Chemical, Civil & Mechanical Eng.

Department of Chemical, Civil & Mechanical Engineering

Introduction

The Department of Chemical, Civil and Mechanical Engineering delivers a professionally focused education in the fields of chemical, civil and mechanical engineering. CCME faculty and staff provide students with instruction, scholastic advising, and professional/career counseling. The CCME department supports related professional and scholarly student activities. Our students are prepared to practice in their chosen field focusing on the industrial and business needs of the region. The needs of traditional and non-traditional students are met through close interaction with faculty, businesses, and the industrial community in a practice-oriented, student-friendly environment. The department maintains ABET-accredited current curricula that foster interdisciplinary teamwork, scholarly development, projects, internships, professional ethics, and training with regional businesses or industries. CCME students are prepared to study for advanced degrees and work in regional businesses or industries.

Performance Objective 1 **Increase enrollment, persistence, retention, and graduation rates for each program offered by the department.**

1 Assessment and Benchmark

Benchmark: Increase enrollment by 5% each year, overall and in each program offered by the department.

Prior to 2018-2019, the benchmark was maintain or exceed 2015-16 levels (fall 2015 was the ABET evaluation year and start of the new cycle).

Assessment: Track undergraduate student enrollments at each level and in each concentration:

- ENGR - BS Engineering
  - CHEG - Chemical Engineering
  - CIEG - Civil Engineering
  - GEEG - General Engineering (effective 201740)
  - MEEG - Mechanical Engineering

CMP - Completers

1.1 Data

2013-2014:

Major	Conc.	Summer						Fall						Spring					
		F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP
ENGR	CHEG	10	13	22	15	60	0	53	36	33	39	161	0	40	36	30	52	158	9
	CIEG	3	8	5	15	31	0	21	20	13	33	87	2	17	17	18	34	86	18
	MEEG	20	17	16	19	72	0	79	40	32	63	214	5	73	40	33	65	211	17
	(blank)	4	3	1	7	15	0	16	9	6	10	41	0	11	5	8	15	29	0
Total		**37**	**41**	**44**	**56**	**178**	**0**	**169**	**105**	**84**	**145**	**543**	**7**	**141**	**96**	**89**	**166**	**484**	**44**

2014-2015:

Major	Conc.	Summer						Fall						Spring					
		F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP
ENGR	CHEG	10	15	18	21	64	2	77	37	36	55	205	2	61	35	31	73	200	15
	CIEG	4	5	6	11	26	0	27	14	24	28	93	3	26	20	16	38	100	13
	MEEG	17	16	13	15	61	0	103	44	31	66	244	10	88	52	23	77	240	18
	(blank)	10	2	5	5	22	0	16	16	13	15	60	0	12	11	11	18	52	0
Total		**41**	**38**	**42**	**52**	**173**	**2**	**223**	**111**	**104**	**164**	**602**	**15**	**187**	**118**	**81**	**206**	**592**	**46**

2015-2016:

Major	Conc.	Summer						Fall						Spring					
		F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP
ENGR	CHEG	15	17	24	19	75	1	114	43	37	66	260	2	79	46	31	76	232	25
	CIEG	16	8	11	16	51	1	76	18	13	30	137	3	60	15	12	32	119	12
	MEEG	30	23	12	20	85	0	104	52	28	65	249	11	61	50	33	62	206	19
	(blank)	7	4	6	11	28	0	9	12	10	27	58	0	18	8	7	28	61	0
Total		**68**	**52**	**53**	**66**	**239**	**2**	**303**	**125**	**88**	**188**	**695**	**16**	**218**	**119**	**83**	**198**	**618**	**56**

2016-2017:

		Summer						Fall						Spring					

Major	Conc.	F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP
ENGR	CHEG	13	21	14	23	71	0	65	60	37	74	236	0	36	51	43	83	213	24
	CIEG	4	7	9	9	29	1	48	24	18	27	117	0	22	22	8	38	90	15
	MEEG	5	31	19	17	72	1	74	49	37	83	243	20	50	40	38	80	208	18
	(blank)	9	5	2	5	21	0	15	9	4	15	43	0	5	6	3	7	21	0
Total		**31**	**64**	**44**	**54**	**193**	**2**	**202**	**142**	**96**	**199**	**638**	**20**	**103**	**119**	**92**	**208**	**532**	**57**

2017-2018:

Major	Conc.	Summer						Fall						Spring					
		F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP
ENGR	CHEG	7	15	23	18	63	0	51	49	44	76	220	5	33	37	40	82	192	22
	CIEG	1	10	14	18	43	0	25	20	0	32	97	7	17	21	16	39	93	8
	GEEG	1	0	0	0	1	0	7	0	1	0	8	0	2	2	0	0	4	0
	MEEG	5	25	23	25	78	0	77	51	34	79	241	10	51	46	36	85	218	22
	(blank)	4	5	1	3	13	0	6	7	3	5	21	0	1	4	1	2	8	0
Total		**18**	**55**	**61**	**64**	**189**	**0**	**166**	**127**	**102**	**192**	**587**	**22**	**104**	**110**	**93**	**208**	**515**	**52**

2018-2019:

Major	Conc.	Summer						Fall						Spring					
		F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP	F	S	J	Sr	T	CMP
ENGR	CHEG	5	20	15	31	71	0	46	45	34	89	214	6	26	30	31	94	181	32
	CIEG	3	12	10	20	45	1	23	17	16	39	95	4	12	15	16	40	83	17
	GEEG	0	1	0	0	1	0	1	2	0	0	3	0	0	2	0	0	2	0
	MEEG	9	23	19	26	77	0	6	43	54	70	173	11	14	21	48	75	158	23
	(blank)	2	2	1	0	5	0	1	1	1	1	4	0	0	1	1	1	3	0
	Total	*19*	*58*	*45*	*77*	*199*	*1*	*77*	*108*	*105*	*199*	*489*	*21*	*52*	*69*	*96*	*210*	*427*	*72*
MEEG	(blank)	0	0	0	0	0	0	59	9	2	4	74	0	27	23	5	4	59	0
	Total	*0*	*0*	*0*	*0*	*0*	*0*	*59*	*9*	*2*	*4*	*74*	*0*	*27*	*23*	*5*	*4*	*59*	*0*
Grand Total		**19**	**58**	**45**	**77**	**199**	**1**	**136**	**117**	**107**	**203**	**563**	**21**	**79**	**92**	**101**	**214**	**486**	**72**

Percentage Change between 2017-2018:

Major	Fall	Total	% Change
ENGR	2017	587	-16.695%
	2018	489	
MEEG	2017	0	
	2018	74	
Total	**2017**	**587**	**-4.088%**
	2018	**563**	

1.1.1 Analysis of Data and Plan for Continuous Improvement

2016-2017:
Enrollment has not been consistent in the past few years with a varied trend. It goes up and down.

2017-2018:
Enrollment is not consistent as it goes up and down. Steps are taken as much as possible to make the trend upward. Recruitment and retention efforts are being made in that direction. Better advising, reevaluating and restructuring the

foundation courses and promoting the program are some of the measures taken in that direction. An open door policy to provide better interaction between teacher and student is being established.

2018-2019:
The freshmen enrollment is not in our control. I think that the admissions office is trying its best to promote and enroll more students. We are attending the various orientation sessions. Also, I am meeting with the prospective students and their parents regularly. For retention, the faculty encourages students to make efforts early on in the semester rather than waiting until the end.

2 Assessment and Benchmark

Benchmark: Exceed a total of 15 students in the MEng program.

- MEng - MS Engineering
    - EMGT - Engineering Management
    - CHEG - Chemical Engineering
    - CIEG - Civil Engineering
    - MEEG - Mechanical Engineering

2.1 Data

Graduate Enrollment:

Major	Conc.	2013-2014			2014-2015			2015-2016			2016-2017			2017-2018		
		U	F	S	U	F	S	U	F	S	U	F	S	U	F	S
ENGR	CHEG	4	8	10	0	9	7	1	10	6	1	6	6	2	5	2
	CIEG	0	2	3	0	6	5	1	4	9	2	6	8	3	5	2
	EMGT	2	6	3	0	4	3	1	4	6	1	4	5	1	6	2
	MEEG	1	4	4	0	6	6	0	7	7	5	4	3	0	2	2
Total		**7**	**20**	**20**	**0**	**25**	**21**	**3**	**25**	**28**	**9**	**20**	**22**	**6**	**18**	**8**

Major	Conc.	2018-2019			2019-2020			2020-2021			2021-2022			2022-2023		
		U	F	S	U	F	S	U	F	S	U	F	S	U	F	S
ENGR	CHEG	0	4	3												
	CIEG	0	0	1												
	EMGT	0	3	1												
	MEEG	2	5	5												
Total		**2**	**12**	**10**												

2.1.1 Analysis of Data and Plan for Continuous Improvement

2016-2017:
The enrollment is decreasing and not meeting the benchmark.

2017-2018:
The enrollment is decreasing and not meeting the benchmark.
There may be multiple reasons for this trend. Majority of our graduate are international students and there is downward trend in that.
The international office is making efforts to recruit international students. We are making promotional flyers for domestic promotion of our program. We have received an endowed professorship to investigate and take measures to improve graduate enrollment.
With three disciplines in CCME, we would like to keep a realistic benchmark of 15.

2018-2019:
We have no control on the new graduates. Most are international students and the international office is trying their best to promote and attract students. There may be multiple factors for it.

EP 2018 Graduate Program   [DOC 53 KB 4/5/19]

Graduate Program Flyer Part 1   [PPTX 72 KB 4/5/19]

Graduate Program Flyer Part 2   [PPTX 52 KB 4/5/19]

3 Assessment and Benchmark

Benchmark: Track student completion rate in each concentration of the MEng degree. Maintain or exceed a total of 10 completers each year in MEng program.

- MEng - MS Engineering
  - EMGT - Engineering Management
  - CHEG - Chemical Engineering
  - CIEG - Civil Engineering
  - MEEG - Mechanical Engineering

3.1 Data

Graduate Completers:

Major	Conc.	2013-2014			2014-2015			2015-2016			2016-2017			2017-2018		
		U	F	S	U	F	S	U	F	S	U	F	S	U	F	S
ENGR	CHEG	0	1	2	0	1	1	0	3	1	0	0	1	0	2	0
	CIEG	0	0	1	0	1	0	1	2	1	0	0	2	0	3	2
	EMGT	0	3	1	0	1	0	0	0	2	0	0	2	0	1	0
	MEEG	0	1	0	0	0	2	0	1	1	1	2	1	0	0	1
Total		**0**	**5**	**4**	**0**	**3**	**3**	**1**	**6**	**5**	**1**	**2**	**6**	**0**	**6**	**3**

Major	Conc.	2018-2019			2019-2020			2020-2021			2021-2022			2022-2023		
		U	F	S	U	F	S	U	F	S	U	F	S	U	F	S
ENGR	CHEG	0	2	1												
	CIEG	0	0	0												
	EMGT	0	0	1												
	MEEG	0	1	0												
Total		**0**	**3**	**2**												

3.1.1 Analysis of Data and Plan for Continuous Improvement

2016-2017:
The current completion rate is not meeting the benchmark.

2017-2018:
The current completion rate is not meeting the benchmark. The completers are directly related to the enrollment. As the enrollment is substantially decreasing so does the completion rate.
Students are graduating in an appropriate time duration.

We would like to establish a realistic benchmark of five.

2018-2019:
Now that we don't have EMGT concentration anymore, the completers number will go further down. We can change our benchmark to 2.

4 Assessment and Benchmark

Benchmarks:
- A persistence rate (retained students from fall Y1 to spring Y1) of 85%.
- A retention rate of 70% from Y1 to Y2.
- A retention rate of 55% from Y1 to Y3.
- A retention rate of 45% from Y1 to Y4.

- A 4-year graduation rate of 35%.
- A 5-year graduation rate of 40%.
- A 6-year graduation rate of 45%.

Major:
- ENGR - Bachelor of Science in Engineering
- MEEG - Bachelor of Science in Mechanical Engineering

4.1 Data

2012:

Major	Cohort Size	Same Major?	Persistence Rate		Retention Rate						Graduation Rate					
					Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
			#	%	#	%	#	%	#	%	#	%	#	%	#	%
ENGR	119	Same	88	73.9	61	51.3	44	37.0	39	32.8	17	14.3	28	23.5	29	24.4
		Changed	22	18.5	23	19.3	28	23.5	28	23.5	17	14.3	23	19.3	23	19.3
		Total	**110**	**92.4**	**84**	**70.6**	**72**	**60.5**	**67**	**56.3**	**34**	**28.6**	**51**	**42.9**	**52**	**43.7**

*4 students were previously undeclared before declaring ENGR.

2013:

Major	Cohort Size	Same Major?	Persistence Rate		Retention Rate						Graduation Rate					
					Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
			#	%	#	%	#	%	#	%	#	%	#	%	#	%
ENGR	118*	Same	85	72.0	61	51.7	46	39.0	42	35.6						
		Changed	21	17.8	19	16.1	24	20.3	26	22.0						
		Total	**106**	**89.8**	**80**	**67.8**	**70**	**59.3**	**68**	**57.6**						

*1 student was previosuly undeclared before declaring ENGR.

2014:

Major	Cohort Size	Same Major?	Persistence Rate		Retention Rate						Graduation Rate					
					Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
			#	%	#	%	#	%	#	%	#	%	#	%	#	%
ENGR	161	Same	115	71.4	87	54.0	60	37.3	56	34.8						
		Changed	21	13.0	28	17.4	36	22.4	34	21.1						
		Total	**136**	**84.5**	**115**	**71.4**	**96**	**59.6**	**90**	**55.9**						

2015:

Major	Cohort Size	Same Major?	Persistence Rate		Retention Rate						Graduation Rate					
					Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
			#	%	#	%	#	%	#	%	#	%	#	%	#	%
ENGR	183	Same	110	60.1	79	43.2	48	26.2	45	24.6						
		Changed	41	22.4	40	21.9	38	20.8	35	19.1						
		Total	**151**	**82.5**	**119**	**65.0**	**86**	**47.0**	**80**	**43.7**						

2016:

Major	Cohort Size	Same Major?	Persistence Rate		Retention Rate						Graduation Rate					
					Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
			#	%	#	%	#	%	#	%	#	%	#	%	#	%

Major	Cohort Size	Same Major?	#	%	#	%	#	%
ENGR	133	Same	97	72.9	67	50.4	58	43.6
		Changed	22	16.5	25	18.8	28	21.1
		Total	**119**	**89.5**	**92**	**69.2**	**86**	**64.7**

2017:

Major	Cohort Size	Same Major?	Persistence Rate		Retention Rate						Graduation Rate					
					Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
			#	%	#	%	#	%	#	%	#	%	#	%	#	%
ENGR	153	Same	114	74.5	74	48.4										
		Changed	16	10.5	32	20.9										
		Total	**130**	**85.0**	**106**	**69.3**										

2018:

Major	Cohort Size	Same Major?	Persistence Rate		Retention Rate						Graduation Rate					
					Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
			#	%	#	%	#	%	#	%	#	%	#	%	#	%
ENGR	70	Same	51	72.9												
		Changed	10	14.3												
		Total	*61*	*87.1*												
MEEG	57	Same	39	68.4												
		Changed	10	17.5												
		Total	*49*	*86.0*												
Total	127	Same	90	70.9												
		Changed	20	15.7												
		Total	**110**	**86.6**												

2019:

Major	Cohort Size	Same Major?	Persistence Rate		Retention Rate						Graduation Rate					
					Y1 to Y2		Y1 to Y3		Y1 to Y4		4-Year		5-Year		6-Year	
			#	%	#	%	#	%	#	%	#	%	#	%	#	%
ENGR		Same														
		Changed														
		Total														
MEEG		Same														
		Changed														
		Total														
Total		Same														
		Changed														
		Total														

4.1.1 Analysis of Data and Plan for Continuous Improvement

2018-2019:

I think we are meeting the benchmark.

Performance Objective 2 Provide a comprehensive curriculum that reflects disciplinary foundations and remains responsive to contemporary developments, and student and workforce

demand.

1 Assessment and Benchmark

Benchmark: The Engineering Industrial Advisory Board reviews all three engineering concentrations (chemical, civil, and mechanical) once per year on a four-year cycle. This is a comprehensive review examining the curricula, space, labs, faculty, financials, etc.

1.1 Data

2016-2017:
CHEN - Spring 2017

2017-2018:
MEEN - Spring 2018

2018-2019:
CIEN - Spring 2019

CE Review- Report-2019   [DOCX 33 KB 2/12/20]

CHEN Audit 2017   [DOCX 13 KB 4/5/19]

CivilReview_2019   [PDF 1,343 KB 2/12/20]

MEEN Program Review Comments Spring 18   [DOCX 18 KB 4/5/19]

1.1.1 Analysis of Data and Plan for Continuous Improvement

2017-2018:
CHEN and MEEN program reviews by IAB received positive feedback. We are implementing their suggestion as much as possible.

1. The separate BSE in Mechanical Engineering has been approved.
2. We are offering small classes by splitting classes.
3. Course will be offered in Piping Stress & CAESAR II in Spring 2019 as suggested.

2018-2019:

2 Assessment and Benchmark

Benchmark: Maintain or exceed a 75% satisfactory level.

Assessment goal: Knowledge and skill gained in ME program.

Instrument: Exit survey data, student perception of gained knowledge and skills through exit survey data.

2.1 Data

Academic Year	Average Score
2016-2017	80+%
2017-2018	81%
2018-2019	70%

2.1.1 Analysis of Data and Plan for Continuous Improvement

2016-2017:
We will collect three years of this data before determining an appropriate benchmark and methods of improvement.

2017-2018:
We will collect three years (2016-2019) of this data before reconsidering an appropriate benchmark and methods of improvement.

2018-2019:
This is the first time that the survey was conducted completely online and may be the reason that not all students completed the survey. On the basis of last three surveys, we can set the benchmark at 70%

3 Assessment and Benchmark

Benchmark: Maintain or exceed an average score of 80%.

Assessment goal: Knowledge and skill gained in ME program.

Instrument: Graduate Comprehensive Exam (GCE), evaluation of gained knowledge and skills through examination.

3.1 Data

Academic Year	Average Score
2016-2017	82%
2017-2018	78%
2018-2019	NA

3.1.1 Analysis of Data and Plan for Continuous Improvement

2016-2017:
This is the first year of reporting for this assessment. We will collect three years of data before determining an appropriate benchmark and methods of improvement.

2017-2018:
The average score was slightly lower than the benchmark as it was slightly over the previous year. In our view, this is within expectations.

2018-2019:
As we have a low number of graduate students overall, the number of graduating students is even lower. We would like to delete this assessment from the master plan.

Performance Objective 3 To prepare graduates to practice engineering and to be successful in solving the engineering problems encountered in industry, government, or private practice. (ABET PEO 1)

1 Assessment and Benchmark

Benchmark: 85% of the engineering alumni within 5 years of graduation who fill out an alumni survey will score this PO with a 2 or higher based on a three point scale (1 = Successful, 2 = Satisfactorily successful, 3 = Very Successful.

1.1 Data

Reporting Year	Alumni group	# of surveys completed	% scored this PO with a 2	% scored this PO with a 3	% scored this PO with a 2 or higher
2013-2014	2010-2014	55	56%	42%	100%
2014-2015	2011-2015	54	67%	31%	98%
2015-2016	2012-2016	NA	NA	NA	NA
2016-2017	2013-2017	NA	NA	NA	NA
2017-2018	2014-2018	NA	NA	NA	NA
2018-2019	2015-2019	NA	NA	NA	NA

1.1.1 Analysis of Data and Plan for Continuous Improvement

2015-2016:
The survey was not administered in 2015-2016, but the next survey is scheduled for 2016-2017.

2016-2017:
The next survey is scheduled for 2017-2018.

2017-2018:

As the evaluation has been cumulative for the college, data is not available.

2018-2019:
The survey will be next year.

2 Assessment and Benchmark

Benchmark: 85% of the Engineering Industrial Advisory Board (IAB) members who fill out a survey will score this PO with a 2 or higher based on a three point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

2.1 Data

Reporting Year	# of IAB members that completed the survey	% scored this PO with a 2	% scored this PO with a 3	% scored this PO with a 2 or higher
2015*	24/27	25%	75%	100%
2018	NA	NA	NA	NA
2019	NA	NA	NA	NA

*2015 was the first reporting year for this assessment.

2.1.1 Analysis of Data and Plan for Continuous Improvement

2015-2016:
We will collect three years of data before setting a benchmark or making changes. The next survey is scheduled for 2016-2017.

2016-2017:
This is a new measure and the next survey is scheduled for 2017-2018.

2017-2018:
As the data is cumulatively collected for the college, it is not available this cycle..

2018-2019:
The survey will be done next year.

3 Assessment and Benchmark

Benchmark: 85% of the Southwest Louisiana plant managers and engineering business owners who hire McNeese engineering graduates and fill out a survey will score this PO with a 2 or higher based on a three point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

3.1 Data

Reporting Year	# of employers of engineering graduates that responded to the survey	% scored this PO with a 2	% scored this PO with a 3	% scored this PO with a 2 or higher
2015*	78	35.5%	64.5%	100%
2018	NA	NA	NA	NA
2019	NA	NA	NA	NA

na
*2015 was the first reporting year for this assessment.

3.1.1 Analysis of Data and Plan for Continuous Improvement

2015-2016:
We will collect three years of this data before setting a benchmark or making changes. The next survey is scheduled for 2016-2017.

2016-2017:
This is a new measure and the next survey is scheduled for 2017-2018.

2017-2018:
As the data is cumulatively collected for the college, it is not available this cycle.

2018-2019:
The survey will be done next year.

Performance Objective 4 **To provide graduates with the motivation and skills to advance into positions of increased responsibility and to pursue continuing education or graduate studies. (ABET PEO 2)**

1 Assessment and Benchmark

Benchmark: 85% of the engineering alumni within 5 years of graduation who fill out an alumni survey will score this PO with a 2 or higher based on a three point scale (1 = Successful, 2 = Satisfactorily successful, 3 = Very Successful.

1.1 Data

Reporting Year	Alumni group	# of surveys completed	% scored this PO with a 2	% scored this PO with a 3	% scored this PO with a 2 or higher
2013-2014	2010-2014	55	44%	51%	95%
2014-2015	2011-2015	54	52%	43%	95%
2015-2016	2012-2016	NA	NA	NA	NA
2016-2017	2013-2017	NA	NA	NA	NA
2017-2018	2014-2018	NA	NA	NA	NA
2018-2019	2015-2019	NA	NA	NA	NA

1.1.1 Analysis of Data and Plan for Continuous Improvement

2015-2016:
The next survey is scheduled for 2016-2017.

2016-2017:
The next survey is scheduled for Fall 2018. The benchmark was 85% on a three point scale.

2017-2018:
As the evaluation has been cumulative for the college, data is not available.

2018-2019:
The survey will be done next year.

2 Assessment and Benchmark

Benchmark: 85% of the College of Engineering Industrial Advisory Board (IAB) members who fill out a survey will score this PO with a 2 or higher based on a three point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

2.1 Data

Reporting Year	# of IAB members that completed the survey	% scored this PO with a 2	% scored this PO with a 3	% scored this PO with a 2 or higher
2015*	24/27	33.3%	66.6%	100%
2018	NA	NA	NA	NA
2019	NA	NA	NA	NA

*2015 was the first reporting year for this assessment.

2.1.1 Analysis of Data and Plan for Continuous Improvement

2015-2016:
We will collect three years of data before setting a benchmark or making changes. The next survey is scheduled for 2016-2017.

2016-2017:
The next survey is scheduled for 2017-2018.

2017-2018:
As the data is cumulatively collected for the college, it is not available this cycle..

2018-2019:
The survey will be done next year.

3 Assessment and Benchmark

Benchmark: 85% of the Southwest Louisiana plant managers and engineering business owners who hire McNeese engineering graduates and fill out a survey will score this PO with a 2 or higher based on a three point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

3.1 Data

Reporting Year	# of employers of engineering graduates that responded to the survey	% scored this PO with a 2	% scored this PO with a 3	% scored this PO with a 2 or higher
2015*	78	43%	57%	100%
2018	NA	NA	NA	NA
2019	NA	NA	NA	NA

*2015 was the first reporting year for this assessment.

3.1.1 Analysis of Data and Plan for Continuous Improvement

2015-2016:
We will collect three years of data before setting a benchmark or making changes. The next survey is scheduled for 2016-2017.

2016-2017:
The next survey is scheduled for 2017-2018.

2017-2018:
As the data is cumulatively collected for the college, it is not available this cycle.

2018-2019:

Performance Objective 5 To produce graduates who are not only ethical and professional as engineers but also are responsible members of their communities and the larger society. (ABET PEO 3)

1 Assessment and Benchmark

Benchmark: 85% of the engineering alumni within 5 years of graduation who fill out an alumni survey will score this PO with a 2 or higher based on a three point scale (1 = Successful, 2 = Satisfactorily successful, 3 = Very Successful.

1.1 Data

Reporting Year	Alumni group	# of surveys completed	% scored this PO with a 2	% scored this PO with a 3	% scored this PO with a 2 or higher
2013-2014	2010-2014	55	45%	55%	100%
2014-2015	2011-2015	54	50%	50%	98%
2015-2016	2012-2016	NA	NA	NA	NA
2016-2017	2013-2017	NA	NA	NA	NA
2017-2018	2014-2018	NA	NA	NA	NA
2018-2019	2015-2019	NA	NA	NA	NA

1.1.1 Analysis of Data and Plan for Continuous Improvement

2015-2016:
The survey was not administered in 2015-2016, but the next survey is scheduled for 2016-2017.

2016-2017:
The next survey is scheduled for 2017-2018. The benchmark was 85% on a three point scale.

2017-2018:
As the evaluation has been cumulative for the college, data is not available.

2018-2019:
The survey will be done next year.

2 Assessment and Benchmark

Benchmark: 85% of the Engineering Industrial Advisory Board (IAB) members who fill out a survey will score this PO with a 2 or higher based on a three point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

2.1 Data

Reporting Year	# of IAB members that completed the survey	% scored this PO with a 2	% scored this PO with a 3	% scored this PO with a 2 or higher
2015*	24/27	17%	83%	100%
2018	NA	NA	NA	NA
2019	NA	NA	NA	NA

*2015 was the first reporting year for this assessment.

2.1.1 Analysis of Data and Plan for Continuous Improvement

2015-2016:
We will collect three years of data before setting a benchmark or making changes. The next survey is scheduled for 2016-2017.

2016-2017:
This is a new measure and the next survey is scheduled for 2017-2018.

2017-2018:
As the data is cumulatively collected for the college, it is not available this cycle..

2018-2019:
The survey will be done next year.

3 Assessment and Benchmark

Benchmark: 85% of the Southwest Louisiana plant managers and engineering business owners who hire McNeese engineering graduates and fill out a survey will score this PO with a 2 or higher based on a three point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

3.1 Data

Reporting Year	# of employers of engineering graduates that responded to the survey	% scored this PO with a 2	% scored this PO with a 3	% scored this PO with a 2 or higher
2015*	78	29%	71%	100%
2018	NA	NA	NA	NA
2019	NA	NA	NA	NA

*2015 was the first reporting year for this assessment.

3.1.1 Analysis of Data and Plan for Continuous Improvement

2015-2016:
We will collect three years of this data before setting a benchmark or making changes. The next survey is scheduled for 2016-2017.

2016-2017:
This is a new measure and the next survey is scheduled for 2017-2018.

2017-2018:

As the data is cumulatively collected for the college, it is not available this cycle.

2018-2019:

The survey will be done next week.

Performance Objective 6 **To generate internal and external funding sources for program enhancement and research through writing grant proposals by CCME faculty.**

1 Assessment and Benchmark

Benchmark: Score of 1.1 or higher (Moderate) for number of submitted proposals per faculty per year is the desired achievement level.

PC1: Number of grant/fund seeking proposals submitted by CCME faculty.

Instrument: Annual number of submitted proposals as provided by CCME faculty in APR data. Data will be evaluated on a 3-tier scale. Achievement levels for PC1 are:
Score range of 0-1.0 = Low, 1.1-3.0 = Moderate, and 3.1-5.0 = High.

1.1 Data

Academic Year	# of grant seeking proposals written and submitted by CCME faculty	Range of proposals submitted per faculty per year	Average # of submitted proposals per faculty per year
2015-2016	19	0-5	2.7
2016-2017	13	0-5	1.9
2017-2018	21	0-7	2.3
2018-2019	15	0-6	2.5

1.1.1 Analysis of Data and Plan for Continuous Improvement

2016-2017:

No action is needed. Data for the current assessment period is used as a base number for the purpose of creating a benchmark.

2017-2018:

We would like to delete this PO as this information is already included in PO 8. The grant proposal and award activities are part of the APR Professional & Scholarly activities.

2018-2019:

Same comment as in 2017-18.

2 Assessment and Benchmark

Benchmark: Score of 1.1 or higher (Moderate) for number of successful proposals per faculty per year is the desired achievement level.

PC2: Number of funded proposals submitted by CCME faculty. Annual evaluation of number of successful (funded) proposals submitted seeking grant/enhancement internal or external funds.

Instrument: Annual number of funded proposals as provided by CCME faculty in APR data. Data will be evaluated on a 3-tier scale. Achievement levels for PC2 are:
Score range of 0-1.0 = Low, 1.1-3.0 = Moderate, and 3.1-5.0 = High.

2.1 Data

Academic Year	# of successful internal and external proposals written by CCME faculty	Range of funded proposals per faculty per year	Average # of funded proposals per faculty per year

2015-2016	13	0-4	1.9
2016-2017	13	0-4	1.9
2017-2018	13	0-4	1.4
2018-2019	9	0-3	2.0

2.1.1 Analysis of Data and Plan for Continuous Improvement

2016-2017:
No action is needed. Data for the current assessment period is used as a base number for the purpose of creating a benchmark.

2017-2018:
We would like to delete this PO as this information is already included in PO 8. The grant proposal and award activities are part of the APR Professional & Scholarly activities.

2018-2019:
Same comment as in 2017-18.

Performance Objective 7 To improve classroom teaching by monitoring course SEI.

1 Assessment and Benchmark

Benchmark: Score of 85% or higher is the desired achievement level for "Student Satisfaction Rate".

PC1: Annual rate of "Student Satisfaction" for all CCME courses.

Instrument: Annual review of SEI scores for all CCME courses by using the average SEI scores for each CCME faculty. Data is normalized and evaluated on a 3-tier scale. Achievement levels for PC1 are:
Score range of 0-65% = Low Satisfaction, 66-85% = Moderate Satisfaction, and 86-100% = High.

1.1 Data

Calendar Year	APR range of SEI scores
2013	NA
2014	84%-96%
2015	86%-95%
2016	84%-94%
2017	79%-97%
2018-2019	85%-94%
2019	
2020	

Academic Year	Average Student Satisfaction Rate
2013	91%
2014	91%
2015	92%
2016	90%
2017	89%
2018-2019	91%
2019	
2020	

1.1.1 Analysis of Data and Plan for Continuous Improvement

2016-2017:
No action is needed as the performance is above the benchmark.

2017-2018:
We believe the SEIs are stable. The benchmark is reasonable but still will work to improve the performance.

2018-2019:
We believe the SEIs are stable.

Performance Objective 8 To increase faculty engagement with developmental research, and professional and scholarly activities.

1 Assessment and Benchmark

Benchmark: Score of 35% (Moderate) is the desired achievement level for faculty "Professional and Scholarly" activities.

PC1: Annual rate of "Professional and Scholarly" activities dedicated toward research and professional development.

Instrument: Annual review of P&S activities engaged by CCME faculty. Data is provided by P&S section of APR data. Data is normalized and is evaluated on a 3-tier scale. Achievement levels for PC1 are:
Score range of 0-30% = Low, 31-65% = Moderate, and 66-100% = High.

1.1 Data

Calendar Year	APR Range of P&S Activity Scores
2014	6-100%
2015	6-100%
2016	6-100%
2017	1-100%
2018-2019	12-100%
2019	

Academic Year	Average APR P&S Activity Score
2014	33%
2015	32%
2016	37%
2017	37%
2018-2019	40%
2019	

1.1.1 Analysis of Data and Plan for Continuous Improvement

2016-2017:
No action is needed as the performance is above the benchmark.

2017-2018:
We would like to set our benchmark as 35%. We are performing above the benchmark, but we encourage our faculty to write more proposals, get more grants and involve in professional development activities.

2018-2019:
We are stable in this performance.