

## 2016-2017 Assessment Cycle (College of Engineering) ENGR\_Mechanical Engineering MS

### 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>MS Engineering.MSE1</b>	An ability to demonstrate breadth of knowledge across the general field of engineering.
<b>MS Engineering.MSE2</b>	An ability to demonstrate depth of knowledge in an area of specialization beyond the level of a B.S. degree in engineering.
<b>MS Engineering.MSE3</b>	An ability to demonstrate competence in solving practical problems in the field of engineering.
<b>MS Engineering.MSE4</b>	An ability to demonstrate readiness to enter and succeed in an engineering PhD program.

## Curriculum Map

### Assessment Findings for the Assessment Measure level for MSE (Mechanical Engineering)

Legend	A - Assessed				
Course/Event	Oral Exam				
Standard/Outcome	MS Engineering.MSE1 An ability to demonstrate breadth of knowledge across the general field of engineering.				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Presentation	Has the criterion 80% of students will achieve a score of 3 or better on their oral exam using a standard rubric. been met yet? Met	Faculty evaluated five students. All achieved a score of 3.0 or better on all faculty evaluations.		

Legend	A - Assessed				
Course/Event	Oral Exam				
Standard/Outcome	MS Engineering.MSE2 An ability to demonstrate depth of knowledge in an area of specialization beyond the level of a B.S. degree in engineering.				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Presentation	Has the criterion 80% of students will achieve a score of 3 or better on their oral exam using a standard rubric. been met yet?	Faculty evaluated five students. All achieved a score of 3.0 or better on all faculty evaluations.		

		Met			
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Legend	A - Assessed				
Course/Event	Oral Exam				
Standard/Outcome	MS Engineering.MSE3 An ability to demonstrate competence in solving practical problems in the field of engineering.				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Presentation	Has the criterion 80% of students will achieve a score of 3 or better on their oral exam using a standard rubric. been met yet? Met	Faculty evaluated five students. All achieved a score of 3.0 or better on all faculty evaluations.		- Assessment Process: Continuous monitoring: All students are meeting expectations. Continue to monitor performance.

Legend	A - Assessed				
Course/Event	Oral Exam				
Standard/Outcome	MS Engineering.MSE4 An ability to demonstrate readiness to enter and succeed in an engineering PhD program.				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Presentation	Has the criterion 80% of students will achieve a score of 3 or better on their oral exam using a standard rubric. been met yet?	Faculty evaluated five students. All achieved a score of 3.0 or better on all faculty evaluations.		

	Met			
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Legend	A - Assessed				
Course/Event	Thesis / Report				
Standard/Outcome	MS Engineering.MSE2 An ability to demonstrate depth of knowledge in an area of specialization beyond the level of a B.S. degree in engineering.				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Thesis	Has the criterion 80% of students will achieve a score of 3 or better on their oral exam using a standard rubric. been met yet? Met	Faculty evaluated five students. All achieved a score of 3.0 or better on all faculty evaluations.		

Legend	A - Assessed				
Course/Event	Thesis / Report				
Standard/Outcome	MS Engineering.MSE3 An ability to demonstrate competence in solving practical problems in the field of engineering.				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Thesis	Has the criterion 80% of students will achieve a score of 3 or better on their oral exam using a standard rubric. been met yet?	Faculty evaluated five students. All achieved a score of 3.0 or better on all faculty evaluations.		

	Met			
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Legend	A - Assessed				
Course/Event	Thesis / Report				
Standard/Outcome	MS Engineering.MSE4 An ability to demonstrate readiness to enter and succeed in an engineering PhD program.				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Thesis	Has the criterion 80% of students will achieve a score of 3 or better on their oral exam using a standard rubric. been met yet? Met	Faculty evaluated five students. All achieved a score of 3.0 or better on all faculty evaluations.		

Legend	A - Assessed				
Course/Event	MCHE 508				
Standard/Outcome	MS Engineering.MSE1 An ability to demonstrate breadth of knowledge across the general field of engineering.				
Assessment Measures	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Presentation	Has the criterion 80% of students will achieve a score of 3 or better on their oral presentation using a standard rubric. been met yet?			

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Legend	A - Assessed				
Course/Event	MCHE 508				
Standard/Outcome	MS Engineering.MSE4 An ability to demonstrate readiness to enter and succeed in an engineering PhD program.				
Assessment Measures					
	<b>Assessment Measure</b>	<b>Criterion</b>	<b>Summary</b>	<b>Attachments of the Assessments</b>	<b>Improvement Narratives</b>
	Direct - Presentation	Has the criterion 80% of students will achieve a score of 3 or better on their oral presentation using a standard rubric. been met yet?			

## Summary of Improvement Narratives

### Improvement Narrative List

#### Assessment Findings for the Assessment Measure level

Standard/Outcome	MS Engineering.MSE3 An ability to demonstrate competence in solving practical problems in the field of engineering.
Legend	A
Course/Event	Oral Exam
Assessment Measure	Direct - Presentation
Assessment Findings	Met
Improvement Narrative	

	Improvement Type	Summary
	Assessment Process: Continuous monitoring	All students are meeting expectations. Continue to monitor performance.

## Reflection

### Reflection

#### 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 (selected)

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

Discussed informally

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) What were the measurable or perceivable effects on your current (2016-2017) findings based on prior action plans (created in 2015-2016)?**

The department has observed that on the whole the graduate students are meeting our expectations. However, it was decided that it was time to conduct a general review of all assessment procedures at both the graduate and undergraduate levels. At the graduate level, the focus will be on reviewing the outcomes themselves to insure they are still relevant, and on reviewing the instruments for collecting assessment data. This will be accomplished during the 2016 - 2017 assessment cycle. The outcomes and instruments were evaluated and the need for an assessment in MCH 508 was questioned. This issue will be discussed further during the coming year.

**5) What has the unit learned from the current assessment cycle?**

The students are meeting expectations and their performance will continue to be monitored. Changes to the assessment procedure may be warranted.