



ANNUAL PROGRAM REPORT

_____ (suggested length of 1-3 pages)

1. The major change was the transfer to a semester-based program. The Industrial Engineering curriculum has been transformed such a way that it both satisfies the accreditation requirements and provides stronger graduates. This has been accomplished by fundamental changes to courses, teaching methods and course requirements. The first year of the implementation of the new curriculum has gone smoothly. The students that are in transition have been advised properly and are now on their way to graduate on time.

As mentioned in accreditation report showing the 1-10, we have to address the observation that the program needs additional faculty before the next 10.

Research* The Industrial Engineering faculty are active in research and are being referred to. The strong connections and as such our students have the opportunity to complete several research based projects by the time of graduation.

+. Laborator% 1e(e\$oment* 2 e ha(e "rchased two 3N3 machines and a robotcs wor4 ce\$\$ that are #nsta\$\$ed #n 5 6T +7, for man"fact"r#ng re\$ated co"rses. These machines w\$\$ be "sed #n ENGR +1, ' and some grad"ate co"rses.

7. E&"# ment* Thro"gh A+E+ ann"a\$ f"nd#ng and the norma\$ refresh c%ce of com "ters b% !T' we are 4ee #ng the !nd"str#a\$ Eng#neer#ng Laborator#es c"rrent. The Eng#neer#ng 3om "ter Lab. /5 6T ++70 #s d"e for a refresh that w\$\$ be done d"r#ng the 3hr#stmas brea4 of +, 18. Th#s \$ab #s "sed for se(era\$!E co"rses.

9. Enro\$\$ment* :t"dent enro\$\$ment #n !nd"str#a\$ Eng#neer#ng program has stab#\$\$;ed at aro"nd 1, ,.

-. E. ccess cred#ts* The program re&"res 1<1 cred#t ho"rs to complete. The transformed curriculum just meets the minimum accreditation requirements in the areas of basic science and engineering hours. No engineering electives could be added to the program.

- +. 2 e are \$ann#ng to re&"est one ten"re trac4 os#t#on for the #nd"str#a\$ eng#neer#ng rogram as s"ggested #n the f#nd#ngs of o"r \$ast accred#tat#on (#s#t re ort. 2 e w#\$ s"bm#t o"r re&"est s"ch that we ha(e the new fac"\$t% b% the t#me of the ne.t accred#tat#on (#s#t #n the)a\$\$ of +, +1.
- 7. The man"fact"r#ng \$aborator% has been " graded w#th two new 3N3 mach#ne too\$s and a robot#cs ce\$\$.
- 9. Enro\$\$ment #n #nd"str#a\$ eng#neer#ng has rema#ned stead" d"r#ng the ast 7 %ears.

The #nd"str#a\$ eng#neer#ng rogram started #n the %ear +, , , and has been stead#\$% grow#ng w#t# the enro\$\$ment stab#;\$#;ng #n the ast three %ears. :#nce +, , 9 we ha(e not h#red an% fac"\$t% for th#s rogram. O"r \$ast accred#tat#on re(#ew was cond"cted #n the)a\$\$ &"arter of +, 1-. The#r f#nd#ngs #nc\$"ded the fact that the rogram needs new fac"\$t% members to sta% c"rrent. 2 e are \$ann#ng to re&"est a fac"\$t% os#t#on for th#s rogram #n th#s academ#c %ear.

The transformed c"rr#c"\$"m #s des#gned to #nc\$"de more act#(e \$earn#ng ract#ces and #nc\$"des co"rses and mater#a\$ that are #n \$#ne w#th the #nd"str% trends for #nd"str#a\$ eng#neers.

1 eman#d for #nd"str#a\$ eng#neer#ng grad"ates are re\$at#(e\$% strong. Most of o"r grad"ates are em \$o%ed #n eng#neer#ng os#t#ons' ma#n\$% #n the 6a% Area.

:#nce +, , 9' we ha(e had 7 fac"\$t% ded#ded to the #nd"str#a\$ eng#neer#ng and M. : . #n eng#neer#ng management rograms. These #nc\$"de @e\$en Aong' 1a(#d 6owen and)arna; Ganje#;adeh. The rogram needs one add#t#ona\$ ten"re-trac4 os#t#on

2 e ha(e two f"\$% t#me staff for the :choo\$ of Eng#neer#ng' Mrs. L#sa @o\$mstrom o"r st"dent ad(#sor and a \$aborator% techn#c#an' Mr. L#nh Ng"%en. 2 e a\$so ha(e a jo#nt staff w#th Math and 3om "ter :c#nce de artments

2 e ha(e " graded o"r Man"fact"r#ng rocesses e&"# ment and are \$ann#ng to " grade the eng#neer#ng com "ter \$aborator%' 5 6T ++7.

An e.tens#(e assessment rocess #s #n \$ace for the #nd"str#a\$ eng#neer#ng rogram. :am \$e res"\$ts are ro(#ded #n the fo\$\$ow#ng sect#on.

-
- 1. An ab#\$t% to #dent#f%' form"\$ate' and so\$(e com \$e. eng#neer#ng rob\$ems b% a \$%#ng r#nc# \$es of eng#neer#ng sc#ence' and mathemat#cs. /!LO 10
 - +. An ab#\$t% to a \$% eng#neer#ng des#gn to ro#d"ce so\$"t#ons that meet s ec#f#ed needs w#th cons#derat#on of "b#c health' safet%' and we\$fare' as we\$\$ as g#oba\$' c"\$t"ra\$' soc#a\$' en(#ronmenta\$' and econom#c factors. /!LO 1 B -0
 - 7. An ab#\$t% to comm"n#cate effect#(e\$% w#th a range of a"d#ences. /!LO +0
 - 9. An ab#\$t% to recogn#;e eth#ca\$ and rofess#ona\$ res ons#b#\$t#es #n eng#neer#ng s#t"at#ons and ma4e #nformed j"dgments' wh#ch m"st cons#der the #m act of eng#neer#ng so\$"t#ons #n g#oba\$' econom#c' en(#ronmenta\$' and soc#eta\$ conte .ts. /!LO 7' 9 B -0
 - . An ab#\$t% to f"nct#on effect#(e\$% on a team whose members together ro(#de \$eadersh# ' create a co\$\$aborat#(e and #nc\$"s#(e en(#ronment' estab\$sh goa\$s' \$an tas4s' and meet object#(es. /!LO 7 B 90
 - ? . An ab#\$t% to de(e\$e and cond"ct a ro r#ate e. er#mentat#on' ana\$%;e and #nter ret data' and "se eng#neer#ng j"dgment to draw conc\$"s#ons. /!LO 1 B +0
 - C. An ab#\$t% to ac&"#re and a \$% new 4now\$edge as needed' "s#ng a ro r#ate \$earn#ng strateg#es. /!LO 1' +' B 90

6.

2 e ha(e assessed the fo\$\$ow#ng : LO for the !nd"str#a\$ Eng#neer#ng rogram d"r#ng the +, 18-+, Academ#c =ear*

<p>6. Which PLOs to assess</p>	<p>PLO 1* An ab#\$t% to #dent#f%' form"\$ate' and so\$(e com \$e. eng#neer#ng rob\$ems b% a \$%#ng r#nc# \$es of eng#neer#ng' sc#ence' and mathemat#cs. /!LO 10.</p> <p>PLO 9 An ab#\$t% to recogn#;e eth#ca\$ and rofess#ona\$ res onsb#\$t#es #n eng#neer#ng s#t"at#ons and ma4e #nformed j"dgments' whch m"st cons#der the #m act of eng#neer#ng so"\$#ons #n g#oba\$' econom#c' en(#ronmenta\$' and soc#eta\$ conte . ts. /!LO 7' 9 B -0</p>
<p>2. !ssess "ent indicators</p>	<p>c-</p>
<p>3. #a "ple (courses\$% of students)</p>	<p>c-ENGR ++, ' ENGR +, ,</p>
<p>4. &i "e ('hich (arter(s))</p>	<p>c-)a\$\$ +, 1<</p>
<p>5.)esponsi *le person(s)</p>	<p>c- R#c4 3ho%')ad# 3asrono(o</p>
<p>+. Wa,s of reporting (ho ' - to 'ho)</p>	<p>The res"\$ts w#\$ be re orted b% fac"\$t% to the de artment cha#r (#a com \$et#on of the co"rse)ac"\$t% :e\$f-Assessment form.</p>
<p>7. Wa,s of closing the loop</p>	<p>!nteract#on between cha#r' fac"\$t% and #nd"str#a\$ ad(#sor% board</p>

3.

PLO 1 was assessed #n ENGR ++, #n)a\$\$ of +, 1<. !n th#s co"rse' st"dents com \$ete se(era\$ @ 2 ass#gnments "s#ng an on-\$#ne too\$ ca\$\$ed Master#ng Eng#neer#ng. Th#s too\$ ro(#des #nstant feedbac4 to st"dents as the% com \$ete the#r homework. There are a\$\$o se(era\$ &"#; ;es' two e.ams and a f#na\$. At the end of each semester the fac"\$t% com \$etes a co"rse assessment form that s"mmar#;es a\$\$ assessment act#(ates re\$ated to the co"rse \$earn#ng o"tcomes as ma ed to PLOs. The assessment form a\$\$o #nc\$"des #nstr"ctors feedbac4 on the strengths and wea4nesses of the co"rse based on st"dent e(a\$"at#ons and #nstr"ctor)s obser(at#ons. The assessment forms for a\$\$ co"rses are co\$\$ected and the s"mmar% #s resented to the ad(#sor% board where' fac"\$t% and other members of the board ma4e dec#s#ons on how to #m ro(e the rogram.

PLO 9* :t"dents #n ENGR +, , wor4 on se(era\$ case st"d#es and ass#gnments. :ome of these ass#gnments are re\$ated to eng#neer#ng eth#cs. As an e.am \$e' Ass#gnment E1 re&"#res st"dents to wr#te a m#n#- a er on eng#neer#ng eth#cs and s"sta#nab#\$t%. Th#s a er d#sc"sses re ar#ng the code of cond"ct for a com an%' one sho"\$d ass"re that the (a\$"es of the com an% are reflected. As art of th#s ass#gnment' st"dents re(#ew recent a ers re\$ated to eth#cs and s"sta#nab#\$t% and re are a s"mmar%.

4. & "e ('hich (quarter(s))	a-: r#ng +,+,
5.)esponsi *le person(s)	a-Prof. Ganj#e;adeh or \$ect"rer
+.Wa,s of reporting (ho '- to 'ho)	The res"sts w\$\$ be re orted b% fac"\$t% to the de artment cha#r (#a com \$et#on of the co"rse)ac"\$t% :e\$f-Assessment form.
7.Wa,s of closing the loop	!nteract#on between cha#r' fac"\$t% and #nd"str#a\$ ad(#sor

The #nd"str#a\$ eng#neer#ng rogram started #n the)a\$\$ of +, , , and has been stead#% grow#ng w#th the enro\$\$ment stab#%;#ng #n the ast three %ears at aro"nd 1, , st"dents . :#nce +, , 9' we ha(e not h#red an% fac"\$t% for th#s rogram. O"r \$ast re-accred#tat#on re(#ew b% A6ET was cond"cted #n the fa\$\$ &"arter of +, 1-. The#r f#nd#ngs #nc"\$ded a rogram obser(at#on c#ted be\$ow' #nd#cat#ng that the rogram needs new fac"\$t% members to sta% c"rrent. 2 e ha(e not re&"ested ten"re trac4 os#t#ons s#nce the accred#tat#on (#s#t. 2 e ha(e to address th#s obser(at#on we\$\$ before the ne . t accred#tat#on (#s#t #n the fa\$\$ of +, +1._

The fo\$\$ow#ng tab\$e #s enro\$\$ment data e. tracted from P#oneer 1 ata 2 areho"se. Th#s data #nd#cat#s that the !nd"str#a\$ Eng#neer#ng enro\$\$ment has stab#%;#ed at aro"nd 1, , st"dents. The)a\$\$ +, 1< enro\$\$ment #s at 1, +. The c"rrent fac"\$t% of !nd"str#a\$ Eng#neer#ng areG 1a(#d 6owen')arna; Ganj#e;adeh and @e\$en Aong. The rogram #s accred#ted b% A6ET "nt# the)a\$\$ of +, ++. 2 e are \$ann#ng to re&"est a fac"\$t% os#t#on for #nd"str#a\$ eng#neer#ng and eng#neer#ng management rograms s"ch that he#she #s #n \$ace b% the)a\$\$ &"arter of +, +1' wh#ch #s the t#me for o"r ne . t accred#tat#on (#s#t.

1. :tab#\$\$;at#on of the enro\$\$ment

+. : trong #nd"str% demand for the grad"ates

7. Act#(e Ad(#sor% 6oard 3o"nc#\$\$

9. Ma#nta#n#ng accred#tat#on

: 2 e ha(e " graded the man"fact"r#ng \$aborator% and are #n d#sc"ss#on w#th the !T
1e artment to " grade the Eng#neer#ng 3om "ter Lab. Th#s " grade w#\$\$ ha en d"r#ng 3hr#stmas brea4.

2 e ha(e to add one new ten"re-trac4 fac"\$t% w#th#n the ne.t two
academ#c %ears #n order to to 4ee the rogram c"rrent and sat#sf% the accred#tat#on re&"#rements.

N/A

Term		Industrial Engineering	
Fall Quarter 2012	Total	<u>18</u>	
Fall Quarter 2013	Total	<u>54</u>	
Fall Quarter 2014	Total	<u>78</u>	
Fall Quarter 2015	Total	<u>109</u>	
Fall Quarter 2016	Total	<u>120</u>	
Fall Quarter 2017	Total	<u>122</u>	
Fall Semester 2018	Total	<u>102</u>	
#ource/ .ioneer data			
Date 0\$1 0\$2010			