

## 2017-2018 Assessment Cycle (College of Engineering) ENGR\_Mechanical Engineering BS

### Mission

Welcome to the "Mission" tab. First, review the University's Mission, Values, and Vision statements provided below. Then, in the section labeled "Department / Program Mission", type in the current mission for your department, program, or unit. Click "Save" when you are finished.

#### University Mission

The University of Louisiana at Lafayette offers an exceptional education informed by diverse worldviews grounded in tradition, heritage, and culture. We develop leaders and innovators who advance knowledge, cultivate aesthetic sensibility, and improve the human condition.

#### University Values

We strive to create a community of leaders and innovators in an environment that fosters a desire to advance and disseminate knowledge. We support the mission of the university by actualizing our core values of equity, integrity, intellectual curiosity, creativity, tradition, transparency, respect, collaboration, pluralism, and sustainability.

#### University Vision

We strive to be included in the top 25% of our peer institutions by 2020, improving our national and international status and recognition.

#### Program Mission

##### Program Mission

*If applicable, provide the program's mission in the space provided. If none exists, write "None Available in 2016-2017".*

### Goals (University/Program tied to Curriculum)

#### Standards/Outcomes

Identifier	Description
ABET-EAC.1.3	CRITERION: Program Outcomes and Assessment Although institutions may use different terminology, for purposes of Criterion 3, program outcomes are intended to be statements that describe what students are expected to know or be able to do by the time of graduation from the

	program.
<b>ABET-EAC.1.3.1</b>	> an ability to apply knowledge of mathematics, science, and engineering
<b>ABET-EAC.1.3.10</b>	> a knowledge of contemporary issues
<b>ABET-EAC.1.3.11</b>	> an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
<b>ABET-EAC.1.3.12</b>	Each program must have an assessment process with documented results. Evidence must be given that the results are applied to the further development and improvement of the program. The assessment process must demonstrate that the outcomes of the program, including those listed above, are being measured.
<b>ABET-EAC.1.3.2</b>	> an ability to design and conduct experiments, as well as to analyze and interpret data
<b>ABET-EAC.1.3.3</b>	> an ability to design a system, component, or process to meet desired needs
<b>ABET-EAC.1.3.4</b>	> an ability to function on multi-disciplinary teams
<b>ABET-EAC.1.3.5</b>	> an ability to identify, formulate, and solve engineering problems
<b>ABET-EAC.1.3.6</b>	> an understanding of professional and ethical responsibility
<b>ABET-EAC.1.3.7</b>	> an ability to communicate effectively
<b>ABET-EAC.1.3.8</b>	> the broad education necessary to understand the impact of engineering solutions in a global and societal context
<b>ABET-EAC.1.3.9</b>	> a recognition of the need for, and an ability to engage in life-long learning

#### **Additional Standards/Outcomes**

<b>Identifier</b>	<b>Description</b>
<b>MCHE BS.1</b>	Prepare students to work professionally in the mechanical systems area
<b>MCHE BS.2</b>	Prepare students to work professionally in thermo-fluid systems area

## Curriculum Map

### Assessment Findings for the Assessment Measure level for Mechanical Engineering BS(Imported)

Legend	A - Assessed				
Course/Event	MCHE 357				
Standard/Outcome	ABET-EAC.1.3.11 > an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Written Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	95.6% of students met the expectations according to the rubric.		

Legend	A - Assessed				
Course/Event	MCHE 357				
Standard/Outcome	ABET-EAC.1.3.2 > an ability to design and conduct experiments, as well as to analyze and interpret data				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Written Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	84.8% of students met the expectations according to the rubric.		

Legend	A - Assessed				
Course/Event	MCHE 357				
Standard/Outcome	ABET-EAC.1.3.7 > an ability to communicate effectively				
Assessment Measures					
	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Written Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	89.1% of students met the expectations according to the rubric.		

Legend	A - Assessed				
Course/Event	MCHE 358				
Standard/Outcome	ABET-EAC.1.3.11 > an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.				
Assessment Measures					
	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Written Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	97.5% of students met the expectations according to the rubric.		

Legend	A - Assessed				
Course/Event	MCHE 358				
Standard/Outcome	ABET-EAC.1.3.2 > an ability to design and conduct experiments, as well as to analyze and interpret data				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Written Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Not met	77% of students met the expectations according to the rubric.		- Pedagogical Change : Increase emphasis on written presentation in MCHE 358. Actions taken include breaking the report into sections so that students address key aspects of the report a week at a time.

Legend	A - Assessed				
Course/Event	MCHE 358				
Standard/Outcome	ABET-EAC.1.3.7 > an ability to communicate effectively				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Written Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	89.5% of students met the expectations according to the rubric.		

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Legend	A - Assessed				
Course/Event	MCHE 358				
Standard/Outcome	MCHE BS.2 Prepare students to work professionally in thermo-fluid systems area				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Written Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	94.5% of students met the expectations according to the rubric.		

Legend	A - Assessed				
Course/Event	MCHE 469				
Standard/Outcome	ABET-EAC.1.3.1 > an ability to apply knowledge of mathematics, science, and engineering				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Written Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class	79% of students met the expectations according to the rubric.		- Pedagogical Change : Unforeseen weather events prevented increasing the amount of coverage from the previous year, so this corrective action will continue into the new year. Increase coverage of

	been met yet? Not met			radiation in MCHE 469.
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Legend	A - Assessed				
Course/Event	MCHE 469				
Standard/Outcome	ABET-EAC.1.3.5 > an ability to identify, formulate, and solve engineering problems				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Written Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Not met	71% of students met the expectations according to the rubric.		- Pedagogical Change : More example problems. Extra class period on use of property data and on how to formulate problems in MCHE 469.

Legend	A - Assessed				
Course/Event	MCHE 484				
Standard/Outcome	ABET-EAC.1.3.1 > an ability to apply knowledge of mathematics, science, and engineering				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>

	Direct - Capstone Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	93.2% of students met the expectations according to the rubric.		
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Legend	A - Assessed				
Course/Event	MCHE 484				
Standard/Outcome	ABET-EAC.1.3.10 > a knowledge of contemporary issues				
Assessment Measures					
	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Capstone Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	95.8% of students met the expectations according to the rubric.		

Legend	A - Assessed				
Course/Event	MCHE 484				
Standard/Outcome	ABET-EAC.1.3.11 > an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.				
Assessment Measures					
	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>



	Direct - Capstone Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	88.4% of students met the expectations according to the rubric.		
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Legend	A - Assessed				
Course/Event	MCHE 484				
Standard/Outcome	ABET-EAC.1.3.2 > an ability to design and conduct experiments, as well as to analyze and interpret data				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Capstone Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	88.4% of students met the expectations according to the rubric.		

Legend	A - Assessed				
Course/Event	MCHE 484				
Standard/Outcome	ABET-EAC.1.3.3 > an ability to design a system, component, or process to meet desired needs				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>

	Direct - Capstone Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	82.2% of students met the expectations according to the rubric.		
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Legend	A - Assessed				
Course/Event	MCHE 484				
Standard/Outcome	ABET-EAC.1.3.4 > an ability to function on multi-disciplinary teams				
Assessment Measures					
	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Capstone Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	83.7% of students met the expectations according to the rubric.		

Legend	A - Assessed				
Course/Event	MCHE 484				
Standard/Outcome	ABET-EAC.1.3.5 > an ability to identify, formulate, and solve engineering problems				
Assessment Measures					
	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>

	Direct - Capstone Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	86.4% of students met the expectations according to the rubric.		
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Legend	A - Assessed				
Course/Event	MCHE 484				
Standard/Outcome	ABET-EAC.1.3.6 > an understanding of professional and ethical responsibility				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Capstone Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	91.1% of students met the expectations according to the rubric.		

Legend	A - Assessed				
Course/Event	MCHE 484				
Standard/Outcome	ABET-EAC.1.3.7 > an ability to communicate effectively				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>

	Direct - Capstone Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	95.3% of students met the expectations according to the rubric.		
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Legend	A - Assessed				
Course/Event	MCHE 484				
Standard/Outcome	ABET-EAC.1.3.8 > the broad education necessary to understand the impact of engineering solutions in a global and societal context				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Capstone Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	94.5% of students met the expectations according to the rubric.		

Legend	A - Assessed				
Course/Event	MCHE 484				
Standard/Outcome	ABET-EAC.1.3.9 > a recognition of the need for, and an ability to engage in life-long learning				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>

	Direct - Capstone Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed for the work products developed in this class been met yet? Met	91.5% of students met the expectations according to the rubric.		
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Legend	A - Assessed				
Course/Event	MCHE 484				
Standard/Outcome	MCHE BS.1 Prepare students to work professionally in the mechanical systems area				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Capstone Assignment	Has the criterion 80% of the students will meet or exceed expectations according to the rubric developed been met yet? Met	83.2% of students met the expectations according to the rubric.		

Legend	A - Assessed				
Course/Event	Senior Exit Interviews				
Standard/Outcome	ABET-EAC.1.3.1 > an ability to apply knowledge of mathematics, science, and engineering				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>

	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			
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Legend	A - Assessed				
Course/Event	Senior Exit Interviews				
Standard/Outcome	ABET-EAC.1.3.10 > a knowledge of contemporary issues				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Senior Exit Interviews				
Standard/Outcome	ABET-EAC.1.3.11 > an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

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Legend	A - Assessed				
Course/Event	Senior Exit Interviews				
Standard/Outcome	ABET-EAC.1.3.2 > an ability to design and conduct experiments, as well as to analyze and interpret data				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Senior Exit Interviews				
Standard/Outcome	ABET-EAC.1.3.3 > an ability to design a system, component, or process to meet desired needs				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

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Legend	A - Assessed				
Course/Event	Senior Exit Interviews				
Standard/Outcome	ABET-EAC.1.3.4 > an ability to function on multi-disciplinary teams				
Assessment Measures					
	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion The target is that 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations. been met yet?			

Legend	A - Assessed				
Course/Event	Senior Exit Interviews				
Standard/Outcome	ABET-EAC.1.3.5 > an ability to identify, formulate, and solve engineering problems				
Assessment Measures					
	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			



Legend	A - Assessed				
Course/Event	Senior Exit Interviews				
Standard/Outcome	ABET-EAC.1.3.6 > an understanding of professional and ethical responsibility				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Senior Exit Interviews				
Standard/Outcome	ABET-EAC.1.3.7 > an ability to communicate effectively				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Senior Exit Interviews				
Standard/Outcome	ABET-EAC.1.3.8 > the broad education necessary to understand the impact of engineering solutions in a global and societal context				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Senior Exit Interviews				
Standard/Outcome	ABET-EAC.1.3.9 > a recognition of the need for, and an ability to engage in life-long learning				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Senior Exit Interviews				

Standard/Outcome	MCHE BS.1 Prepare students to work professionally in the mechanical systems area				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Exit Interviews	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Senior Exit Interviews				
Standard/Outcome	MCHE BS.2 Prepare students to work professionally in thermo-fluid systems area				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Exit Interviews	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Student Advisory Committee				
Standard/Outcome	ABET-EAC.1.3.1 > an ability to apply knowledge of mathematics, science, and engineering				
Assessment					

Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Student Advisory Committee				
Standard/Outcome	ABET-EAC.1.3.10 > a knowledge of contemporary issues				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Student Advisory Committee				
Standard/Outcome	ABET-EAC.1.3.11 > an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.				
Assessment Measures	<b>Assessment</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the</b>	<b>Improvement</b>

	<b>Measure</b>			<b>Assessments</b>	<b>Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Student Advisory Committee				
Standard/Outcome	ABET-EAC.1.3.2 > an ability to design and conduct experiments, as well as to analyze and interpret data				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Student Advisory Committee				
Standard/Outcome	ABET-EAC.1.3.3 > an ability to design a system, component, or process to meet desired needs				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>

	Indirect - Survey - students	Has the criterion The target is that 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations. been met yet?			
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Legend	A - Assessed				
Course/Event	Student Advisory Committee				
Standard/Outcome	ABET-EAC.1.3.4 > an ability to function on multi-disciplinary teams				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Student Advisory Committee				
Standard/Outcome	ABET-EAC.1.3.5 > an ability to identify, formulate, and solve engineering problems				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

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Legend	A - Assessed				
Course/Event	Student Advisory Committee				
Standard/Outcome	ABET-EAC.1.3.6 > an understanding of professional and ethical responsibility				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Student Advisory Committee				
Standard/Outcome	ABET-EAC.1.3.7 > an ability to communicate effectively				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

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Legend	A - Assessed				
Course/Event	Student Advisory Committee				
Standard/Outcome	ABET-EAC.1.3.8 > the broad education necessary to understand the impact of engineering solutions in a global and societal context				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Student Advisory Committee				
Standard/Outcome	ABET-EAC.1.3.9 > a recognition of the need for, and an ability to engage in life-long learning				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			



Legend	A - Assessed				
Course/Event	Student Advisory Committee				
Standard/Outcome	MCHE BS.1 Prepare students to work professionally in the mechanical systems area				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

Legend	A - Assessed				
Course/Event	Student Advisory Committee				
Standard/Outcome	MCHE BS.2 Prepare students to work professionally in thermo-fluid systems area				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Indirect - Survey - students	Has the criterion 80% of the students surveyed will indicate that their education relative to this outcome met or exceeded their expectations been met yet?			

## Summary of Improvement Narratives

### Improvement Narrative List

#### Assessment Findings for the Assessment Measure level

Standard/Outcome	ABET-EAC.1.3.2 > an ability to design and conduct experiments, as well as to analyze and interpret data	
Legend	A	
Course/Event	MCHE 358	
Assessment Measure	Direct - Written Assignment	
Assessment Findings	Not met	
Improvement Narrative		
	<b>Improvement Type</b>	<b>Summary</b>
	Pedagogical Change	Increase emphasis on written presentation in MCHE 358. Actions taken include breaking the report into sections so that students address key aspects of the report a week at a time.

Standard/Outcome	ABET-EAC.1.3.1 > an ability to apply knowledge of mathematics, science, and engineering	
Legend	A	
Course/Event	MCHE 469	
Assessment Measure	Direct - Written Assignment	
Assessment Findings	Not met	
Improvement Narrative		
	<b>Improvement</b>	<b>Summary</b>

	<b>Type</b>	
	Pedagogical Change	Unforeseen weather events prevented increasing the amount of coverage from the previous year, so this corrective action will continue into the new year. Increase coverage of radiation in MCHE 469.

Standard/Outcome	ABET-EAC.1.3.5 > an ability to identify, formulate, and solve engineering problems	
Legend	A	
Course/Event	MCHE 469	
Assessment Measure	Direct - Written Assignment	
Assessment Findings	Not met	
Improvement Narrative		
	<b>Improvement Type</b>	<b>Summary</b>
	Pedagogical Change	More example problems. Extra class period on use of property data and on how to formulate problems in MCHE 469.

## Reflection

### Reflection

The primary purpose of assessment is to use data to inform decisions and improve programs and operations; this is an on-going process of defining goals and expectations, collecting results, analyzing data, comparing current and past results and initiatives, and making decisions based on these reflections. Recalling this purpose, respond to the questions below.

#### 1) How were assessment results shared in the unit?

*Please select all that apply; if "other", please use the text box to elaborate.*

Distributed via email

Presented formally at staff/department/committee meeting (selected)

Discussed informally (selected)  
 Other (explain in text box below)

**2) How frequently were assessment results shared in the unit?**

Frequently (>4 times per cycle)  
 Periodically (2-4 times per cycle) (selected)  
 Once per cycle  
 Results were not shared this cycle

**3) With whom were assessment results shared?**

*Please select all that apply.*  
 Department Head (selected)  
 Dean / Asst. or Assoc. Dean  
 Departmental assessment committee (selected)  
 Other faculty / staff (selected)  
 Other (please explain in text box below)

**4) Consider the impact of prior applied changes. Specifically, compare current results to previous results to evaluate the impact of a previously reported change. Demonstrate how the use of results improved student learning and/or operations.**

The faculty are going to evaluate the possibility of using the NCEES provided FE exam/ABET Outcome mapping as a future assessment vehicle. Some faculty note that students have a challenge to identify, formulate, and solve engineering problems as measured in assessed courses. Other faculty indicate acceptable performance in their courses. The Curriculum Committee will look at prerequisites for the courses where a problem was identified to see if they need to be modified.

**5) Over the past three assessment cycles, what has been the overall impact of "closing the loop"? Provide examples of improvements in student learning, program quality, or department operations that are directly linked to assessment data and follow-up analysis.**

**Attachments (optional)**

*Upload any documents which support the assessment process.*

