 - 2024 Program Assessment Report

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1. Program Mission and Educational Objectives

The mission statement of the Mechanical Engineering (ME) Program is in-line with and built upon the mission statements of both the Institution and the Department. The ME program's Mission Statement and Program Educational Objectives are stated as:

Mechanical Engineering Program Mission Statement

The Mechanical Engineering Bachelor of Science program at Oregon Institute of Technology is an applied engineering program. Its mission is to provide graduates the skills and knowledge for successful careers in mechanical engineering or related fields.

Program Educational Objectives (PEO)

The program expects graduates to achieve, within several years of graduation, the following objectives. Mechanical Engineering graduates will have:

- demonstrated the ability to analyze, design and improve practical thermal and/or mechanical systems.
- showed the ability to communicate effectively and work well on team-based engineering projects.
- succeeded in mechanical engineering positions.
- pursued continued professional development, including professional registration if desired.
- successfully pursued engineering graduate studies and research if desired.

2. Program Description and History

Program History

The Mechanical Engineering (ME) Program at Oregon Institute of Technology (Oregon Tech) was implemented in fall 2005. It gained initial accreditation by the Engineering Accreditation Commission (EAC) of ABET in fall 2009. Subsequently the program was visited in 2011 and its accreditation continued. The accreditation of the ME program was extended to the Oregon Tech campus in the Seattle, WA area in 2013; and to the Portland-Metro campus in 2018. Enrollment trends from 2019 – 2024 have varied from 328 to 378 students per year in the program.

Program Location: The BSME program is delivered at three campuses within the University –

Klamath Falls, Portland-Metro (in Wilsonville) and Seattle. The MMET Department's other two degree programs (the Bachelor of Science in Mechanical Engineering Technology, BSMET and the Bachelor of Science in Manufacturing Engineering Technology, BSMFG) share a number of common courses with the BSME and thus faculty input from the staff on these programs is also considered when assessing the effectiveness of several Departmental courses.

Program Enrollment:

The program enrollment for each campus, and the program total, are shown below in Table 1 for the last 5 years. Also shown in the % Change in these numbers over the 5-year period.

	2018-19	2019-20	2020-21	2021-22	2022-23	5 Year Difference	5Year % Change
Klamath Falls	239	248	240	242	229	-10	-4%
Portland-Metro	68	67	68	62	61	-7	-10%
Seattle	74	63	33	38	35	-39	-53%
Total	381	378	341	342	325	-56	-15%

Table 1 BSME Program 5-Year Enrollment Data

Program Graduates:

The program graduates for each campus, and the combined total are shown below for the last 5 years.

	2018-19	2019-20	2020-21	2021-22	2022-23
Klamath Falls	38	35	38	44	33
Portland-Metro	3	8	15	12	9
Seattle	14	12	15	9	6
Total	55	55	68	65	48

Table 2 BSME Program 5-Year Graduate Data

Employment Rates and Salaries:

The Employment rates and salaries for Oregon Tech BSME students shown below. These numbers are the combined results for the 2020/2021/2022 graduating classes.

% Employed	% Continuing Education	% Seeking	% Not Seeking	Medium Salary	Success Rate
96%	1%	3%	1%	$70,000	97%

Table 3 BSME Program Employment Rates and Salaries

3. Program Student Learning Outcomes

The PSLO's for the BSME degree are shown below, and are based on the ABET EAC 1-7 Criterion 3 outcomes.

Upon graduating from the BSME program at Oregon Tech, students should possess:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. an ability to communicate effectively with a range of audiences.
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

4. Curriculum Map

The mapping of the PLSO to the course curriculum are shown below. The BSME PLSO's are closely aligned with the Oregon Tech ESLO's, and are mapped approximately as shown below for the purpose of identifying which BSME program courses which support the Oregon Tech ESLOs. The BSME Program uses the terminology of "Introduced", "Reinforced", and "Emphasized"; which corresponds to the Oregon Tech terms of "Foundation", "Practice", and "Capstone" respectively.

BSME PLSO	Oregon Tech ESLO
1. An ability to solve problems	Quantitative Literacy and Reasoning
2. An ability to apply designs	Diverse Perspectives
3. Communication	Communications
4. Ethics	Ethics and Reasoning
5. Teamwork	Teamwork
6. Experimentation	--
7. Apply Knowledge	Inquiry and Analysis

Table 4 BSME Program PLSO to ELSO Course Outcome Mapping

Freshman Year

Fall
CHE 201 - General Chemistry I
CHE 204 - General Chemistry I Lab
ENGR 111 - MMET Orientation
WRI 121Z - Composition I
Humanities/Social Science Elective
Math (Algebra if required)

Winter
CHE 202 - General Chemistry II
CHE 205 - General Chemistry II Lab
COM 111Z - Public Speaking
Hum/Soc-Sci Elective
Math (Trigonometry if required)

Spring
MATH 251 - Differential Calculus
MFG 120 - Intro Machining Proc
MET 241 - CAD for Mechanical Design I
Economics Elective

Junior Year

Fall

MATH 341 - Linear Algebra I	
MECH 318 - Fluid Mechanics	SO 2,6
MECH 363 - Engineering Inst.	SO 1,2,6
MET 375 - Solid Modeling	
Statistics Requirement	

Winter

ENGR 212 - Dynamics	SO 2
ENGR 326 – Elec. Pwr Sys.	SO 6
ENGR 355 - Thermodynamics	SO 1,2
MECH 315 - Machine Design I	SO 1,2,4
MECH 360 - Engineering Mtls II	SO 1,3,6
SPE 321 - Sml Grp/Team Comm	SO 3,4

Spring

HUM 125 - Intro Tech, Soc, Vals	SO 7
MECH 313 - Thermodynamics II	SO 1,2,4
MECH 316 - Machine Design II	SO 1,2,3,5
MECH Elective (MECH 307/407)	

ABET SO 1-7: Upper-Level BSME Courses appropriate for collecting/scoring data.

Sophomore Year

Fall
MATH 252 - Integral Calculus
MECH 260 - Engineering Materials I
MET 242 - CAD for Mechanical Design II
PHY 221 - General Physics w/Calculus
WRI 122Z - Composition II -or-
WRI 227Z - Technical Writing

Winter
ENGR 211 - Engineering Mechanics: Statics
MATH 254 - Vector Calculus I
MFG 314 - Geom Dimension/Tolerance
PHY 222 - General Physics w/Calculus

Spring
ENGR 213 - Engr Mech: Strength of Mat
ENGR 236 - Fund of Elec Circuits
ENGR 266 - Engineering Computation
MATH 321 - Appl Diff Equation I
PHY 223 - General Physics w/Calculus

Senior Year

Fall

ENGR 491 - MMET Sen. Proj. I	SO 1-7
MECH 323 - Heat Transfer I	SO 1,3,6
MECH 351 – Fin. Elem. Anal.	SO 1
WRI 327 – Adv. Tech Writing	SO 3,4
Fluid Mech. II (MECH 417/18)	SO 1,2

Winter

ENGR 492 - MMET Sen. Proj. II	SO 1-7
MECH 437 - Heat Transfer II	SO 1,3,5,6
MECH 480 – Mech. Vibrations	SO 1,3,5,6
PHIL 331 - Ethics / Professions	SO 4
Hum/SocSci Elective	
MECH Elective (MECH 307/407)	

Spring

ENGR 493 - MMET Sen. Proj. III	SO 1-7
MECH 436 – Class. Ctrl Sys.	SO 1,2,5,6
Hum /SocSci Elective	
MECH Elective (MECH 307/407)	

Required to Graduate with BSME Degree: 180 Credit Hours

5. Three-Year Cycle for Assessment of Student Learning Outcomes

The BSME program is using a three-year assessment cycle for its SLOs, with the assessment cycle being the same for all three campuses.

Assessment Criteria	22/23	23/24	24/25
1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.		✓	
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.		✓	
3. an ability to communicate effectively with a range of audiences.	✓		✓
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	✓		✓
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.		✓	
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	✓		✓
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.	✓		✓

Table 5: Three-year PLSO assessment cycle timetable

6. Assessment Activities Undertaken

Student Outcomes Assessment and Continuous Improvement Summary Tables

Table 3.1 – The B.S. in Mechanical Engineering Continuous Improvement Using Student Outcomes and Assessment Results

EAC SO 3: An ability to communicate effectively with a range of audiences
Klamath Falls Campus Assessments of BSME Program for SO 3

Courses corresponding to the SO	Course(s) used for assessment	Performance Indicators	Assessment Method	Cycle of Assessment	Year/Semester of Assessment	Target	Results	Documents
MECH 437 MECH 360 MECH 316 ENGR 211 ENGR 491-3 WRI 327 MECH 323	MECH437	Use Heat Transfer Experiment to Analyze and Apply Lecture Materials	Lab Report based on experiment that applies concepts / theory from Heat Transfer	3-Years	Winter 2022	80% of students score 3 or 4 for criteria 3a-3e using scoresheet	Students scored >80% on all criteria except 3c Support and Documentation. (68%)	Evidence is in MMET Teams folders / SO Data Collection
	ENGR 211	Assess Students ability to problem solve and communicate steps / logic used to work out solutions	HW statics problems & communicate process and how engr. and scient. principles used, not just trial/error	3-Years	Fall 2022	80% of students score 3 or 4 for criteria 3a-3e using scoresheet	Students scored 90% on all criteria 3a-3e	Evidence is in MMET Teams folders / SO Data Collection

Summary of Aggregated Assessment Data (across all Criteria):
The data is based on assessments from assignments in two different courses (MECH 437 and ENGR 211). Both courses have components / outcomes in mechanical engineering and communications. The classes were made up of 16 BSME students in MECH 437 (Heat Transfer) and 15 students in ENGR 211 (Mechanics/Statics). Each Performance Indicator (Criteria) were scored / student.

SO3 Results of Evaluation of Aggregated Assessment Data:
The threshold for success is defined as 80% of students in class score a 3 or 4 on question/assignments that is selected as performance indicator. Only BSME students were included in this assessment. The findings indicate the students' performance was very good across all criteria except for the Support and Documentation criteria did not meet the faculty expectations in the Heat Transfer (MECH 437) course, and faculty look at this finding for Closing-the-Loop and Continuous Improvement opportunities. The faculty identified a lack of or quality of references as an area that needs to improve.

SO3 Actions for Continuous Improvement:
Apply a corrective action of utilizing library services to learn more about using resources and databases available to students. The head librarian at Oregon Tech gave a presentation at all 3 campuses related to references and standards in 2023-24 to address this weakness and give students the resources to perform better (especially in delivery of the Capstone / Senior Project).

SO3 Results of Actions for Improvement:
Students received the presentation and relevant exercise of looking up references/standards and were receptive and appreciative of the materials provided. All Senior Project groups were asked to include references in their documentation and there is evidence that the additional tools that resulted from this corrective action were helpful in improving the overall quality of written/oral communication for this year's projects.

SO3 Assessment Instruments:
In regard to SO3 assessment in MECH 437, One lab exercise / experiment involving the application of theory to present results for a heat transfer problem was used. The problems were relevant to the mechanical engineering field of study. Students were required to set up the experiment and run tests before identifying the variables and selecting the correct tools to complete the assignment. The overall grade for the lab report was used for assessment. Regarding SO3 assessment in ENGR 211, engineering mechanics - statics problems were assigned with a focus on communicating the process, steps, and theory related to intermediate steps was utilized.

Table 3.3 – The B.S. in Mechanical Engineering Continuous Improvement Using Student Outcomes and Assessment Results

Seattle Campus Assessment of BSME Program for SO 3								
Courses corresponding to the SO	Course(s) used for assessment	Performance Indicators	Assessment Method	Cycle of Assessment	Year/Semester of Assessment	Target	Results	Documents
MECH 417 MECH 436 MECH 437 MECH 480 MECH 318 MECH 363 MECH 351 MECH 360 MECH 316 WRI 122/227 WRI 327 PHIL 331 ENGR 491 ENGR 492 ENGR 493	MECH 417	Purpose and audience (a), focus and organization (b), support & documentation (c), style & convention (d), visual comm. (where app) (e)	Write a research paper on hydroelectric power	3-Years	Winter 2022	80% of students score 3 or 4 for criteria 3a-3e using scoresheet	Students scored > 85% on all criteria.	Evidence is in MMET Teams folders / SO Data Collection
	MECH 480	Purpose and audience (a), focus and organization (b), support & documentation (c), style & convention (d), visual comm (where app) (e)	Laboratory report on a torsional pendulum experiment and mass moment of inertia measurements	3-Years	Winter 2023	80% of students score 3 or 4 for criteria 3a-3e using scoresheet	Students scored > 83% on all criteria.	Evidence is in MMET Teams folders / SO Data Collection
Summary of Aggregated Assessment Data (across all Criteria): The data is based on the assessment done on two different assignments in two different courses (MECH 417 and MECH 480). Both have applications of communication in mechanical engineering problems. The classes were made up of 7 BSME students in MECH 417 (Fluid Mechanics II) and 6 students in MECH 480 (Mechanical Vibrations). Each Performance Indicator (Criteria) were scored / student.								
SO3 Results of Evaluation of Aggregated Assessment Data: The threshold for success is defined as 80% of students in class score a 3 or 4 on question/assignments that is selected as performance indicator. Only BSME students were included in this assessment. The findings indicate the students' performance was good overall.								

Table 4.1 – The B.S. in Mechanical Engineering Continuous Improvement Using Student Outcomes and Assessment Results

EAC SO 4: An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

Klamath Falls Campus Assessments of BSME Program for SO 4

Courses corresponding to the SO	Course(s) used for assessment	Performance Indicators	Assessment Method	Cycle of Assessment	Year/Semester of Assessment	Target	Results	Documents
ENGR 491-3 PHIL 331 WRI 327 MECH 315 ENGR 355 MGT 345	ENGR 491	Responses to ethical scenario questions taken from FE exam.	Multiple choice questions on engineering ethics/global/ economic impact	3-Years	Fall 2022	50% of students answering correctly	Students scored at 50% or above on 8 of the 10 questions	Evidence is in MMET Teams folders / SO Data Collection
	ENGR 355	Use of code of ethics to describe ethical issue and explore global/econ impact sol'n & ethical diversity	Student report on use of Chloro - fluorocarbons	3-Years	Fall 2021	80% of students score 3 or 4 for criteria 4a-4f using scoresheet	Students scored 100% on all criteria except 4a where they scored 75%	Evidence is in MMET Teams folders / SO Data Collection

Summary of Aggregated Assessment Data (across all Criteria):
The data is based on the assessment done on two different assignments in two different courses (MECH 491 and ENGR 355). Both courses have applications of ethical and professional behavior / impact of solutions in mechanical engineering. 17 BSME students completed the survey in ENGR 491 and 4 students in ENGR 355 (Thermodynamics). The Performance Indicator (Criteria) were scored / student in the ENGR 355 class while the questions in the survey were scored individually for each campus.

SO4 Results of Evaluation of Aggregated Assessment Data:
The threshold for success is defined as 80% of students in class score a 3 or 4 on question/assignments that is selected as performance indicator. Only BSME students were included in this assessment. The findings indicate the students' performance met the expectation of the faculty, with only criteria 1 for SO 4 showing weaknesses / scoring at the 75% in ENGR 355, more data needs to be collected to draw useful conclusions.

SO4 Actions for Continuous Improvement:
Use a better course to re-evaluate this SO so that more data is collected and a bigger group of students complete the assessment.
Redesign the Qualtrics survey so that it has better / more representative questions that directly relate to the criteria in the SO.
If possible, collect data from the Philosophy 331 class where topics related to this SO are focused on and taught to BSME students.

SO4 Results of Actions for Improvement:
None yet, this SO is scheduled for assessment and data collection in 2024-25

SO4 Assessment Instruments:
In regard to SO4 assessment in ENGR 491, 10 problems from the FE were used in a Qualtrics Survey. The problems were taken from the engineering field of study. In assessment done in ENGR 355, an individual report was assigned related to the use of chloro-fluorocarbons was used. The BSME faculty will be looking into better tools for this assessment in the coming year.

Table 6.3 – The B.S. in Mechanical Engineering Continuous Improvement Using Student Outcomes and Assessment Results

EAC SO 6: an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

Seattle Campus Assessment of BSME Program for SO 6

Courses corresponding to the SO	Course(s) used for assessment	Performance Indicators	Assessment Method	Cycle of Assessment	Year/Semester of Assessment	Target	Results	Documents
MECH 318 MECH 360 MECH 363 MECH 437 MECH 480 MECH 436 ENGR 326 ENGR 491 ENGR 492 ENGR 493	MECH 480	Experimentation, collection and analysis of data, interpretation of data and drawing conclusions	Laboratory assignment on free vibration of SDOF systems	3-Years	Winter 2022	80% of students score 3 or 4 for criteria 6a-6e using scoresheet	Students scored >82% on all criteria	Evidence is in MMET Teams folders / SO Data Collection
	MECH 318	Experimentation, collection and analysis of data, interpretation of data and drawing conclusions	Laboratory assignment on calibration of wind tunnel speed	3-Years	Fall 2022	80% of students score 3 or 4 for criteria 6a-6e using scoresheet	All students scored 100% on all criteria	Evidence is in MMET Teams folders / SO Data Collection

Summary of Aggregated Assessment Data (across all Criteria):

The data is based on the assessment done on two different assignments in two different courses (MECH 480 and MECH 318). Both have applications in experimentation and data analysis and interpretation. The classes were made up of 7 BSME students in MECH 480 (Mechanical Vibrations) and 3 in MECH 318 (Fluid Mechanics I). Each Performance Indicator (Criteria) were scored / student.

SO6 Results of Evaluation of Aggregated Assessment Data:

The threshold for success is defined as 80% of students in class score a 3 or 4 on question/assignments that is selected as performance indicator. Only BSME students were included in this assessment. The findings indicate the students' performance was good overall, but a weakness was noted in MECH 221, and is therefore being looked at for Closing-the-Loop and Continuous Improvement opportunities.

SO6 Actions for Continuous Improvement: Not needed.

Table 7.1 – The B.S. in Mechanical Engineering Continuous Improvement Using Student Outcomes and Assessment Results

EAC SO 7: An ability to acquire and apply new knowledge as needed, using appropriate learning strategies

All Campuses Assessment of BSME Program for SO 7: Black – KF Blue - PM Green – SEA

Courses corresponding to the SO	Course(s) used for assessment	Performance Indicators	Assessment Method	Cycle of Assessment	Year/Semester of Assessment	Target	Results	Documents
ENGR 491-3 PHIL 331 HUM 125 ENGR 111 MECH 417	ENGR 492 KF	Responses to questions scored for ability to find relevant information / references for senior project.	Individual interviews done with students and responses rated for acquiring knowledge, information for projects.	3-Years	Fall 2023	80% of students score 3 or 4 for criteria 7a-7d using scoresheet	Students scored >90% on all criteria 7a -7d	Evidence is in MMET Teams folders / SO Data Collection
	ENGR 492	Using learning strategies to acquire and apply new knowledge	Project report	3-Years	Winter 2022	80% of students score 3 or 4 for criteria 7a-7d using scoresheet	All students scored >85% on all criteria	Evidence is in MMET Teams folders / SO Data Collection
	MECH 417	Using learning strategies to acquire and apply new knowledge	Research report on hydropower	3-Years	Winter 2022	80% of students score 3 or 4 for criteria 7a-7d using scoresheet	Students scored >85% on all criteria	Evidence is in MMET Teams folders / SO Data Collection
	ENGR 491	Using learning strategies to acquire and apply new knowledge	Analysis of a scenario where more learning would be required	3-Years	Fall 2022	80% of students score 3 or 4 for criteria 7a-7d using scoresheet	All students scored 100% on all criteria	Evidence is in MMET Teams folders / SO Data Collection

Summary of Aggregated Assessment Data (across all Criteria):

The data is based on the assessment done on assignments in ENGR 492 (KF & PM) and MECH 417 (SEA). These courses used assessments that require students to acquire and apply new knowledge and use appropriate and effective learning strategies. The classes were made of 8, 5, and 8 BSME students respectively. Performance Indicators (Criteria) were used to score each student.

The faculty assessed this outcome in MECH 492 Winter term 2022, using a research paper. There were a total of 5 students in the class (all BSME). Only the mechanical engineering students were considered in this assessment. Each criterion was scored.

The data is based on the assessment done on two different assignments in two different courses (MECH 417 and ENGR 491). The classes were made up of 8 BSME students in MECH 417 (Fluid Mechanics II) and 4 students in ENGR 491 (Senior Project I). Each Performance Indicator (Criteria) were scored / student.

SO7 Results of Evaluation of Aggregated Assessment Data:

The threshold for success is defined as 80% of students in the class scoring a 3 or 4 on question/assignments that is selected as performance indicator. Only BSME students were included in this assessment. There were no weaknesses identified by faculty in these assessments and therefore more data will be selected the next time this SO comes up in the cycle.

The findings indicate the students' performance was good overall.

The threshold for success is defined as 80% of students in class score a 3 or 4 on question/assignments that is selected as performance indicator. Only BSME students were included in this assessment. The findings indicate the students' performance was good overall.

SO7 Actions for Continuous Improvement: No Action Required at 3 campuses

It would be a good idea to discuss this SO among faculty to make a general assignment that can be used to assess this SO. That way it could be automated using a Qualtrics survey and consistency across campuses would bring more consistent data that can be used for continuous improvement and for identifying differences / similarities throughout the BSME student population at 3 campuses.

SO7 Assessment Instruments:

For the SO7 assessment in upper level courses, Senior Project and Fluids II were used to collect data and score student performance. The process of acquiring and applying new knowledge, as well as using effective learning strategies is very relevant to the mechanical engineering field of study. Students were scored on interview questions and research papers to determine their levels of understanding related to this SO. Project reports were used at the PM and SEA campuses for assessing SO7.

7. Data-driven Action Plans: Changes Resulting from Assessment

The BSME Task Force was able to formalize the Data Analysis, Closing-The-Loop (CLT), and Continuous Improvement (CI) processes for the department which will ensure that we improve our processes. We realized that the BSME faculty had been too focused on collecting the data, and we fell short of providing evidence of how that data would be used to improve teaching and student performance in the areas covered by the ABET SOs. Our work with faculty on developing corrective actions once under performance had been identified through our scoresheets really helped faculty understand the CLT objectives and how re-assessing/scoring would lead to the evidence we needed of CI for the BSME program. Some important changes moving forward will help our department stay on track and apply the assessment system as it is intended to be used:

- Transition to a 2-year cycle for data collection, using years 3 & 6 for CLT and CI.
- A focused and group effort to process the data and analyze it for CLT discussions.
- More consistency and standardization in which classes are used for SO data collection.
- Collecting data from the same classes for SOs at all 3 campuses where BSME offered.
- Use data and CLT cases to look at similarities and differences among students/teachers.
- Utilize Site Leaders (faculty) to process and organize data and lead CLT/CI discussions.

8. Closing the Loop: Evidence of Improvement in Student Learning

Our dedicated efforts to close the loop on student outcomes have significantly enhanced the effectiveness of our Mechanical Engineering program. By systematically assessing and refining these outcomes, we have ensured that our students are very capable of identifying, formulating, and solving complex engineering problems and producing designs that demonstrate the use of constraints and other factors. These improvements underscore our commitment to continuous improvement, resulting in a curriculum that meets ABET standards. This process guarantees that our graduates are well-prepared to succeed in their careers, equipped with the critical thinking, problem-solving, and design know-how necessary for success as mechanical engineering professionals.

By consistently aligning our coursework with industry-recognized benchmarks, we ensure that our students are not only well-versed in theoretical concepts but also proficient in applying these principles to real-world scenarios. This strategic focus equips our graduates with the essential skills and professional acumen needed to excel in the engineering field, fostering a deep sense of ethical and professional responsibility. Our commitment to upholding these standards reinforces our program's reputation for excellence, continuously preparing students to meet and exceed the dynamic demands of the engineering industry and continue our strong reputation in education.