# 2017-2018 Assessment Cycle (College of Engineering) ENGR\_Civil 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". 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.
ABET-	> an ability to apply knowledge of mathematics, science, and engineering

EAC.1.3.1	
ABET- EAC.1.3.10	> a knowledge of contemporary issues
ABET- EAC.1.3.11	> an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
ABET- EAC.1.3.12	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.
ABET- EAC.1.3.2	> an ability to design and conduct experiments, as well as to analyze and interpret data
ABET- EAC.1.3.3	> an ability to design a system, component, or process to meet desired needs
ABET- EAC.1.3.4	> an ability to function on multi-disciplinary teams
ABET- EAC.1.3.5	> an ability to identify, formulate, and solve engineering problems
ABET- EAC.1.3.6	> an understanding of professional and ethical responsibility
ABET- EAC.1.3.7	> an ability to communicate effectively
ABET- EAC.1.3.8	> the broad education necessary to understand the impact of engineering solutions in a global and societal context
ABET- EAC.1.3.9	> a recognition of the need for, and an ability to engage in life-long learning

### Additional Standards/Outcomes

Identifier	Description
MS Engineering.MSE1	An ability to demonstrate breadth of knowledge across the general field of engineering.
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.
MS Engineering.MSE3	An ability to demonstrate competence in solving practical problems in the field of engineering.
MS Engineering.MSE4	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 (Civil Engineering)(Imported)

ral Exam						
	Oral Exam					
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 Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives		
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	11 faculty evaluations of oral examinations yielded an average score of 4.75/5.0 for all the graduates (100%)				
ng As Di	gineering. ssessment easure irect -	gineering.       Criterion         ssessment       Criterion         easure       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?	ssessment easure       Criterion       Summary         irect - resentation       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?       11 faculty evaluations of oral examinations yielded an average score of 4.75/5.0 for all the graduates (100%)	ssessment easureCriterionSummaryAttachments of the Assessmentsirect - resentationHas the criterion 80% of students will achieve a score of 3 or better on their oral exam using a standard rubric. been met yet?11 faculty evaluations of oral examinations yielded an average score of 4.75/5.0 for all the graduates (100%)		

Legend	A - Assessed	A - Assessed					
Course/Event	Oral Exam	Jral Exam					
Standard/Outcome	MS Engineering.	MS Engineering.MSE3 An ability to demonstrate competence in solving practical problems in the field of engineering.					
Assessment Measures							
	Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives		
	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?	11 faculty evaluations of oral examinations yielded an average score of 4.16/5.0 for all the graduates (100%)		- Assessment Process: Targets / Criteria for Success changed: Communicate with our senior undergraduate students to identify the most likely candidates.		

	Met		

A - Assessed	- Assessed					
Oral Exam	Jral Exam					
MS Engineering.	MS Engineering.MSE4 An ability to demonstrate readiness to enter and succeed in an engineering PhD program.					
Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives		
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	11 faculty evaluations of oral examinations yielded an average score of 4.92/5.0 for all the graduates (100%)				
	Oral Exam MS Engineering. Assessment Measure Direct -	Oral Exam         MS Engineering.MSE4 An ability to demonstrate readiness         Assessment Measure       Criterion         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?	Oral Exam         MS Engineering.MSE4 An ability to demonstrate readiness to enter and succeed in an engineerin         Assessment Measure       Criterion       Summary         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?       11 faculty evaluations of oral examinations yielded an average score of 4.92/5.0 for all the graduates (100%)	Oral Exam       MS Engineering.MSE4 An ability to demonstrate readiness to enter and succeed in an engineering PhD program.         Assessment Measure       Criterion       Summary       Attachments of the Assessments         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?       11 faculty evaluations of oral examinations yielded an average score of 4.92/5.0 for all the graduates (100%)		

Legend	A - Assessed				
Course/Event	Thesis / Report				
Standard/Outcome	MS Engineering. engineering.	MSE2 An ability to den	nonstrate depth of knowledge in a	n area of specialization beyond	the level of a B.S. degree in
Assessment Measures					
	Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives

Direct - Thesis	Has the criterion 80% of students will achieve a score of 3 or better on their theses using a standard rubric. been met yet? Met	11 faculty evaluations of theses yielded an average score of 4.58/5.0 for all the graduates (100%)	- Assessment Process: Continuous monitoring: Compare the findings with that of the next assessment cycle.

Legend	A - Assessed	- Assessed					
Course/Event	Thesis / Report	hesis / Report					
Standard/Outcome	MS Engineering.	MS Engineering.MSE3 An ability to demonstrate competence in solving practical problems in the field of engineering.					
Assessment Measures							
	Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives		
	Direct - Thesis	Has the criterion 80% of students will achieve a score of 3 or better on their theses using a standard rubric. been met yet? Met	11 faculty evaluations of the these yielded an average score of 4.27/5.0 for all the graduates (100%)				

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	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Thesis	Has the criterion 80% of students will achieve a score of 3 or better on their theses using a standard rubric. been met yet? Met	11 faculty evaluations of theses yielded an average score of 4.92/5.0 for all the graduates (100%)		- Assessment Process: Continuous monitoring: Compare the findings with that of the next assessment cycle.

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					
	Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
	Direct - Writing Exam	Has the criterion 80% of students will achieve a score of 3 or better on their exams using a standard rubric. been met yet? Met	100% of the students received a final grade B or above, which is equivalent to 3.75 on a 5.0 grading scale.		- Assessment Process: Continuous monitoring: Check the students' progress during the time that the students are taking the class instead of after graduation

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					
	Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
	Direct - Writing Exam	Has the criterion 80% of students will achieve a score of 3 or better on their exams using a standard rubric. been met yet? Met	100% of the students received a final grade B or above, which is equivalent to 3.75 on a 5.0 grading scale.		- Assessment Process: Continuous monitoring: Check the students' progress during the time that the students are taking the class instead of after graduation

# 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: Targets / Criteria for Success	Communicate with our senior undergraduate students to identify the most likely	

changed	candidates.

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				
	Improvement Type	Summary		
	Assessment Process: Continuous monitoring	Compare the findings with that of the next assessment cycle.		

Standard/Outcome	MS Engineering.MSE4 An ability to demonstrate readiness to enter and succeed in an engineering PhD program.			
Legend	Α			
Course/Event	Thesis / Report			
Assessment Measure	Direct - Thesis			
Assessment Findings	Met			
Improvement Narrative				
	Improvement Type	Summary		
	Assessment Process: Continuous monitoring	Compare the findings with that of the next assessment cycle.		

MS Engineering.MSE1 An ability to demonstrate breadth of knowledge across the general field of engineering.		
A		
MCHE 508		
Direct - Writing Exam		
Met		
Improvement Type	Summary	
Assessment Process: Continuous monitoring	Check the students' progress during the time that the students are taking the class instead of after graduation	
	A MCHE 508 Direct - Writing Exam Met Improvement Type Assessment Process: Continuous	

Standard/Outcome	MS Engineering.MSE4 An ability to demonstrate readiness to enter and succeed in an engineering PhD program.		
Legend	A		
Course/Event	MCHE 508		
Assessment Measure	Direct - Writing Exam		
Assessment Findings	Met		
Improvement Narrative			
	Improvement Type	Summary	
	Assessment Process: Continuous monitoring	Check the students' progress during the time that the students are taking the class instead of after graduation	
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### 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 (selected) Presented formally at staff/department/committee meeting 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) 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)

The assessment results were sent to the department faculty in the civil engineering department. They were requested to provide feedback and identify ways to improve our program.

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.

Last year we planned to improve the quality of the research conducted by our students. Most of the students graduated in this cycle has published two journal/proceeding papers on average.

# 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.

We learned that we need to recruit good students to join our program. We also learned that we need to recruit research-oriented faculty members who plan to stay in Lafayette to work with our students. We do not see any strategy or effort "working less well" in this cycle

### Attachments (optional)

Upload any documents which support the assessment process.