

# **Engineering & Computer Science**

#3 Plan cycle - 3 Plan cycle 2020/2021 7/1/20 - 6/30/21

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

# 1 Assessment and Benchmark

Benchmark: Increase enrollment in the BS Computer Science program by 5% each year.

- CSCI BS Computer Science
  - APSC Applied Computer Science
  - GNCS General Computer Science
  - INCS Industrial Computer Science

# 1.1 Data

# 2015-2016:

Major	Cono			Su	ımme	r				ı	Fall					Sp	oring		
Major	Conc.	F	S	J	Sr	Т	СМР	F	s	J	Sr	Т	СМР	F	s	J	Sr	Т	СМР
	APSC	1	1	2	2	6	0	16	8	5	6	35	4	7	5	5	10	27	1
CSCI	GNCS	3	1	1	3	8	1	30	20	9	3	62	3	41	15	12	19	87	7
	(blank)	1	3	4	10	18	0	14	5	9	27	55	0	3	6	6	10	25	0
To	otal	5	5	7	15	32	1	60	33	23	36	152	7	51	26	23	39	139	8

# 2016-2017:

Major	Conc.			Su	mme	r				F	Fall					S	oring		
Major	Conc.	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР
	APSC	2	0	1	6	9	2	13	5	7	10	35	1	8	5	5	11	29	4
CSCI	GNCS	2	10	3	6	21	0	65	22	20	17	124	5	44	31	20	19	114	7
	(blank)	0	0	0	4	4	0	5	1	2	7	15	0	9	1	5	6	21	0
То	tal	4	10	4	14	34	2	83	28	29	34	174	6	61	37	30	36	164	11

# 2017-2018:

Major	Cono			Sı	ımme	r				F	all					Sı	oring		
Major	Conc.	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР
	APSC	0	2	1	4	7	0	25	5	4	12	46	2	11	7	3	14	35	5
CSCI	GNCS	4	7	8	11	30	1	72	33	24	27	156	5	51	37	29	26	143	6
CSCI	INCS	1	0	0	0	1	0	1	0	0	0	1	0	0	0	0	1	1	0
	(blank)	1	0	0	2	3	1	3	4	5	4	16	0	1	4	2	0	7	0
Тс	tal	6	9	9	17	41	2	101	42	33	43	219	7	63	48	34	41	179	11

# 2018-2019:

	10 20	10.																		
	10ior	Cono			Su	ımme	er				ı	all					Sp	oring		
Ľ	/lajor	Conc.	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР
		APSC	0	1	1	5	7	1	12	12	6	12	42	3	7	9	6	13	35	1
١,	CSCI	GNCS	3	8	5	18	34	0	45	36	31	31	143	5	24	37	29	39	129	10
Ι,	,SCI	INCS	0	0	1	0	1	0	4	0	1	1	6	0	3	0	0	1	4	0
		(blank)	1	0	1	0	2	0	1	0	1	0	2	0	1	2	1	1	5	0
		<del></del>																		

Total	4	9	8	23	44	1	62	48	39	44	193	8	35	48	36	54	173	11	
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# 2019-2020:

Major	Cono			Su	ımme	r				F	all					Sp	oring		
Major	Conc.	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР
	APSC	2	4	1	8	15	0	22	8	5	16	51	3	16	8	9	12	45	2
CSCI	GNCS	5	3	6	21	35	1	38	26	40	48	152	12	23	19	34	51	127	20
CSCI	INCS	0	1	0	0	1	0	3	3	0	0	6	0	1	2	0	0	3	0
	(blank)	0	0	0	0	0	0	0	1	0	0	1	0	2	1	2	0	5	0
To	tal	7	8	7	29	51	1	63	38	45	64	210	15	42	30	45	63	180	22

# 2020-2021:

Major	Cono			Su	ımme	r				F	all					Sp	oring		
Major	Conc.	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР
	APSC	3	3	1	5	12	0	23	15	12	12	62	3	14	11	11	14	50	2
CCCI	GNCS	1	6	4	16	27	1	37	25	25	56	143	14	22	28	25	53	128	19
CSCI	INCS	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	0	2	0
	(blank)	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
To	otal	4	9	6	21	40	1	62	40	37	68	207	17	37	40	36	67	180	21

# Percentage Change between 2017-2018:

Major	Fall	Total	% Change
CSCI	2017	219	-11.872%
CSCI	2018	193	-11.07270
Total	2017	219	-11.872%
Total	2018	193	-11.0 <i>12</i> %

# Percentage Change between 2018-2019:

Major	Fall	Total	% Change
CSCI	2018	193	8.808%
CSCI	2019	210	0.000%
Total	2018	193	8.808%
Total	2019	210	0.000%

# Percentage Change between 2019-2020:

Major	Fall	Total	% Change
CSCI	2019	210	-1.428%
CSCI	2020	207	-1.420%
Total	2019	210	-1.428%
lotai	2020	207	-1. <del>4</del> 20%

2019-2020:

2020-2021:

Data is inconclusive, due to Fall 2021 data not being completed yet. The completers column indicates that the Computer Science major has had a few more completers than the previous years. This could be due to the COVID-19 pandemic and hurricanes Laura and Delta forcing the university to have more online courses than it has ever had before.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 1.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

Once data on the Fall 2021 enrollment comes in we can work on a plan of increasing recruiting efforts.

#### 2 Assessment and Benchmark

Benchmark: Increase enrollment in the BSChE Chemical Engineering, BS Engineering, and BSME Mechanical Engineering programs by 5% each year.

- CHEG Chemical Engineering, BSChE (effective 202040)
- ENGR Engineering, BS
  - CHEG Chemical Engineering Concentration (inactive effective 202040)
  - CIEG Civil Engineering Concentration
  - ELEG Electrical Engineering Concentration
  - GEEG General Engineering Concentration (effective 201740; inactive effective 201940)
  - MEEG Mechanical Engineering Concentration (inactive effective 201860)
- MEEG Mechanical Engineering, BSME (effective 201860)

# CMP - Completers

#### 2.1 Data

# 2015-2016:

Major	Cono			Su	mme	er				F	all					Sp	oring		
Major	Conc.	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР
	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
ENGR	ELEG	11	6	6	16	39	2	39	11	13	31	94	5	36	17	15	31	99	6
	MEEG	30	23	12	20	85	0	104	52	28	65	249	11	61	50	33	62	206	19
	(blank)	8	4	8	12	32	0	16	15	12	32	75	0	18	8	7	28	61	0
То	tal	80	58	65	83	282	4	349	139	103	224	815	21	254	136	98	229	717	62

# 2016-2017:

Major	Cono			Su	mme	er				F	all					Sp	ring		
Major	Conc.	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР
	CHEG	13	21	14	23	71	0	65	60	37	74	236	0	36	51	43	83	213	23
	CIEG	4	7	9	9	29	1	48	24	18	27	117	0	22	22	15	38	97	15

ENGR	ELEG	7	7	4	11	29	1	18	28	8	33	87	7	12	17	16	36	81	8
	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
To	tal	38	71	48	65	222	3	220	170	104	232	636	27	125	133	115	244	620	64

# 2017-2018:

Major	Conc.			Su	mme	er				F	all					Sp	ring		
Major	Conc.	F	S	J	Sr	Т	СМР	F	Ø	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР
	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	20	32	97	7	17	21	16	39	93	8
ENGR	ELEG	2	4	8	12	26	1	30	12	23	30	95	3	28	16	16	44	104	12
ENGK	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	7	8	3	7	27	0	1	4	2	3	10	0
То	tal	20	59	69	66	221	1	197	140	125	224	688	25	132	126	110	253	621	64

# 2018-2019:

Major	Cono			Su	mme	er				F	all					Sp	ring		
Major	Conc.	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР
	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
	COEG	0	1	0	0	1	0	8	3	1	3	15	0	8	5	2	3	18	0
ENGR	ELEG	8	6	5	6	25	0	31	23	9	41	104	1	25	18	8	47	98	14
LINGK	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)	3	2	2	0	7	0	1	1	1	1	4	0	0	1	1	1	3	0
	Total	28	66	50	83	227	1	116	134	1115	243	605	22	85	92	106	260	543	86
MEEG	(blank)	-					_	59	9	2	4	74	0	27	23	5	4	59	0
IVIEEG	Total	_			_		_	59	9	2	4	74	0	27	23	5	4	59	0
Grand	d Total	28	66	50	83	227	1	175	143	117	247	682	22	112	115	111	264	602	86

# 2019-2020:

Major	Conc.			Su	mme	er				F	all					Sı	oring		
Iviajoi	Conc.	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР
	CHEG	1	13	11	19	44	1	47	28	36	73	184	4	18	35	31	87	171	38
	CIEG	4	11	2	14	31	0	18	19	13	37	87	5	6	17	12	37	72	10
	COEG	3	3	0	2	8	0	25	4	2	7	38	0	10	9	2	8	29	3
	ELEG	4	6	3	8	21	0	21	22	11	33	87	8	13	20	14	31	78	13
ENGR	GEEG	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	0
	MEEG	1	4	19	25	49	1	1	8	26	67	102	11	0	2	10	57	69	0
	(blank)	0	0	0	2	2	0	3	2	0	4	9	0	0	0	0	0	0	0

	Total	13	37	35	70	155	3	115	83	89	221	508	43	47	83	70	220	420	86
MEEG	(blank)	8	17	7	5	37	0	58	40	14	9	121	0	33	37	29	36	135	16
MEEG	Total	8	17	7	5	37	0	58	40	14	9	121	0	33	37	29	36	135	16
Grand	l Total	21	54	42	75	192	3	173	123	103	230	629	43	80	120	99	256	555	107

# 2020-2021:

Maiar	Cara			Sı	ımm	er				F	all						Spring		
Major	Conc.	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР	F	S	J	Sr	Т	СМР
CHEG	(blank)	1	0	2	4	7	0	38	11	2	6	57	0	18	24	24	20	86	0
CHEG	Total	1	0	2	4	7	0	38	11	2	6	57	0	18	24	24	20	86	0
	CHEG	1	10	16	26	53	3	5	23	22	65	115	3	0	0	0	54	54	25
	CIEG	1	3	11	11	26	1	18	12	15	36	81	4	13	10	12	39	74	10
	COEG	2	4	2	2	10	0	16	5	5	7	33	0	6	10	5	7	28	3
ENGR	ELEG	4	5	6	11	26	0	27	14	17	25	83	1	21	10	21	27	79	13
	MEEG	0	0	3	25	28	0	0	1	5	56	62	0	0	0	3	48	51	0
	(blank)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	8	22	38	<i>7</i> 5	143	4	66	55	64	189	374	8	40	30	41	175	286	51
MEEG	(blank)	2	16	12	16	46	2	57	37	36	30	160	11	34	39	31	43	147	28
IVIEEG	Total	2	16	12	16	46	2	57	37	36	30	160	11	34	39	31	43	147	28
Grand	d Total	11	38	52	95	196	6	161	103	102	225	591	19	92	93	96	238	519	79

# Percentage Change between 2017-2018:

Major	Fall	Total	% Change
ENGR	2017	688	-12.064%
LINGK	2018	605	-12.00476
MEEG	2017	0	
MEEG	2018	74	
Total	2017	688	-1.308%
Total	2018	679	-1.306%

# Percentage Change between 2018-2019:

		1	
Major	Fall	Total	% Change
ENGR	2018	605	-16.033%
ENGR	2019	508	-10.033%
MEEG	2018	74	63.514%
MEEG	2019	121	03.314%
Total	2018	679	-7.364%
Total	2019	629	-7.304%

# Percentage Change between 2019-2020:

Major	Fall	Total	% Change

CHEG	2019	0	_
	2020	57	
ENGR	2019	508	-26.378%
ENGR	2020	374	-20.370%
MEEG	2019	121	32.231%
INIEEG	2020	160	32.231%
Total	2019	629	-6.041%
Iotai	2020	591	-0.041%

2019-2020:

#### 2020-2021:

The benchmark cannot be measured currently due to the need for Fall 2021 data. Although based upon the 2020-2021 chart it looks like the benchmark wouldn't have been meant since the number of completers has gone down. This could be due to the COVID-19 Pandemic, as well as hurricanes Laura and Delta.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20]

Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 2.1.2 Plan for Continuous Improvement

2019-2020:

#### 2020-2021:

The first part of continuous improvement is getting back to face-to-face courses to get students who took a break during the COVID-19 pandemic back, as well as increase recruiting efforts through the new LNG center that is getting built.

# 3 Assessment and Benchmark

Benchmark: Track student enrollment in the MEng Engineering program. Maintain or exceed a total of 40 students in the MEng Engineering program.

- ENGR MEng Engineering
  - CHEG Chemical Engineering
  - CIEG Civil Engineering
  - ELEG Electrical Engineering
  - EMGT Engineering Management (inactive effective 201940)
  - MEEG Mechanical Engineering
- ENRT MEng Engineering (Thesis Option; effective 201740)
  - CHEG Chemical Engineering
  - CIEG Civil Engineering
  - ELEG Electrical Engineering
  - MEEG Mechanical Engineering

#### 3.1 Data

#### Graduate Enrollment:

Major	Conc.	20	13-20	14	20	14-20	15	20	15-20	16	20	16-20	17	20	17-20	18
Major	Conc.	J	F	S	U	F	S	כ	F	S	U	F	S	U	F	S
	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
ENGR	ELEG	4	10	7	2	6	19	13	25	21	14	17	13	3	8	8
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	EMGT MEEG	1	6 4	4	0	4 6	6	0	7	6 7	5	4	3	0	6 2	2
То	tal	11	30	27	2	31	40	16	50	49	23	37	35	9	26	16

Major	Cono	20	18-20	19	20	19-20	20	20	20-20	21	20	21-20	22	20	22-20	23
Major	Conc.	U	F	S	U	F	S	U	F	S	U	F	S	U	F	S
	CHEG	0	4	3	0	2	1	3	3	3						
	CIEG	0	0	1	0	2	2	0	2	4						
ENGR	ELEG	4	4	3	1	2	5	3	3	1						
ENGK	EMGT	0	3	1	0	1	1	1	0	0						
	MEEG	2	5	4	1	5	3	0	1	1						
	Total	6	16	12	2	12	12	7	9	9						
	CHEG	0	0	0	0	0	1	1	1	1						
	CIEG	0	0	0	0	0	0	0	0	0						
ENRT	ELEG	0	2	3	1	2	1	0	2	2						
	MEEG	0	0	1	1	1	2	0	0	1						
	Total	0	2	4	2	3	4	1	3	4						
Grand	l Total	6	18	16	4	15	16	8	12	13						

2019-2020:

# 2020-2021:

The benchmark wasn't met for the current academic year for graduate students in the department of Engineering and Computer Science. This could be due to the current job market and the need to getting a Master's degree not being there. Or it could be due to the COVID-19 pandemic and hurricanes Laura and Delta.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20]
Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 3.1.2 Plan for Continuous Improvement

2019-2020:

# 2020-2021:

The plan for improvement may be to lower the number of graduate students to 15-20, due to the current job market and then reexamine the data year-to-year.

# 4 Assessment and Benchmark

Benchmark: Track student completion in the MEng Engineering program. Maintain or exceed a total of 10 completers in the MEng Engineering program.

- ENGR MEng Engineering
  - CHEG Chemical Engineering
  - CIEG Civil Engineering
  - ELEG Electrical Engineering
  - EMGT Engineering Management (inactive effective 201940)
  - MEEG Mechanical Engineering

- ENRT MEng Engineering (Thesis Option; effective 201740)
  - CHEG Chemical Engineering
  - CIEG Civil Engineering
  - ELEG Electrical Engineering
  - MEEG Mechanical Engineering

# 4.1 Data

# **Graduate Completers:**

Major	Conc.	20	13-20	14	20	14-20	15	20	15-20	16	20	16-20	17	20	17-20	18
Major	Conc.	כ	F	S	כ	F	S	ט	F	S	J	F	S	J	F	S
	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
ENGR	ELEG	0	3	3	0	1	3	0	9	3	3	6	6	0	1	0
ENGK	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	8	7	0	4	6	1	15	8	4	8	12	0	7	3
	CHEG													0	0	0
	CIEG													0	0	0
ENRT	ELEG									_				0	0	3
	MEEG													0	0	0
	Total						_							0	0	3
Grand	l Total	0	8	7	0	4	6	1	15	8	4	8	12	0	7	6

Major	Cono	20	18-20	19	20	19-20	20	20	20-20	21	20	21-20	22	20	22-20	23
Major	Conc.	U	F	S	U	F	S	U	F	S	U	F	S	J	F	S
	CHEG	0	2	1	0	0	0	1	1	0						
	CIEG	0	0	0	0	0	0	0	0	0						
ENGR	ELEG	0	1	1	0	0	1	0	2	0						
ENGK	EMGT	0	0	1	0	0	0	1	0	0						
	MEEG	0	1	0	0	0	0	0	0	0						
	Total	0	4	3	0	0	1	2	3	0						
	CHEG	0	0	0	0	0	0	0	0	0						
	CIEG	0	0	0	0	0	0	0	0	1						
ENRT	ELEG	0	0	1	0	0	0	0	0	1						
	MEEG	0	0	0	0	0	4	0	0	0						
	Total	0	0	1	0	0	4	0	0	2						
Grand	l Total	0	4	4	0	0	5	2	3	2						

# 4.1.1 Analysis of Data

2019-2020:

# 2020-2021:

The benchmark of 10 completers in the Master's of Engineering wasn't met. This ties in with the lower enrollment in the Master's of Engineering and the completers being tied into it.

# 4.1.2 Plan for Continuous Improvement

#### 2019-2020:

# 2020-2021:

The graduate program needs to increase enrollment numbers, by increasing recruitment. As well as possibly lowering the number of total completers.

# 5 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:

- CITE Bachelor of Science in Computer Information Technology
- CSCI Bachelor of Science in Computer Science
- ENGT Bachelor of Science in Engineering Technology
- ENGR Bachelor of Science in Engineering
- ENTC Bachelor of Science in Engineering Technology
- MEEG Bachelor of Science in Mechanical Engineering

# 5.1 Data

			Persi	stence		Re	etent	ion Ra	te			Gr	adua	tion R	ate	
Major	Cohort Size*	Same Major?	R	ate	Y1 ·	to Y2	Y1	to Y3	Y1	to Y4	4-`	Year	5-`	Year	6-`	Year
	O.Z.o	major.	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	2	66.7	2	66.7	1	33.3	0	0.0	0	0.0	0	0.0	0	0.0
CITE	3	Changed	1	33.3	0	0.0	1	33.3	2	66.7	0	0.0	1	33.3	1	33.3
		Total	3	100	2	66.7	2	66.7	2	66.7	0	0.0	1	33.3	1	33.3
		Same	11	57.9	7	36.8	2	10.5	2	10.5	2	10.5	2	10.5	2	10.5
CSCI	19	Changed	4	21.1	3	15.8	3	15.8	2	10.5	1	5.3	1	5.3	1	5.3
		Total	15	78.9	10	52.6	5	26.3	4	21.1	3	15.8	3	15.8	3	15.8
		Same	7	63.6	5	45.5	3	27.3	3	27.3	3	27.3	3	27.3	3	27.3
ENGT	11	Changed	1	9.1	2	18.2	2	18.2	1	9.1	0	0.0	0	0.0	1	9.1
		Total	8	72.7	7	63.6	5	45.5	4	36.4	3	27.3	3	27.3	4	36.4
		Same	100	74.1	69	51.1	50	37.0	44	32.6	20	14.8	32	23.7	33	24.4
ENGR	135	Changed	25	18.5	27	20.0	33	24.4	32	23.7	18	13.3	24	17.8	25	18.5
		Total	125	92.6	96	71.1	83	61.5	76	56.3	38	28.1	56	41.5	58	43.0
		Same	2	100	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ENTC	2	Changed	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
		Total	2	100	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Total	170	Same	122	71.8	93	54.7	56	32.9	50	29.4	25	14.7	37	21.8	38	22.4
lotai	170	Changed	31	18.2	32	18.8	39	22.9	37	21.8	19	11.2	26	15.3	28	16.5
		Total	153	90.0	125	73.5	95	55.9	87	51.2	44	25.9	63	37.1	51	30.0

\*There were students that were undeclared before declaring:

CSCI = 2

ENGT = 1

ENTC = 2

# 2013:

			Persi	stence		R	etenti	on Rat	:e			Gra	adua	tion Ra	ate	
Major	Cohort Size	Same Major?	R	ate	Y1 1	to Y2	Y1 1	to Y3	Y1	to Y4	4-`	Year	5-`	Year	6-\	<b>Year</b>
	0.20	major.	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	29	87.9	13	39.4	12	36.4	8	24.2	2	6.1	2	6.1	1	3.0
CSCI	33*	Changed	1	3.0	7	21.2	8	24.2	8	24.2	0	0.0	7	21.2	1	3.0
		Total	30	90.9	20	60.6	20	60.6	16	48.5	2	6.1	9	27.3	2	6.1
		Same	103	72.0	73	51.0	53	37.1	48	33.6	18	12.6	21	14.7	3	2.1
ENGR	143	Changed	23	16.1	23	16.1	29	20.3	29	20.3	14	9.8	5	3.5	5	3.5
		Total	126	88.1	96	67.1	82	57.3	77	53.8	32	22.4	26	18.2	8	5.6
		Same	3	100	3	100	2	66.7	2	66.7	1	33.3	0	0.0	0	0.0
ENGT	3**	Changed	0	0.0	0	0.0	1	33.3	1	33.3	0	0.0	1	33.3	0	0.0
		Total	3	100	3	100	3	100	3	100	1	33.3	1	33.3	0	0.0
		Same	135	59.2	89	39.0	67	29.4	58	25.4	21	9.2	23	10.1	4	1.8
Total	228	Changed	24	10.5	30	13.2	38	16.7	38	16.7	14	6.1	13	5.7	6	2.6
		Total	159	69.7	119	52.2	105	46.1	96	42.1	35	15.4	36	15.8	10	4.4

<sup>\*1</sup> student was previously declared before declaring CSCI.

			Persi	stence		R	etent	ion Ra	te			Gr	adua	tion R	ate	
Major	Cohort Size	Same Major?	R	ate	Y1 1	to Y2	Y1 1	to Y3	Y1 ·	to Y4	4-`	Year	5-`	Year	6-`	Year
	0120	Major.	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	17	73.9	12	52.2	8	34.8	7	30.4	5	21.7	6	26	6	26
CSCI	23	Changed	4	17.4	5	21.7	8	34.8	6	26.1	1	4.3	2	8.6	2	8.6
		Total	21	91.3	17	73.9	16	69.6	13	56.5	6	26	8	34.7	8	34.7
		Same	130	70.7	94	51.2	66	35.9	60	32.6	24	13	41	22.2	46	25
ENGR	184	Changed	23	12.5	31	16.8	38	20.8	38	20.8	10	5.4	25	13.5	32	17.3
		Total	153	83.2	125	67.9	104	56.5	98	53.4	34	18.4	66	35.8	78	42.3
		Same	147	71.0	106	51.2	74	35.8	67	32.4	29	14	47	22.7	52	25.1
Total	207	Changed	27	13.0	36	17.4	46	22.2	44	21.3	30	14.4	27	13	34	16.4
		Total	174	84.1	142	68.6	120	58.0	111	53.6	40	19.3	74	35.7	86	41.5

20	1	5
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		Persistence	R	etention Ra	te	Gra	aduation R	ate
1							Î	1

<sup>\*\*1</sup> student was previously declared before declaring ENGT.

Major	Cohort	Same	R	ate	Y1 <sup>1</sup>	to Y2	Y1 1	to Y3	Y1 1	to Y4	4-\	⁄ear	5-\	⁄ear	6-\	⁄ear
	Size	Major?	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	25	67.6	21	56.8	14	37.8	12	32.4						
CSCI	37	Changed	5	13.5	3	8.1	4	10.8	4	10.8						
		Total	30	81.1	24	64.9	18	48.6	16	43.2						
		Same	128	62.4	90	43.9	58	28.3	54	26.3						
ENGR	205	Changed	42	20.5	44	21.5	41	20.0	38	18.5						
		Total	170	82.9	134	65.4	99	48.3	92	44.9						
		Same	153	63.2	111	45.9	72	29.8	66	27.3						
Total	242	Changed	47	19.4	47	19.4	45	18.6	42	17.4						
		Total	200	82.6	158	65.3	117	48.3	108	44.6						

# 2016:

			Persi	stence		R	etent	ion Ra	te			Gra	adua	tion R	ate	
Major	Cohort Size	Same Major?	R	ate	Y1 :	to Y2	Y1 1	to Y3	Y1 1	to Y4	4-\	⁄ear	5-\	⁄ear	6-\	Year
	0.20	major.	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	44	80.0	35	63.6	26	47.3	24	43.6						
CSCI	55	Changed	8	14.5	6	10.9	11	20.0	8	14.5						
		Total	52	94.5	41	74.5	37	67.3	32	58.2						
		Same	105	71.4	73	49.7	62	42.2	53	36.1						
ENGR	147	Changed	27	18.4	26	17.7	30	20.4	30	20.4						
		Total	132	89.8	99	67.3	92	62.6	83	56.5						
		Same	149	73.8	108	53.5	88	43.6	77	38.1						
Total	202	Changed	35	17.3	32	15.8	41	20.3	38	18.8						
		Total	184	91.1	140	69.3	129	63.9	115	56.9						

			Persi	stence		R	etent	ion Rat	te			Gra	adua	tion R	ate	
Major	Cohort Size	Same Major?	R	ate	Y1 ·	to Y2	Y1 1	to Y3	Y1 1	to Y4	4-\	⁄ear	5-\	⁄ear	6-\	⁄ear
	0.20	major.	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	47	67.1	29	41.4	23	32.9	22	31.4						
CSCI	70	Changed	12	17.1	11	15.7	10	14.3	10	14.3						
		Total	59	84.3	40	57.1	33	47.1	32	45.7						
		Same	134	74.9	87	48.6	64	35.8	56	31.3						
ENGR	179	Changed	17	9.5	35	19.6	41	22.9	42	23.5						
		Total	151	84.4	122	68.2	105	58.7	98	54.7						
		Same	181	72.7	116	46.6	87	34.9	78	31.3						
Total	249	Changed	29	11.6	46	18.5	51	20.5	52	20.9						
		Total	80	83.3	56	58.3	138	55.4	130	52.2						

Major	Cohort	Same				Re	etentio	on Rate	)			Gra	adua	tion R	Graduation Rate				
Iviajoi	Size	Major?	Rate		Y1 :	to Y2	Y1 to Y3		Y1 to Y4		4-Year		5-`	⁄ear	6-Year				
			#	%	#	%	#	%	#	%	#	%	#	%	#	%			
		Same	23	59.0	14	35.9	10	25.6											
CSCI	39	Changed	11	28.2	11	28.2	11	28.2											
		Total	34	87.2	25	64.1	21	53.8											
		Same	76	73.1	55	52.9	40	38.5											
ENGR	104	Changed	13	12.5	13	12.5	20	19.2											
		Total	89	85.6	68	63.4	60	57.7											
		Same	39	68.4	29	50.9	21	36.8											
MEEG	57	Changed	10	17.5	10	17.5	16	28.1											
		Total	49	86.0	39	68.4	37	64.9											
		Same	138	69.0	98	49.0	71	35.5											
Total	200	Changed	34	17.0	34	17.0	47	23.5											
		Total	172	86.0	132	66.0	118	59.0											

# 2019:

			Persi	stence		Re	tenti	on Rat	e			Gr	adua	tion R	ate	
Major Cohort	Cohort Size	Same Major?	R	ate	Y1	to Y2	Y1	to Y3	Y1	to Y4	4-`	Year	5-`	<b>Year</b>	6-\	⁄ear
	0.20		#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	34	65.4	28	53.8										
CSCI	52	Changed	8	15.4	10	19.2										
		Total	42	80.8	38	73.1										
		Same	59	61.5	40	41.7										
ENGR	96	Changed	18	18.8	21	21.9										
		Total	77	80.2	61	63.5										
		Same	33	62.3	20	37.7										
MEEG	53	Changed	10	18.9	13	24.5										
		Total	43	81.1	33	62.3										
		Same	126	62.7	88	43.8										
Total	201	Changed	36	17.9	44	21.9										
		Total	162	80.6	132	65.7										

			Persistence		Retention Rate						Graduation Rate					
Major Cohort Same Size Major?	Same Major?	Rate Y1 to Y2 Y1 to Y3		to Y3	Y1 to Y4		4-Year		5-Year		6-Year					
	0120	iviajoi .	#	%	#	%	#	%	#	%	#	%	#	%	#	%
		Same	27	60.0												
CHEG	45	Changed	8	17.8												
		Total	35	77.8												
		Same	29	72.5												
CSCI	40	Changed	6	15.0												

		Total	35	87.5						
		Same	39	70.9						
ENGR	55	Changed	10	18.2						
		Total	49	89.1						
		Same	38	76.0						
MEEG	50	Changed	3	6.0						
		Total	41	82.0						
		Same	133	70.0						
Total	190	Changed	27	14.2						
		Total	160	84.2						

#### 2019-2020:

According to the data the engineering concentrations and the mechanical engineering major are not meeting the benchmark of 70%.

#### 2020-2021:

No other data has been added for 20-21.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20]

Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 5.1.2 Plan for Continuous Improvement

#### 2019-2020:

The engineering concentrations may be lower due to the start of the COVID-19 pandemic and several students not wanting to take courses online.

# 2020-2021:

No data collected.

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

#### 1 Assessment and Benchmark

Benchmark: Computer science faculty meet four times per academic year to review student progress, curricular offerings, and appropriate professional contacts and opportunities.

# 1.1 Data

Academic Year	# of meetings				
2013-2014	8				
2014-2015	8				
2015-2016	6				
2016-2017	7				
2017-2018	12				
2018-2019	9				
2019-2020	3				
2020-2021	0				

CE Review- Report-2019 (1) [DOCX 33 KB 6/12/20]

CHEN Audit 2017 [DOCX 13 KB 6/12/20]

CivilReview\_2019 (1) [PDF 1,343 KB 6/12/20]

MEEN Program Review Comments Spring 18 [DOCX 18 KB 6/12/20]

# 1.1.1 Analysis of Data

#### 2019-2020:

The benchmark wasn't meant for computer science meetings, due to COVID-19 pandemic starting in early March of 2020.

#### 2020-2021:

The benchmark wasn't meant for computer science meetings, due to two hurricanes and the COVID-19 pandemic.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20]

Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

#### 1.1.2 Plan for Continuous Improvement

#### 2019-2020:

With the end of the COVID-19 pandemic, meetings will be held as normally scheduled.

#### 2020-2021:

With the end of the COVID-19 pandemic and hurricanes, meetings will be held as normally scheduled.

# 2 Assessment and Benchmark

#### Benchmark:

1)The College of Engineering Industrial Advisory Board reviews one engineering concentration (Chemical, Civil, Electrical, Computer, or Mechanical) per year on a four-year cycle. This is a comprehensive review examining the curricula, space, labs, faculty, finances, etc.

2)The Computer Science Industrial Advisory Board reviews CS program every 5 years. This is a comprehensive review examining the curricula, space, labs, faculty, finances, etc.

#### 2.1 Data

Term	Program Reviewed				
Fall 2014	CIEG				
Fall 2016	CHEG				
Spring 2018	CSCI & MEEG				
Spring 2019	CIEN				
Fall 2020	ELEG				
Spring 2021	_				
Fall 2021					
Spring 2022					

# 2.1.1 Analysis of Data

2019-2020:

#### 2020-2021:

No program review program review happened due to COVID-19 pandemic and multiple hurricanes.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 2.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

Continue as normally scheduled, once buildings are released back to the College.

# 3 Assessment and Benchmark

Benchmark: Maintain or exceed a 75% satisfactory level.

MEng Engineering:

- Assessment goal: Knowledge and skill gained in MEng program.
- Instrument: Exit survey data, student perception of gained knowledge and skills through exit survey data.

#### 3.1 Data

Academic Year	# of respondents	Average Score			
2019-2020		_			
2020-2021	_	_			

# 3.1.1 Analysis of Data

2019-2020:

No data was collected due to the COVID-19 pandemic.

2020-2021:

No data was collected due to the hurricanes hitting McNeese's campus.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20]

Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 3.1.2 Plan for Continuous Improvement

2019-2020:

The survey will be relooked at, also due to social distancing exit surveys were difficult to complete.

2020-2021:

The survey will be re-evaluated and was not completed due to damage to buildings from the hurricanes.

# 4 Assessment and Benchmark

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

MEng Engineering:

- Assessment goal: Knowledge and skill gained in MEng program.
- Instrument: Graduate Comprehensive Exam (GCE), evaluation of gained knowledge and skills through examination.

#### 4.1 Data

Academic Year	# of respondents	Average Score			
2019-2020		_			
2020-2021	4	80%*			

\*This data is based on master's students in engineering. However, I believe all students were in the thesis option which doesn't require a Comprehensive Examination.

# 4.1.1 Analysis of Data

2019-2020:

#### 2020-2021:

As previously stated most engineering master's students take the thesis option which doesn't require a comprehensive examination; it requires a thesis defense which of the data gathered so far is showing four of four students passed with at least 80% or higher.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

#### 4.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

The score was maintained, however the benchmark does need to be redone to show both non-thesis option students and thesis option students. Will discuss with faculty program coordinators in Fall 2021.

Performance Objective 3 (ABET Program Education Objective 1) The Computer Science programs will enable students to become productive, responsible computing science professionals capable of conducting research and/or designing, developing, or maintaining projects in the various areas of computer science.

# 1 Assessment and Benchmark

Benchmark: A benchmark of 3.00 on a 5-point scale for the McNeese State University Alumni survey for each of the PEOs is set.

- Assessment Goal: To track Program Educational Objectives.
- Instrument: The Computer Science Alumni survey asks questions about Program Educational Objectives.

#### 1.1 Data

Academic Year	# of Respondents	Average Score (out of 5)	Benchmark met?
2014-2015	30	4.27	Yes
2017-2018	37	3.49	Yes
2020-2021		_	_

#### 1.1.1 Analysis of Data

2019-2020:

2020-2021:

No data was collected due to the continuation of the Covid-19 pandemic and two hurricanes hitting the campus.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 1.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

The survey will be re-evaluated to make sure that it is still valid and may be replaced.

# 2 Assessment and Benchmark

Benchmark: A benchmark of 3.00 on a 5-point scale for the Employer survey for each of the PEOs is set.

- Assessment Goal: To track Program Educational Objectives.
- Instrument: The Computer Science Employer Survey asks questions about Program Educational Objectives.

#### 2.1 Data

Academic Year	# of Respondents	Average Score (out of 5)	Benchmark met?		
2014-2015	12	4.67	Yes		
2017-2018	12	4.33	Yes		
2020-2021	_	_	_		

# 2.1.1 Analysis of Data

2019-2020:

2020-2021:

No data was collected due to the covid-19 pandemic and multiple hurricanes hitting the campus.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

## 2.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

The benchmark will be re-evaluated so that we make sure the information is valid and up to date.

# 3 Assessment and Benchmark

Benchmark: A benchmark of 3.00 on a 5-point scale for the MSU Advisory Board Survey for each of the PEOs is set.

- Assessment Goal: To track Program Educational Objectives.
- Instrument: The Computer Science Advisory Board Survey asks questions about Program Educational Objectives.

Prior to 2018, the benchmark was 2.50 on a 3-point scale.

#### 3.1 Data

Academic Year	# of Respondents	Average Score (out of 5)	Benchmark met?
2014-2015	18	4.67	Yes
2017-2018	15	3.80	Yes
2020-2021	_	_	_

# 3.1.1 Analysis of Data

#### 2019-2020:

No data was collected because of the COVID-19 pandemic.

#### 2020-2021:

No data was collected because of the COVID-19 pandemic, as well as hurricanes in the local area.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20]

Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

#### 3.1.2 Plan for Continuous Improvement

#### 2019-2020:

See 2020-2021.

#### 2020-2021:

The survey is going to be reviewed, as well as the benchmark and assessment to see whether or not it should be retained.

# Performance Objective 4 (ABET Program Education Objective 2) The Computer Science program will enable students to understand and apply ethical issues and social aspects of computing science in performing their duties as computer science professionals.

#### 1 Assessment and Benchmark

Benchmark: A benchmark of 3.00 on a 5-point scale for the McNeese State University Alumni survey for each of the PEOs is set.

- Assessment Goal: To track Program Educational Objectives.
- Instrument: The Computer Science Alumni survey asks questions about Program Educational Objectives.

Prior to 2018, the benchmark was 2.00 on a 3-point scale.

#### 1.1 Data

Academic Year	# of Respondents	Average Score (out of 5)	Benchmark met?
2014-2015	31	4.32	Yes
2017-2018	38	3.61	Yes
2020-2021	_	_	_

# 1.1.1 Analysis of Data

2019-2020:

#### 2020-2021:

No data was collected due to the continuation of the covid-19 pandemic, and multiple hurricanes hitting the campus.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20]

Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 1.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

Survey will be re-evaluated to make sure it is still valid and may be replaced.

#### 2 Assessment and Benchmark

Benchmark: A benchmark of 3.00 on a 5-point scale for the McNeese State University Employer Survey for each of the PEOs is set.

- Assessment Goal: To track Program Educational Objectives.
- Instrument: The Computer Science Employer Survey asks questions about Program Educational Objectives.

Prior to 2015, the benchmark was 2.00 on a 3-point scale.

#### 2.1 Data

Academic Year	# of Respondents	Average Score (out of 5)	Benchmark met?
2014-2015	12	4.58	Yes
2017-2018	12	4.33	Yes
2020-2021	_	_	_

# 2.1.1 Analysis of Data

2019-2020:

2020-2021:

No data was collected due to the continuation of the Covid-19 pandemic and multiple hurricanes hitting campus.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20]

Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 2.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

Survey will be re-evaluated to see if it's still valid. The survey may be replaced.

# 3 Assessment and Benchmark

Benchmark: A benchmark of 3.00 on a 5-point scale for the McNeese State University Advisory Board Survey for each of the PEOs is set.

- Assessment Goal: To track Program Educational Objectives.
- Instrument: The Computer Science Advisory Board Survey asks questions about Program Educational Objectives.

Prior to 2018, the benchmark was 2.00 on a 3-point scale.

# 3.1 Data

Academic Year	# of Respondents	Average Score (out of 5)	Benchmark met?
2014-2015	18	4.44	Yes
2017-2018	15	3.90	Yes

2020-2021	_	_	

2019-2020:

No data was collected from the advisory board due to the COVID-19 pandemic.

2020-2021:

No data was collected from the advisory board due to the COVID-19 pandemic, as well as multiple hurricanes in the local area.

Chemical, Civil, and Mechanical Engineering 2019  $\,$  [PDF  $\,$  143 KB  $\,$  6/12/20]

Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 3.1.2 Plan for Continuous Improvement

2019-2020:

See 2020-2021.

2020-2021:

The survey is going to be re-evaluated, as well as the assessment and benchmark.

Performance Objective 5 (ABET Program Education Objective 3) The Computer Science programs will enable students to continue the learning of new technologies in the computer science area through self- directed professional development or post graduate education.

#### 1 Assessment and Benchmark

Benchmark: 3.00 on a 5-point scale for the McNeese State University Alumni Survey for each of the PEOs is set.

- Assessment Goal: To track Program Educational Objectives.
- Instrument: The Computer Science Alumni survey asks questions about Program Educational Objectives.

#### 1.1 Data

Academic Year	# of Respondents	Average Score (out of 5)	Benchmark met?
2014-2015	31	4.26	Yes
2017-2018	36	3.86	Yes
2020-2021		_	_

#### 1.1.1 Analysis of Data

2019-2020:

2020-2021:

No data collected Covid-19 and multiple hurricanes hitting campus.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20]

Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 1.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

Survey will be re-evaluated and may be removed.

#### 2 Assessment and Benchmark

Benchmark: 3.00 on a 5-point scale for the McNeese State University Employer Survey for each of the PEOs is set.

- Assessment Goal: To track Program Educational Objectives.
- Instrument: The Computer Science Employer Survey asks questions about Program Educational Objectives.

# 2.1 Data

Academic Year	# of Respondents	Average Score (out of 5)	Benchmark met?
2014-2015	12	4.40	Yes
2017-2018	12	4.25	Yes
2020-2021		_	

#### 2.1.1 Analysis of Data

2019-2020:

2020-2021:

No data collected Covid-19 and multiple hurricanes hitting campus.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20]

Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 2.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

Survey will be re-evaluated and may be updated or removed.

# 3 Assessment and Benchmark

Benchmark: A benchmark of 3.00 on a 5-point scale for the McNeese State University Advisory Board Survey for each of the PEOs is set.

- Assessment Goal: To track Program Educational Objectives.
- Instrument: The Computer Science Advisory Board Survey asks questions about Program Educational Objectives.

#### 3.1 Data

Academic Year	# of Respondents	Average Score (out of 5)	Benchmark met?
2014-2015	18	4.78	Yes
2017-2018	15	4.07	Yes
2020-2021	_	_	_

#### 3.1.1 Analysis of Data

2019-2020:

No data was collected due to COVID-19.

2020-2021:

No data was collected due to COVID-19, as well as multiple hurricanes in the area.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 3.1.2 Plan for Continuous Improvement

2019-2020: See 2020-2021.

2020-2021:

The survey will be re-evaluated, to see if the assessment and benchmark will be retained.

Performance Objective 6 To prepare graduates of the BS in Engineering program 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 engineering alumni within five years of graduation (2011-2015) who fill out an alumni survey will score this PO with a 2 or higher based on a 3-point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

# 1.1 Data

Reporting Year	Alumni group	# of surveys completed	% that scored this PO with a 2	% that scored this PO with a 3	% that 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		_		_
2016-2017*	2013-2017		_		_
2017-2018	2014-2018		_		_
2018-2019	2015-2019	1	_		_
2019-2020	2016-2020		_		_
2020-2021**	2017-2021		_		_

<sup>\*</sup>TBC in fall 2019 with a 5-year frequency.

# 1.1.1 Analysis of Data

2019-2020:

2020-2021:

No data collected Covid-19 and multiple hurricanes hitting campus.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 1.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

Benchmark will be re-evaluated and possibly removed.

# 2 Assessment and Benchmark

<sup>\*\*</sup>No data collected due to Covid-19 and multiple hurricanes hitting campus.

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 3-point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

#### 2.1 Data

Reporting Year	# of IAB members completing survey	% that scored this PO with a 2	% that scored this PO with a 3	% that scored this PO with a 2 or higher
2015	24/27	25%	75%	100%
2018	_			_
2019*	_			_
2020**	_		_	_
2021	_		_	_

<sup>\*</sup>TBC in fall 2019 with a 5-year frequency.

# 2.1.1 Analysis of Data

#### 2019-2020:

No data was collected from the IAB board due to the COVID-19 pandemic and a nation-wide shutdown.

#### 2020-2021:

No data was collected from the IAB board due to the continuation of the COVID-19 pandemic and the multiple hurricanes that hit the area.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 2.1.2 Plan for Continuous Improvement

2019-2020:

See 2020-2021.

#### 2020-2021:

The benchmark is going to be re-evaluated to see if there is a more accurate way to get the boards perspective and expertise.

## 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 3-point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

#### 3.1 Data

Reporting Year	# of employers completing survey	% that scored this PO with a 2	% that scored this PO with a 3	% that scored this PO with a 2 or higher
2015	78	35.5%	64.5%	100%
2018	_		_	_
2019*	_		_	_
2020**	_		_	_
2021***		_	_	_

<sup>\*</sup>TBC in fall 2019 with a 5-year frequency.

<sup>\*\*</sup>No data collected due to Covid-19 and multiple hurricanes hitting campus.

#### 2019-2020:

No survey data was gathered, however the dean did meet with industry plant managers to discuss McNeese Engineering students. This is were the subject of safety came up, especially important when discussing problem solving.

#### 2020-2021:

No survey data was gathered, however virtual meetings were still held with LAIA with industry plant managers to discuss the effects of adding CHEN 307 into the curriculum.

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Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 3.1.2 Plan for Continuous Improvement

#### 2019-2020:

Meetings with LAIA and the dean of the college will continue, so that the engineering curriculum can grow as needed to be as excellent as possible.

#### 2020-2021:

Meeting with LAIA and the dean of the college will continue to be held, so that engineering can stay on the cutting edge.

# Performance Objective 7 To provide graduates with the motivation and skills to advance into positions of increased responsibility and to purse continuing education or graduate studies. (ABET PEO 2)

# 1 Assessment and Benchmark

Benchmark: 85% of the engineering alumni within five years of graduation who fill out an alumni survey will score this PO with a 2 or higher based on a 3-point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

# 1.1 Data

Reporting Year	Alumni group	# of surveys completed	% that scored this PO with a 2	% that scored this PO with a 3	% that 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		_		_
2016-2017*	2013-2017		_		_
2017-2018	2014-2018		_		_
2018-2019	2015-2019		_		_
2019-2020	2016-2020		_		_
2020-2021**	2017-2021	_	_	_	_

<sup>\*</sup>TBC in fall 2019 with a 5-year frequency.

# 1.1.1 Analysis of Data

<sup>\*\*</sup>No survey sent out; however, face-to-face meetings were held.

<sup>\*\*\*</sup>No survey sent out; however, virtual meetings were held.

<sup>\*\*</sup>No data collected Covid-19 and multiple hurricanes hitting campus.

#### 2020-2021:

No data collected Covid-19 and multiple hurricanes hitting campus.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 1.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

Benchmark will be re-evaluated. Possibly removed.

#### 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 3-point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

#### 2.1 Data

Reporting Year	# of IAB members completing survey	% that scored this PO with a 2	% that scored this PO with a 3	% that scored this PO with a 2 or higher
2015	24/27	33.3%	66.6%	100%
2018	_	_	_	_
2019*	_	_	_	_
2020**	_	_	_	_
2021**	_	_	_	_

<sup>\*</sup>TBC in fall 2019 with a 5-year frequency.

# 2.1.1 Analysis of Data

# 2019-2020:

No data was gathered due to the COVID-19 pandemic, that caused a nation-wide shutdown from March-May of 2020.

#### 2020-2021:

No data was gathered due to the continuation of the COVID-19 pandemic. As well as hurricanes Laura and Delta that did a lot of damage to the campus and local area.

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# 2.1.2 Plan for Continuous Improvement

2019-2020:

See 2020-2021.

#### 2020-2021:

The survey will be re-evaluated as well as the assessment and benchmark, to see if the assessment and benchmark will be kept.

#### 3 Assessment and Benchmark

Benchmark: 85% of the Southwest Louisiana plant managers and engineering business owners who hire McNeese

<sup>\*\*</sup>No data collected due to Covid-19 and multiple hurricanes hitting campus.

engineering graduates and fill out a survey will score this PO with a 2 or higher based on a 3-point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

#### 3.1 Data

Reporting Year	# of employers completing survey	% that scored this PO with a 2	% that scored this PO with a 3	% that scored this PO with a 2 or higher
2015	78	43%	57%	100%
2018				_
2019*			_	_
2020**	_	_	_	_
2021***	_	_	_	_

<sup>\*</sup>TBC in fall 2019 with a 5-year frequency.

# 3.1.1 Analysis of Data

#### 2019-2020:

No data was collected, however the dean did meet with regional plant managers, as well as plant managers in southwest Louisiana at LAIA meetings.

#### 2020-2021:

No data was collected, however the dean continued to meet virtually with LAIA. This will replace the need for a survey.

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#### 3.1.2 Plan for Continuous Improvement

#### 2019-2020:

The meetings that took place in Fall of 2019, as well as others in Spring of 2020 showed that engineering students needed more information on safety in general, but more specifically process safety.

# 2020-2021:

Thanks to the Fall 2019 meeting CHEN 307 (Introduction to Process Safety) was offered for the first time in Spring 2021, students learned about process safety as well as some general safety fundamentals. The LAIA meetings will continue to be attended so that McNeese engineering will continue to be on the cutting edge.

# Performance Objective 8 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 five years of graduation who fill out an alumni survey will score this PO with a 2 or higher based on a 3-point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

#### 1.1 Data

Reporting Year	Alumni group	# of surveys completed	% that scored this PO with a 2	% that scored this PO with a 3	% that scored this PO with a 2 or higher
2013-2014	2010-2014	55	44%	55%	100%

<sup>\*\*</sup>No survey sent out; however, face-to-face meetings were held.

<sup>\*\*\*</sup>No survey sent out; however, virtual meetings were held.

2014-2015	2011-2015	54	50%	50%	100%
2015-2016	2012-2016		_		
2016-2017*	2013-2017		_		
2017-2018	2014-2018		_		
2018-2019	2015-2019		_		
2019-2020	2016-2020		_		
2020-2021**	2017-2021		_		

<sup>\*</sup>TBC in fall 2019 with a 5-year frequency.

2019-2020:

2020-2021:

No data collected Covid-19 and multiple hurricanes hitting campus.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 1.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

Survey will be re-evaluated and may be removed.

# 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 3-point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

## 2.1 Data

Reporting Year	# of IAB members completing survey	% that scored this PO with a 2	% that scored this PO with a 3	% that scored this PO with a 2 or higher
2015	24/27	17%	83%	100%
2018	_	_		_
2019*	_	_		_
2020**	_	_	_	_
2021**	_	_	_	_

<sup>\*</sup>TBC in fall 2019 with a 5-year frequency.

# 2.1.1 Analysis of Data

2019-2020:

This data wasn't collected because of the COVID-19 pandemic that shutdown the campus as well as several business operations.

<sup>\*\*</sup>No data collected Covid-19 and multiple hurricanes hitting campus.

<sup>\*\*</sup>No data collected due to Covid-19 and multiple hurricanes hitting campus.

#### 2020-2021:

This data wasn't collected because of the continuation of the COVID-19 pandemic, as well as the multiple hurricanes that hit the local area, which damaged the campus and local area.

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 2.1.2 Plan for Continuous Improvement

2019-2020:

See 2020-2021.

#### 2020-2021:

The assessment is going under evaluation to see if it is still a viable option. This correlates with the possible changes to the IAB board.

# 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 3-point scale (1 = unsuccessful, 2 = satisfactorily successful, 3 = very successful).

#### 3.1 Data

Reporting Year	# of employers completing survey	% that scored this PO with a 2	% that scored this PO with a 3	% that scored this PO with a 2 or higher
2015	78	29%	71%	100%
2018			_	_
2019*	_		_	_
2020**	_	_	_	_
2021***	_		_	_

<sup>\*</sup>TBC in fall 2019 with a 5-year frequency.

# 3.1.1 Analysis of Data

#### 2019-2020:

No survey data was collected. However, data from face-to-face meetings were collected by the dean.

#### 2020-2021:

No survey data was collected. However, data from virtual meetings were collected by the dean.

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# 3.1.2 Plan for Continuous Improvement

#### 2019-2020:

The dean held face-to-face meetings with southwest Louisiana plant mangers via LAIA, as well as one regional meeting. This will be continued.

#### 2020-2021:

The dean held virtual meetings with LAIA and gained insight in how to better the engineering program, some changes were discussed and put further into ENGR 110 (Freshman Engineering success).

Performance Objective 9 To generate internal and external funding sources for program

<sup>\*\*</sup>No survey sent out; however, face-to-face meetings were held.

<sup>\*\*\*</sup>No survey sent out; however, virtual meetings were held.

# enhancement and research through writing grant proposals by ENCS 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 ENCS faculty.
- Instrument: Annual number of submitted proposals as provided by ENCS 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 = High.

#### 1.1 Data

Academic Year	Range of funded proposals per faculty per year	# of successful internal and external proposals	Average # of funded proposals by faculty per year
2019-2020			
2020-2021			

Fraction represents Co-Pls.

# 1.1.1 Analysis of Data

2019-2020:

2020-2021:

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

#### 1.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

# 2 Assessment and Benchmark

Benchmark: Score of 1.0 or higher (Moderate) for number of successful proposals per faculty per year is the desired achievement level.

- PC2: Number of funded proposals submitted by ENCS 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 ENCS faculty in APR data. Data will be
  evaluated on a 3-tier scale. Achievement levels for PC2 are: Score range of 0-0.5 = Low, 0.6-1.5 =
  Moderate, and 1.6-3 = High.

# 2.1 Data

Academic Year	Range of funded proposals per faculty per year	# of successful internal and external proposals	Average # of funded proposals by faculty per year
2019-2020			
2020-2021			

Fraction represents Co-Pls.

2019-2020:

2020-2021:

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 2.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

# Performance Objective 10 To improve classroom teaching by monitoring student evaluations of instruction (SEIs).

#### 1 Assessment and Benchmark

Benchmark: Will be set after two years of data collection.

- PC1: Annual rate of "Student Satisfaction" for all ENCS courses.
- Instrument: Annual review of SEI scores for all ENCS courses by using the average SEI scores for each ENCS 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

Academic Year	Range of SEI scores	Average "Student Satisfaction Rate"
2019-2020		
2020-2021		

#### 1.1.1 Analysis of Data

2019-2020:

2020-2021:

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 1.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021:

# Performance Objective 11 To increase faculty engagement with developmental research and professional and scholarly activities.

# 1 Assessment and Benchmark

Benchmark: Will be set after two years of data collection.

 PC1: Annual rate of "Professional and Scholarly" activities dedicated toward research and professional development. • Instrument: Annual review of P&S activities engaged by ENCS 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

Academic Year	Range of APR P+S Activity Scores	Average APR P+S Activity Score
2019-2020		
2020-2021		

# 1.1.1 Analysis of Data

2019-2020:

2020-2021:

Chemical, Civil, and Mechanical Engineering 2019 [PDF 143 KB 6/12/20] Electrical Engineering and Computer Science 2019 [PDF 221 KB 6/12/20]

# 1.1.2 Plan for Continuous Improvement

2019-2020:

2020-2021: