

## 2016-2017 Assessment Cycle (College of Engineering) ENGR\_Chemical 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 (Chemical 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			- Assessment Process: Continuous monitoring:

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? Met			- Assessment Process: Continuous monitoring:

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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			- Assessment Process: Continuous monitoring:

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? Met			- Assessment Process: Continuous monitoring:

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			- Assessment Process: Continuous monitoring:

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? Met			- Assessment Process: Continuous monitoring:

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			- Assessment Process: Continuous monitoring:

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?			

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.MSE1 An ability to demonstrate breadth of knowledge across the general field of engineering.				
Legend	A				
Course/Event	Oral Exam				
Assessment Measure	Direct - Presentation				
Assessment Findings	Met				
Improvement Narrative	<b>Improvement Type</b>	<b>Summary</b>			
	Assessment Process: Continuous monitoring				

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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.					
Legend	A					
Course/Event	Oral Exam					
Assessment Measure	Direct - Presentation					
Assessment Findings	Met					
Improvement Narrative	<table border="1"> <thead> <tr> <th>Improvement Type</th> <th>Summary</th> </tr> </thead> <tbody> <tr> <td>Assessment Process: Continuous monitoring</td> <td></td> </tr> </tbody> </table>		Improvement Type	Summary	Assessment Process: Continuous monitoring	
Improvement Type	Summary					
Assessment Process: Continuous monitoring						

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	<table border="1"> <thead> <tr> <th>Improvement Type</th> <th>Summary</th> </tr> </thead> <tbody> <tr> <td>Assessment Process: Continuous monitoring</td> <td></td> </tr> </tbody> </table>		Improvement Type	Summary	Assessment Process: Continuous monitoring	
Improvement Type	Summary					
Assessment Process: Continuous monitoring						



Standard/Outcome	MS Engineering.MSE4 An ability to demonstrate readiness to enter and succeed in an engineering PhD program.					
Legend	A					
Course/Event	Oral Exam					
Assessment Measure	Direct - Presentation					
Assessment Findings	Met					
Improvement Narrative	<table border="1"> <thead> <tr> <th>Improvement Type</th> <th>Summary</th> </tr> </thead> <tbody> <tr> <td>Assessment Process: Continuous monitoring</td> <td></td> </tr> </tbody> </table>		Improvement Type	Summary	Assessment Process: Continuous monitoring	
Improvement Type	Summary					
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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.					
Legend	A					
Course/Event	Thesis / Report					
Assessment Measure	Direct - Thesis					
Assessment Findings	Met					
Improvement Narrative	<table border="1"> <thead> <tr> <th>Improvement Type</th> <th>Summary</th> </tr> </thead> <tbody> <tr> <td>Assessment Process: Continuous monitoring</td> <td></td> </tr> </tbody> </table>		Improvement Type	Summary	Assessment Process: Continuous monitoring	
Improvement Type	Summary					
Assessment Process: Continuous monitoring						

Standard/Outcome	MS Engineering.MSE3 An ability to demonstrate competence in solving practical problems in the field of engineering.	
Legend	A	
Course/Event	Thesis / Report	

Assessment Measure	Direct - Thesis	
Assessment Findings	Met	
Improvement Narrative		
	<b>Improvement Type</b>	<b>Summary</b>
	Assessment Process: Continuous monitoring	

Standard/Outcome	MS Engineering.MSE4 An ability to demonstrate readiness to enter and succeed in an engineering PhD program.	
Legend	A	
Course/Event	Thesis / Report	
Assessment Measure	Direct - Thesis	
Assessment Findings	Met	
Improvement Narrative		
	<b>Improvement Type</b>	<b>Summary</b>
	Assessment Process: Continuous monitoring	

## 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  
 Presented formally at staff/department/committee meeting (selected)  
 Discussed informally (selected)  
 Other (explain in text box below)

Thesis and dissertations are carefully evaluated and discuss by faculty assigned to student committees. The satisfactory completion of a defense is demonstration of students knowledge and the field and application of research in industry.

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

Frequently (>4 times per cycle)  
 Periodically (2-4 times per cycle)  
 Once per cycle (selected)  
 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)?**

We closely monitor the performance of graduate students, and the quality of scholarly products. Students are encouraged to publish, and present results at state and national conferences.

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

As a faculty we have learned students need clarity on graduate student policies. Graduate students also need more information about the types of jobs for students with graduate degrees, and the comprehensive nature of problem solving and research required to complete a thesis.