2016-2017 Assessment Cycle (College of Engineering) ENGR_Industrial Technology 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".
The mission of the Department of Industrial Technology is to prepare management-oriented technical professionals for employment in industry, business, government and education.

Goals (University/Program tied to Curriculum)

Standards/Outcomes

Identifier	Description
ABET-	CRITERION: Program Outcomes and Assessment Although institutions may use different terminology, for purposes of Criterion 3, program

EAC.1.3	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-EAC.1.3.1	> an ability to apply knowledge of mathematics, science, and engineering
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
ITEC.ITEC_1	Apply graphics communications to solve industrial problems .
ITEC.ITEC_2	Apply concepts of electricity and electronics to solve industrial problems.
ITEC.ITEC_3	Apply concepts of safety in industrial applications.
ITEC.ITEC_4	Explain management concepts of employer relations and industrial supervision.

ITEC.ITEC_5	Communicate effectively using written communication.
ITEC.ITEC_6	Communicate effectively using oral communication.
ITEC.ITEC_7	Apply mathematical, statistical and scientific principles to industrial situations to maintain and enhance the work within industry.
ITEC.ITEC_8	Use the computer proficiently as well as information technology as an essential tool in planning, monitoring, and controlling of work within industry.
ITEC.ITEC_9	Demonstrate an understanding of the fundamentals of fluid power systems to solve industrial problems.

Curriculum Map

Assessment Findings for the Assessment Measure level for Industrial Technology BS

Legend	A - Assessed
Course/Event	ITEC 268
Standard/Outcome	ITEC.ITEC_3 Apply concepts of safety in industrial applications.
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Pre/Post Test	Has the criterion 70% of students enrolled in ITEC 268 will correctly answer questions on calculating incidence rate and severity rate. been met yet? Not met	74% of 97 students correctly calculated incidence rate and 61% of 97 students correctly calculated severity rate.		- Service or Program Deliverable: Instructors of ITEC 268 will incorporate in-class activities to increase the students ability to correctly calculate incidence rate and severity rate. - Curricular Change : We will be adding an additional advanced safety course in the next cycle that will reinforce the students concept of safety in industrial applications. The course will be ITEC 369 Advanced Industrial Safety.

Legend	A - Assessed
Course/Event	ITEC 270
Standard/Outcome	ITEC.ITEC_1 Apply graphics communications to solve industrial problems .
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Project	Has the criterion 85% of students enrolled in ITEC 270 will successfully completed a final CAD project with a "C" or better. been met yet? Met	100% of 84 students successfully completed a final CAD project with a "C" or better.		

Legend	A - Assessed
Course/Event	ITEC 307
Standard/Outcome	ITEC.ITEC_9 Demonstrate an understanding of the fundamentals of fluid power systems to solve industrial problems.
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Pre/Post Test	Has the criterion 70% of students completing ITEC 307 will correctly answer questions related to the understanding of Fluid Power Systems. been met yet? Met	93% of 129 students completing ITEC 307 correctly answered questions related to the understanding of Fluid Power Systems.		

Legend	A - Assessed
Course/Event	ITEC 322
Standard/Outcome	ITEC.ITEC_2 Apply concepts of electricity and electronics to solve industrial problems.
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Performance (recital/exhibit/science project)	Has the criterion 75% of students enrolled in ITEC 322 will demonstrate the ability to successfully complete a theoretical problem set and hands-on laboratory practical. been met yet? Met	84% of 83 students enrolled in ITEC 322 have successfully demonstrated completion of a theoretical problem set and a hands-on laboratory practical.		

Legend	A - Assessed
Course/Event	ITEC 424
Standard/Outcome	ITEC.ITEC_6 Communicate effectively using oral communication.
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Presentation	Has the criterion Using a decision making rubric, 80% of students will achieve a level 2 or better on an oral robotic presentation in ITEC 424. been met yet? Met	100% of 18 students successfully earned a level 2 or better on the final oral robotic project presentation.		

Legend	A - Assessed
Course/Event	ITEC 446
Standard/Outcome	ITEC.ITEC_5 Communicate effectively using written communication.
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Project	Has the criterion Using a decision making rubric, 80% of students assessed will achieve a level 2 or better on the final layout project written report. been met yet? Met	97% of 30 students assessed were successful in achieving a level 2 or better on their completed final layout project written report.		

Legend	A - Assessed
Course/Event	ITEC 446
Standard/Outcome	ITEC.ITEC_6 Communicate effectively using oral communication.
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Project	Has the criterion Using a decision making rubric, 80% of students will earn level 2 or better on the final layout project presentation in ITEC 446. been met yet? Met	97% of 30 students successfully completed the final layout project oral presentation earning a level 2 or better.		

Legend	A - Assessed
Course/Event	ITEC 462
Standard/Outcome	ITEC.ITEC_4 Explain management concepts of employer relations and industrial supervision.
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Capstone Assignment	Has the criterion 80% of students enrolled in ITEC 462 will successfully complete a management scheduling problem evaluated on a pass/fail basis. been met yet? Not met	74% of 65 students enrolled in ITEC 462 successfully completed a management scheduling problem		

Legend	A - Assessed
Course/Event	ITEC 462
Standard/Outcome	ITEC.ITEC_5 Communicate effectively using written communication.
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Written Assignment	Has the criterion 80% of students will successfully submit employment documentation evaluated on a pass/fail basis. been met yet? Met	97% of 65 students were successful in submitting employment documentation which included a resume.		

Legend	A - Assessed
Course/Event	ITEC 474
Standard/Outcome	ITEC.ITEC_7 Apply mathematical, statistical and scientific principles to industrial situations to maintain and enhance the work within industry.
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Direct - Pre/Post Test	Has the criterion 70% of students will be able to correctly calculate and plot a Histogram with a given data set. been met yet? Not met	64% of students successfully completed an embedded problem on the final exam which required them to successfully calculate and plot a Histogram with a given data set.		- Assessment Process: Continuous monitoring: We will continue to monitor the students ability to successfully complete a Histogram with a given data set as well as introduce additional practical applications of the use of Histograms in industry.

Legend	A - Assessed
Course/Event	Indirect Measure
Standard/Outcome	ITEC.ITEC_1 Apply graphics communications to solve industrial problems .
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Indirect - Survey - employer	Has the criterion 85% of employers surveyed every five years will indicate that they are satisfied with the ITEC graduates application of graphic	86% of employers surveyed in Spring/Summer 2017 indicate that they are satisfied with the ITEC graduate's application of graphic	ITEC_Employer_Survey_Summer_2017.pdf	

		communications (CAD) for problem solving and daily work activities. been met yet? Met	communication (CAD) for problem solving and daily work activities.		

Legend	A - Assessed
Course/Event	Indirect Measure
Standard/Outcome	ITEC.ITEC_2 Apply concepts of electricity and electronics to solve industrial problems.
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Indirect - Survey - employer	Has the criterion 70% of employers responding to a survey every five years will indicate satisfaction with an ITEC graduate's technical skills in electronics to solve industrial problems. been met yet? Met	71% of employers surveyed in Spring/Summer 2017 indicate that they are satisfied with the ITEC graduate's technical skills in electronics to solve industrial problems.		

Legend	A - Assessed
Course/Event	Indirect Measure
Standard/Outcome	ITEC.ITEC_3 Apply concepts of safety in industrial applications.
Assessment Measures	

Assessment	Criterion	Summary	Attachments of	Improvement

	Measure			the Assessments	Narratives
	Indirect - Survey - students	Has the criterion 70% of employers responding to a survey conducted every five years will indicate satisfaction with the ITEC graduate's knowledge and use of standard safety principles in every day work activities. been met yet? Met	85% of employers surveyed in Spring/Summer 2017 indicate satisfaction with the ITEC graduate's knowledge and use of standard safety principles in daily work activities.		

Legend	A - Assessed
Course/Event	Indirect Measure
Standard/Outcome	ITEC.ITEC_4 Explain management concepts of employer relations and industrial supervision.
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Indirect - Survey - alumni	Has the criterion 80% of students completing the Graduate Exit Exam will indicate satisfactory knowledge of management concepts. been met yet? Met	99% of 91 students completing the Graduate Exit Survey indicated that they had satisfactory knowledge of management concepts.		
Indirect - Survey - employer	Has the criterion 70% of employers completing the Employer Survey sent out every 5 years will indicate satisfactory knowledge of management concepts with those students hired. been met yet? Met	71% of employers surveyed in Spring/Summer 2017 indicate satisfaction with the ITEC graduate's ability to demonstrate skills and attitudes necessary to succeed in leadership and management.		

Legend	A - Assessed
Course/Event	Indirect Measure
Standard/Outcome	ITEC.ITEC_5 Communicate effectively using written communication.
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Indirect - Survey - students	Has the criterion 90% of ITEC graduating seniors completing a locally administered university graduate exit survey indicated satisfactory knowledge of written communications. been met yet? Met	100% of 91 ITEC graduating seniors completing a locally administered university graduate exit survey indicated that they effectively communicate using written English very well, well or somewhat well.		
Indirect - Survey - employer	Has the criterion 70% of employers completing the employer survey every five years will indicate satisfaction with an ITEC graduate's ability to effectively communicate through written mode. been met yet? Met	100% of employers surveyed in Spring/Summer 2017 indicate satisfaction with the ITEC graduate's ability to effectively communicate through written mode.		

Legend	A - Assessed
Course/Event	Indirect Measure
Standard/Outcome	ITEC.ITEC_6 Communicate effectively using oral communication.
Assessment Measures	

Assessment	Criterion	Summary	Attachments of	Improvement

	Measure			the Assessments	Narratives
	Indirect - Survey - students	Has the criterion 90% of students completing the graduate exit survey will indicate that they effectively communicate orally. been met yet? Met	100% of students completing the graduate exit survey indicated that they speak publicly in both formal and informal settings very well, well or somewhat well.		
	Indirect - Survey - employer	Has the criterion 70% of employers completing the employer survey every five years will indicate above average or better with an ITEC graduate's ability to effectively communicate orally. been met yet? Met	100% of employers surveyed in Spring/Summer 2017 indicate satisfaction with the ITEC graduate's ability to communicate effectively in verbal mode.		

Legend	A - Assessed
Course/Event	Indirect Measure
Standard/Outcome	ITEC.ITEC_7 Apply mathematical, statistical and scientific principles to industrial situations to maintain and enhance the work within industry.

Assessment Measures					
	Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
	Indirect - Survey - students	Has the criterion 85% of graduating seniors completing a university developed and locally administered graduate exit survey will indicate satisfactory knowledge of scientific preparation and quantitative analysis. been met yet? Met	85% of 91 graduating seniors completing the locally administered university graduate exit survey indicated satisfactory knowledge (very well or well) of quantitative analysis preparation; while 87% reported satisfaction with scientific knowledge relating to contemporary topics.		

	Indirect - Survey - employer	Has the criterion 70% of employers who complete the employer survey every five years will indicate satisfactory use of math for problem solving and daily work activities by ITEC graduates. been met yet? Met	100% of employers surveyed in Spring/Summer 2017 indicate satisfaction with the ITEC graduates ability to use math for problem solving and daily work activities.		

Legend	A - Assessed
Course/Event	Indirect Measure
Standard/Outcome	ITEC.ITEC_8 Use the computer proficiently as well as information technology as an essential tool in planning, monitoring, and controlling of work within industry.
Assessment Measures	

Assessment Measure	Criterion	Summary	Attachments of the Assessments	Improvement Narratives
Indirect - Survey - students	Has the criterion 70% of ITEC graduating seniors completing a university developed and locally administered graduate exit survey indicate satisfactory knowledge of information technology. been met yet? Met	86% of 91 graduates completing the locally administered university graduate exit survey indicated satisfactory (very well and well) knowledge of information technology.		
Indirect - Survey - alumni	Has the criterion 70% of ITEC alumni completing a university developed and locally administered alumni survey indicate satisfaction with their understanding and preparation of information technology. been met yet? Met	75% of the ITEC alumni completing a university developed and locally administered alumni survey indicated satisfaction (completely and to a great extent) with their information technology foundation for working with business, education and industry.		

	Indirect - Survey - employer	Has the criterion 70% of employers completing a university developed and locally administered employer survey indicate satisfaction with the ITEC graduates use of information technology for problem solving and daily work activities. been met yet? Met	86% of employers surveyed in Spring/Summer 2017 indicated satisfaction with the ITEC graduate's use of information technology and software for problem solving and daily work activities.		

Summary of Improvement Narratives

Improvement Narrative List

Assessment Findings for the Assessment Measure level

Standard/Outcome	ITEC.ITEC_3 Apply concepts of safety in industrial applications.
Legend	A
Course/Event	ITEC 268
Assessment Measure	Direct - Pre/Post Test
Assessment Findings	Not met
Improvement Narrative	

Improvement Type	Summary
Service or Program Deliverable	Instructors of ITEC 268 will incorporate in-class activities to increase the students ability to correctly calculate incidence rate and severity rate.
Curricular Change	We will be adding an additional advanced safety course in the next cycle that will reinforce the students concept of safety in industrial applications. The course will be ITEC 369 Advanced Industrial Safety.

Standard/Outcome	ITEC.ITEC_7 Apply mathematical, statistical and scientific principles to industrial situations to maintain and enhance the work within industry.
Legend	A
Course/Event	ITEC 474
Assessment Measure	Direct - Pre/Post Test
Assessment Findings	Not met
Improvement Narrative	

Improvement Type	Summary
Assessment Process: Continuous monitoring	We will continue to monitor the students ability to successfully complete a Histogram with a given data set as well as introduce additional practical applications of the use of Histograms in industry.

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
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)

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

Eighty eight percent of the criterion was met by the department, up from 79% last cycle. Fifty eight percent of the criterion targets that were reported in this cycle were at the same level or higher.

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

Because of the change in reporting system, it was a bit more difficult to analyze the data without summary report capabilities. That said the data indicates that we need to address management concepts, only meeting 2 of the 3 criteria in this area. We made a few changes in this cycle to help students in the area of industrial safety. During this cycle, we met two of the three criterion. For the next cycle, we are adding an additional advanced course in safety that will support this target. Having online surveys for graduating seniors, alumni and employers has made evaluating the data much easier and the rate of survey completion is higher.