## Assurance of Student Learning Report 2020-2021 Ogden College of Science and Engineering School of Engineering and Applied Sciences Electrical Engineering program, #537 Assessment coordinator: Walter Collett

Use this page to	list learning outcomes, measurements, and summarize results for your program. Detailed information must be completed in th	e subsequent	pages.
Student Learni	ng Outcome 1: ABET EAC Outcome #1: Upon graduation our students have the ability to identify, formulate, and solve complex	engineering p	roblems by
applying princip	les of engineering, science, and mathematics.		
Instrument 1	Artifacts assessed in certain courses/sections		
Instrument 2	Senior Exit Surveys		
Instrument 3			
Based on your	results, check whether the program met the goal Student Learning Outcome 1.	🛛 Met	Not Met
Student Learni needs with const	<b>ng Outcome 2:</b> ABET EAC Outcome #2: Upon graduation, our students have the ability to apply engineering design to produce s deration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.	olutions that r	neet specified
Instrument 1	Artifacts assessed in certain courses/sections		
Instrument 2	Senior Exit Surveys		
Instrument 3			
Based on your	results, check whether the program met the goal Student Learning Outcome 2.	🛛 Met	Not Met
Student Learni	ng Outcome 3: ABET EAC Outcome #3: Upon graduation, our students have the ability to communicate effectively with a range	of audiences.	
Instrument 1	Artifacts assessed in certain courses/sections		
Instrument 2	Senior Exit Surveys		
Instrument 3			
Based on your	results, check whether the program met the goal Student Learning Outcome 3.	🛛 Met	🗌 Not Met
Student Learni	<b>ng Outcome 4:</b> ABET EAC Outcome #4: Upon graduation, our students have the ability to recognize ethical and professional res ake informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal	ponsibilities ir	nengineering
Instrument 1	Artifacts assessed in certain courses/sections		
Instrument 2	Senior Exit Surveys		
Instrument 3			
Based on your	results, check whether the program met the goal Student Learning Outcome 3.	🛛 Met	Not Met

Student Learni	ng Outcome 5: ABET EAC Outcome #5: Upon graduation, our students have the ability to function effectively on a team whose	members toget	ther provide
leadership, creat	e a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.		
Instrument 1	Artifacts assessed in certain courses/sections		
Instrument 2	Senior Exit Surveys		
Instrument 3			
Based on your	results, check whether the program met the goal Student Learning Outcome 3.	🛛 Met	🗌 Not Met
Student Learni	ng Outcome 6: ABET EAC Outcome #6: Upon graduation, our students have the ability to develop and conduct appropriate expe	erimentation, a	nalyze and
interpret data, ar	nd use engineering judgment to draw conclusions.		
Instrument 1	Artifacts assessed in certain courses/sections		
Instrument 2	Senior Exit Surveys		
Instrument 3			
Based on your	results, check whether the program met the goal Student Learning Outcome 3.	🛛 Met	🗌 Not Met
Student Learni learning strategi	ng Outcome 7: ABET EAC Outcome #7: Upon graduation, our students have the ability to acquire and apply new knowledge as ses.	needed, using	appropriate
Instrument 1	Artifacts assessed in certain courses/sections		
Instrument 2	Senior Exit Surveys		
Instrument 3			
Based on your	results, check whether the program met the goal Student Learning Outcome 3.	🛛 Met	🗌 Not Met
Program Sumn	nary (Briefly summarize the action and follow up items from your detailed responses on subsequent pages.)		L
All Student Lear Instrument 2 is a	ning Outcomes were marked as "Met" even though the target average of 3.75 was not always attained in Measurement Instrument 2. In INDIRECT measure of student learning. Measurement Instrument 1, however, is a DIRECT measure of student learning.	This is becaus	se Measurement
The EE program of low rubric sco	met on May 13, 2021, to discuss rubric results. Few specific actions were identified as needed. Generally, however, we decided to bres in a particular course over several years.	watch to see if	f there is a trend
The EE program be discussed.	a faculty plan to conduct a course review for the week prior to Fall semester, mainly emphasizing the lecture-based courses. Recer	it changes to E	EE 300 will also
Regarding rubrid students in EE-f For the coming y also attempt to c	c collection for ENGR 490 and 491, which involve student teams of CE, EE and ME students, we have lately been determining ru aculty-sponsored teams, not just EE students. (Rubrics have not been collected for non-EE-faculty-sponsored teams, even if EE s year, however, although we will attempt to collect rubrics for all students we will extract only the EE student data to incorporate in ollect rubrics from all project teams that include EE students.	bric averages tudents were c n our rubric av	by including all on those teams.) erages. We will

		Student Learning	Outcome 1							
Student Learning Outcome	ABET EAC Outcome #1: Upon graduation our students have the ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.									
Measurement Instrument 1	Artifacts were assessed in some or all sections of the following courses: EE 300, EE 420, EE 431, EE 460, EE 473, ENGR 490 and ENGR 91.									
Criteria for Student Success	The following rubric is used	when assessing student perfo	ormance:							
	Student Learning Outcome 1: 1 engineering, science, and mathe	Upon graduation, our students have t ematics.	the ability to identify, formulate, an	d solve complex engineering probl	ems by applying principles of					
		Capstone	Mile	stones	Benchmark					
	Calculation (Quantitative Literacy VALUE Rubric)	4 Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. Calculations are also presented elegantly (clearly, concisely, etc.)	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem.	Calculations attempted are either unsuccessful or represent only a portion of the calculations required to comprehensively solve the problem.	Calculations are attempted but are both unsuccessful and are not comprehensive.					
	Define Problem (Problem Solving VALUE Rubric)	Demonstrates the ability to construct a clear and insightful problem statement with evidence of all relevant contextual factors.	Demonstrates the ability to construct a problem statement with evidence of most relevant contextual factors, and problem statement is adequately detailed.	Begins to demonstrate the ability to construct a problem statement with evidence of most relevant contextual factors, but problem statement is superficial.	Demonstrates a limited ability in identifying a problem statement or related contextual factors.					
	Identify Strategies (Problem Solving VALUE Rubric)	Identifies multiple approaches for solving the problem that apply within a specific context.	Identifies multiple approaches for solving the problem, only some of which apply within a specific context.	Identifies only a single approach for solving the problem that does apply within a specific context.	Identifies one or more approaches for solving the problem that do not apply within a specific context.					
	Evaluate Potential Solutions (Problem Solving VALUE Rubric)	Evaluation of solutions is deep and elegant (for example, contains thorough and insightful explanation) and includes, deeply and thoroughly, all of the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.	Evaluation of solutions is adequate (for example, contains thorough explanation) and includes the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.	Evaluation of solutions is brief (for example, explanation lacks depth) and includes the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.	Evaluation of solutions is superficial (for example, contains cursory, surface level explanation) and includes the following: considers history of problem, reviews logic/reasoning, examines feasibility of solution, and weighs impacts of solution.					
	We look for a minimum aver Of the courses assessed for the senior-level.	rage of 2.50 for each assessential o	d junior-level course sectio 31 and 473 are considered	n, and 3.00 for each assesse junior-level, with the remai	d senior-level course section. ning courses considered					

Program Success Target for this Measurement		Target weighted averages are 2.50 for assessed junior-level course sections combined, and 3.00 for assessed senior-level course sections combined.	Percent of Program Achieving Target Weighted Averages for course sections assessed:	Junior-le Senior-le	vel course sections: 3.04 vel course sections: 3.18			
Methods	Instructors choo section-to-cours was weighted e	ose artifacts to assess, using the above rubric, in the se section, instructor-to-instructor, and semester-to- qually when scoring the rubric. In some cases, spec	ir respective courses/sections semester. Each item of the ru ific items may not have been	. These artifacts will bric (e.g., calculation scored.	be different course , define problem, etc.)			
	We looked at the minimum avera most assessed c	the average obtained for each course section assessed age of 2.50, and each of the senior-level course section ourse sections met their targets, but a couple did no	l, with each of the junior-leve ons targeted to achieve a min t.	el course sections targ nimum average of 3.0	eted to achieve a 0. It was observed that			
	We also calcula one for all asses averages were e of 3.04 and 3.18	We also calculated two weighted rubric averages for this Outcome this academic year: one for all assessed junior-level course sections and one for all assessed senior-level course sections. This was done to determine if, overall, the Outcome was met. The minimum weighted averages were expected to be 2.50 and 3.00, respectively. This was our Program Success Target. As indicated above, we achieved averages of 3.04 and 3.18.						
Measurement Instrument 2	Senior Exit Sur your ability to i mathematics" o	Senior Exit Surveys were given to students taking the senior design course during Fall 2020 and Spring 2021. Students were asked to "Rate your ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics" on a scale of 1 to 5 (with 5 being the highest).						
Criteria for Student Success								
Program Success Target for this	s Measurement	Target average of 3.75	Percent of Program Achieving Target Weighted Average:	:	3.66			
Methods	For this year the received on this	ere were 9 scores total, 6 for Fall 2020 and 3 for Sp s particular item from both semesters.	ring 2021. The above average	e of 3.66 is the average	e of all 9 scores			
Based on your results, highlight	whether the pro	gram met the goal Student Learning Outcome 1		🖂 Met	Not Met			
Actions (Describe the decision-m (NOTE: Student Learning Outcor Instrument 2 is an INDIRECT me The EE program met on May 13, trend of low scores in a particular Problems that allow more SLO1 r Follow-Up (Provide your timeline The EE program assessment plan	aking process and ne 1 was marked asure of student le 2021, to discuss r course over seven ubric items (e.g., e for follow-up. I calls for rubric co	Lactions for program improvement. The actions sho as "Met" even though the target average of 3.75 wa earning. Measurement Instrument 1, however, is a I ubric results. We do not see a need to address the ru ral years. calculation, define problem, etc.) to be considered i f follow-up has occurred, describe how the actions a ullection each semester (fall and spring), and a meet	build include a timeline.) s not attained in Measuremen DIRECT meaure of student le abric scores for this particular <u>n EE 420 and EE 473 may be</u> above have resulted in progra ing of EE faculty to discuss the	nt Instrument 2. This earning.) r Outcome, except to e given in the coming an improvement.) he rubric results.	is because Measurement watch to see if there is a year.			
See above.	ease describe you							
					2			

			Student Learning	Outcom	e 2				
Student Learning Outcome	ABET EAC Outco specified needs wit factors.	ABET EAC Outcome #2: Upon graduation, our students have the ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.							
Measurement Instrument 1	Artifacts were asse	Artifacts were assessed in some or all sections of the following courses: EE 300, ENGR 490, ENGR 491							
Criteria for Student Success	The following rubr Student Learning O of public health, saf	Che following rubric is used when assessing student performance:           Student Learning Outcome 2: Upon graduation, our students have the ability to apply engineering design to produce solutions that meet specific needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.							
			Capstone		3	stones 2	Benchmark		
	Acquiring Compet (Creative Thinking Rubric)	tencies VALUE	Reflect: Evaluates creative process and product using domain-appropriate criteria.	Create: Cre object, solut appropriate	ates an entirely new ion or idea that is to the domain.	Adapt: Successfully adapts an appropriate exemplar to his/her own specifications.	Model: Successfully reproduces an appropriate exemplar.		
	Solving Problems (Creative Thinking VA Rubric)		Not only develops a logical, consistent plan to solve problem, but recognizes consequences of solution and can articulate reason for choosing solution.	Having select alternatives consistent pl problem.	cted from among develops a logical, an to solve the	Considers and rejects less acceptable approaches to solving problem.	Only a single approach is considered and is used to solve the problem.		
	Embracing Contra (Creative Thinking Rubric)	dictions VALUE	Integrates alternate, divergent, or contradictory perspectives or ideas fully.	Incorporates divergent, or perspectives exploratory	alternate, r contradictory or ideas in <u>a</u> way.	Includes (recognizes the value of) alternate, divergent, or contradictory perspectives or ideas in a small way.	Acknowledges (mentions in passing) alternate, divergent, or contradictory perspectives or ideas.		
	Connecting, Synth Transforming (Creative Thinking Rubric)	<b>esizing,</b> VALUE	Transforms ideas or solutions into entirely new forms.	Synthesizes into a cohere	ideas or solutions ent whole.	Connects ideas or solutions in novel ways.	Recognizes existing connections among ideas or solutions.		
	Implement Solutions (Problem Solving VALUE Rubric)	Implement Solutions (Problem Solving VALU Rubric)	ns VALUE	Implements the solution in a manner that addresses thoroughly and deeply multiple contextual factors of the problem.	Implements manner that contextual fa problem in a	the solution in a addresses multiple actors of the a surface manner.	Implements the solution in a manner that addresses the problem statement but ignores relevant contextual factors.	Implements the solution in a manner that does not directly address the problem statement.	
	Identifying specific project objectives, standards, and constraints based on general project requirements		All important objectives, standards, and constraints are identified and clearly implemented	Most import standards, an identified an with minor of	ant objectives, nd constraints are d implemented deficiencies	Some objectives, standards, an constraints are identified with some deficiencies	Objectives, standards, and/or constraints not clearly identified or contain significant deficiencies		
	We look for a mini Of the courses asse	mum aver essed for t	 rage of 2.50 for each assesse his Outcome, EE 300 is con	ed junior-le sidered jun	vel course section ior-level, with the test of the section of the	on, and 3.00 for each asses ne remaining courses cons	ssed senior-level course section. idered senior-level		
Program Success Target for this	s Measurement	Carget wei unior-leve for assesse combined	ighted averages are 2.50 for el course sections combined, ed senior-level course section	assessed and 3.00	Percent of Pr Weighted Av	ogram Achieving         J           Target         S           verages for course         sections assessed:	unior-level course sections: 2.60 enior-level course sections: 3.32		

Methods	Instructors choose artifacts to assess, using the above rubric, in their respective courses/sections. These artifacts will be different course section-to-course section, instructor-to-instructor, and semester-to-semester. Each item of the rubric (e.g., acquiring competencies, solving problems, etc.) was weighted equally when scoring the rubric. In some cases, specific items may not have been scored. We looked at the average obtained for each course section assessed, with each of the junior-level course sections targeted to achieve a minimum average of 2.50, and each of the senior-level course sections targeted to achieve a minimum average of 3.00. It was observed that all assessed course sections met their targets. We also calculated two weighted rubric averages for this Outcome this academic year: one for all assessed junior-level course sections and one for all assessed senior-level course sections. This was done to determine if, overall, the Outcome was met. The minimum weighted averages were expected to be 2.50 and 3.00, respectively. This was our Program Success Target. As indicated above, we achieved averages of 2.60 and 3.32.						
Measurement Instrument 2	your ability to a welfare, as well	apply engineering design to produce solutions that a global, cultural, social, environmental, and ec	t meet specific needs with consideratio onomic factors" on a scale of 1 to 5 (w	n for public health, ith 5 being the high	, safety, and hest).		
Criteria for Student Success							
Program Success Target for this	s Measurement	Target average of 3.75	Percent of Program Achieving Target Weighted Average:	m Achieving 3.55 Target red Average:			
Methods	For this year the received on this	ere were 9 scores total, 6 for Fall 2020 and 3 for 5 s particular item from both semesters.	Spring 2021. The above average of 3.5.	5 is the average of a	all 9 scores		
Based on your results, circle or	highlight whethe	er the program met the goal Student Learning	Outcome 2.	🖂 Met	Not Met		
Actions (Describe the decision-m	aking process and	actions planned for program improvement. The	actions should include a timeline.)				
(NOTE: Student Learning Outcome 2 was marked as "Met" even though the target average of 3.75 was not attained in Measurement Instrument 2. This is because Measurement Instrument 2 is an INDIRECT measure of student learning. Measurement Instrument 1, however, is a DIRECT measure of student learning.) The EE program met on May 13, 2021, to discuss rubric results. We did not identify any actions required for this Outcome this year.							
Follow-Up (Provide your timeline	e for follow-up. I	f follow-up has occurred, describe how the action	is above have resulted in program impr	rovement.)			
The EE program assessment plan	calls for rubric co	ollection each semester (fall and spring), and a me	eting of EE faculty to discuss the rubri	c results.			
Next Assessment Cycle Plan (Pla	ease describe you	r assessment plan timetable for this outcome)					
See above.							

Student Learning Outcome 3										
Student Learning Outcome	ABET EAC Outcome	#3: Upon graduation, our stud	ents have the ability to c	ommunicate effectively w	with a range of audiences.					
Measurement Instrument 1	Artifacts were assesse	Artifacts were assessed in some or all sections of the following courses: EE 300, EE 460, ENGR 490, ENGR 491								
Criteria for Student Success	The following rubrics are used when assessing student performance:									
	Oral Communication	Capstone	Mile	stones	Benchmark					
		4	3	2	1					
	Organization (Oral Communication VALUE Rubric)	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable and is skillful and makes the content of the presentation cohesive	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable within the presentation	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is intermittently observable within the presentation	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is not observable within the presentation					
	Language (Oral Communication VALUE Rubric)	Language choices are imaginative, memorable, and compelling, and enhance the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are thoughtful and generally support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are mundane and commonplace and partially support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are unclear and minimally support the effectiveness of the presentation. Language in presentation is not appropriate to audience.					
	Delivery (Oral Communication VALUE Rubric)	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speaker appears polished and confident.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker appears comfortable.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation understandable, and speaker appears tentative.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speaker appears uncomfortable.					
	Central Message (Oral Communication VALUE Rubric)	Central message is compelling (precisely stated, appropriately repeated, memorable, and strongly supported.)	Central message is clear and consistent with the supporting material.	Central message is basically understandable but is not often repeated and is not memorable.	Central message can be deduced, but is not explicitly stated in the presentation.					
	Content	Technical/Professional information at an appropriate level for course, Key concepts and terms explained clearly. Research and/or analysis of topic clearly evident Audience gains significant new knowledge and insight	Technical/Professional information at an appropriate level for course, some concepts not completely clarified, research and/or analysis of topic generally evident. Audience gains some new knowledge and insight.	Technical/Professional information at a marginal level for course, many concepts unclear or not discussed. Audience gains little new knowledge or insight	Technical/Professional information unacceptable for course, most concepts unclear or not discussed, audience gains no new knowledge or insight					
	Multimedia	Multimedia clearly enhances presentation. Concepts made clearer, most information easy to see and follow, details minimized and main points stand out	Multimedia contributes to the quality of the presentation. Most concepts made clearer, most information generally easy to read and follow, main points stand out, a few details difficult to follow	Multimedia poorly prepared or used inappropriately, generally do not enhance concepts, sometimes confusing, hard to see, read, and/or follow, may be confusing	Multimedia not used or so poor they are distracting, do not contribute to presentation.					
	Question and Answer (if applicable)	Answers confidently and adequately with no hesitation or stumbling over words.	Answers adequately with some hesitation, may stumble over a few words, some slight lack of confidence, overall good at answering questions	Answers not always adequate and show uncertainty, pauses more obvious, and somewhat distracting.	Questions either not answered or done so with great difficulty, significant uncomfortable pauses, little to no confidence.					

Writ	ten Communication	Capstone	Mile	stones		Benchmark
Carry	tent of and Door on far	4	3 Demonstrator e de musta	2	£	1 Demonstrates minimal attention
Uri (Wri (Wr VAI	text of and Purpose for ting ritten Communication JUE Rubric)	Demonstrates a thorougn understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	Demonstrates awar context, audience, to the assigned task begins to show awar audience's percepti assumptions).	eness of purpose, and cs(s) (e.g., areness of ons and	Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).
Con (Wr VAI	Content Development (Written Communication VALUE Rubric) Control of Syntax and Mechanics (Written Communication VALUE Rubric) Interpretation (Quantitative Literacy VALUE Rubric)	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.	Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.	Uses appropriate a content to develop ideas through most	nd relevant and explore of the work.	Uses appropriate and relevant content to develop simple ideas in some parts of the work.
Con Mec (Wr VAI		Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error free.	Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.	Uses language that conveys meaning t with clarity, althou may include some	generally o readers gh writing errors.	Uses language that sometimes impedes meaning because of errors in usage.
Inte (Qu VAI		Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information.	Provides accurate explanations of information presented in mathematical forms. For instance, accurately explains the trend data shown in a graph.	<ul> <li>Provides somewhat accurate explanations of information presented in mathematical forms, but occasionally makes minor errors related to <u>computations or units</u>.</li> </ul>		Attempts to explain information presented in mathematical forms, but draws incorrect <u>conclusions</u> about what the information means.
Con	tent	Technical/Professional information at an appropriate level for course, Key concepts and terms explained clearly. Research and/or analysis of topic clearly evident Reader gains significant new knowledge and insight	Technical/Professional information at an appropriate level for course, some concepts not completely clarified, research and/or analysis of topic generally evident. Reader gains some new knowledge and insight.	Technical/Professi information at a ma for course, many co unclear or not disco Reader gains little knowledge or insig	onal arginal level oncepts ussed. new ht	Technical/Professional information unacceptable for course, most concepts unclear or not discussed, reader gains no new knowledge or insight
We look Of the c	c for a minimum ave ourses assessed for	erage of 2.50 for each assess this Outcome, EE 300 is co	ed junior-level course sec nsidered junior-level, with	tion, and 3.00 fo the remaining o	or each asso courses cor	essed senior-level course se sidered senior-level.
Success Target for this Measure	ement Target we assessed j combined	ighted averages are 2.50 for unior-level course sections , and 3.00 for assessed senio	or- Weighted	t of Program eving Target Averages for	junior junior-lev senior	-level course sections (oral vel course sections (writter -level course sections (oral
	level cour	se sections combined.	course secti	ons assessed:	senior-lev	vel course sections (written
Instruct	ors choose artifacts	to assess, using the above ru	brics, in their respective c	ourses/sections.	These arti	facts will be different cour

Measurement Instrument 2	minimum average of 2.50, and each of the senior-level course sections targeted to achieve a minimum average of 3.00. It was observed that most assessed course sections met their targets, but some did not. We also calculated two sets of weighted rubric averages for this Outcome this academic year: one set for all assessed junior-level course sections and one set for all assessed senior-level course sections. This was done to determine if, overall, the Outcome was met. The minimum weighted averages were expected to be 2.50 and 3.00, respectively. This was our Program Success Target. As indicated above, we achieved averages of 3.01/3.33 (oral/written) and 3.21/3.10 (oral/written). Senior Exit Surveys were given to students taking the senior design course during Fall 2020 and Spring 2021. Students were asked to "Rate your ability to communicate effectively with range of audiences" on a scale of 1 to 5 (with 5 being the highest).							
Criteria for Student Success								
Program Success Target for this	s Measurement	Target average of 3.75	Percent of Program Achieving Target Weighted Average:	3.	78			
Methods	For this year the	re were 9 scores total, 6 for Fall 2020 and 3	for Spring 2021. The above average of 3.78	8 is the average of a	all 9 scores			
	received on this	particular item from both semesters.						
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 3.								
					Not Met			
Actions (Describe the decision-ma	aking process and	actions for program improvement. The action	ons should include a timeline.)	i Met	Not Met			
Actions (Describe the decision-ma The EE program met on May 13, 2 trend of low scores in a particular	aking process and 2021, to discuss ru course over severa	actions for program improvement. The action abric results. We do not see a need to address al years.	ons should include a timeline.) the rubric scores for this particular Outcor	me, except to watch	n to see if there is a			
Actions (Describe the decision-ma The EE program met on May 13, 2 trend of low scores in a particular Follow-Up (Provide your timeline	aking process and 2021, to discuss ru course over severa	actions for program improvement. The action abric results. We do not see a need to address al years.	ons should include a timeline.) the rubric scores for this particular Outcon tions above have resulted in program impr	me, except to watch	n to see if there is a			
Actions (Describe the decision-ma The EE program met on May 13, 2 trend of low scores in a particular Follow-Up (Provide your timeline The EE program assessment plan of	aking process and 2021, to discuss ru course over severa e for follow-up. If calls for rubric col	actions for program improvement. The action abric results. We do not see a need to address al years. Collow-up has occurred, describe how the action each semester (fall and spring), and a	ons should include a timeline.) the rubric scores for this particular Outcon tions above have resulted in program impr meeting of EE faculty to discuss the rubri	me, except to watch	n to see if there is a			
Actions (Describe the decision-ma The EE program met on May 13, 2 trend of low scores in a particular Follow-Up (Provide your timeline The EE program assessment plan of Next Assessment Cycle Plan (Ple	aking process and 2021, to discuss ru course over severa e for follow-up. If calls for rubric col	actions for program improvement. The action abric results. We do not see a need to address al years. Tofollow-up has occurred, describe how the action each semester (fall and spring), and a assessment plan timetable for this outcome)	ons should include a timeline.) the rubric scores for this particular Outcon tions above have resulted in program impr meeting of EE faculty to discuss the rubri	me, except to watch	n to see if there is a			

			Student Learning	Outcome 4						
Student Learning Outcome	ABET EAC Out	BET EAC Outcome #4: Upon graduation, our students have the ability to recognize ethical and professional responsibilities in engineering								
	situations and ma	tuations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and								
	societal contexts	societal contexts.								
Measurement Instrument 1	Artifacts were as	Artifacts were assessed in some or all sections of the following courses: EE 300, ENGR 490, ENGR 491								
Criteria for Student Success	The following rubric is used when assessing student performance:									
	Student Learnin informed judgm	g Outcome 4: 1 ients, which mu	Upon graduation, our students have t ist consider the impact of engineering	the ability to recognize ethical and solutions in global, economic, en	professional responsibilities in eng vironmental, and societal contexts	ineering situations and make				
			Capstone 4	Mile	stones 2	Benchmark				
	Ethical Issue R (Ethical Reason Rubric)	ecognition ning VALUE	Student can recognize ethical issues when presented in a complex, multilayered (gray) context AND can recognize crossrelationships among the issues.	Student can recognize ethical issues when issues are presented in a complex, multilayered (gray) context OR can grasp crossrelationships among the issues.	Student can recognize basic and obvious ethical issues and grasp (incompletely) the complexities or interrelationships among the issues.	Student can recognize basic and obvious ethical issues but fails to grasp complexity or interrelationships.				
	Application of Ethical Perspectives/Concepts (Ethical Reasoning VALUE Rubric)		Student can independently apply ethical perspectives/concepts to an ethical question, accurately, and is able to consider full implications of the application.	Student can independently (to a new example) apply ethical perspectives/ concepts to an ethical question, accurately, but does not consider the specific implications of the application.	ently (to a student can apply ethical perspectives/concepts to an ethical question, independently (to a new example) and the application is inaccurate.	Student can apply ethical perspectives/ concepts to an ethical question with support (using examples, in a class, in a group, or a fixed-choice setting) but is unable to apply ethical perspectives/concepts independently (to a new example.).				
	Responsibility	Responsibility of Engineer Given a situation, clearly articulates the responsib the engineer in a global societal context with all issues addressed		Given a situation, generally articulates the responsibilities of the engineer in a global and societal context with most major issues addressed	Given a situation, attempts to articulate the responsibilities of the engineer in a global and societal context but misses several key points	Has not grasped the role of a responsible engineer in a global society				
	Cultural Impact of Solutions Clearly engineers society		Clearly articulates the impact of engineering solutions in a global society	Can basically articulate the impact of engineering solutions in a global society	Has some ability to articulate the impact of engineering solutions in a global society	Cannot articulate the impact of engineering solutions in a global society				
	Application of code of ethics	appropriate	Clear link of dilemma and resolution (s) to an appropriate code of ethics	Link between dilemma and final resolution to appropriate code of ethics	Superficial discussion of a code of ethics to dilemma and resolution	Code of ethic not incorporated into discussion of dilemma or resolution				
	We look for a minimum average of 2.50 for each assessed junior-level course section, and 3.00 for each assessed senior-level course Of the courses assessed for this Outcome, EE 300 is considered junior-level, with the remaining courses considered senior-level.									
Program Success Target for this	Measurement	Target wei assessed ju combined, level cours	ghted averages are 2.50 for mior-level course sections and 3.00 for assessed senior se sections combined.	- Weighted Av course section	f ProgramJuing TargetSen/erages fors assessed:	nior-level course section: 3.52 ior-level course sections: 3.66				
Methods	Instructors choos section-to-course application of eth been scored.	se artifacts to section, ins hical perspec	o assess, using the above rub structor-to-instructor, and sen otives/concepts, etc.) was we	oric, in their respective cour mester-to-semester. Each it sighted equally when scorin	ses/sections. These artifacts em of the rubric (e.g., ethic g the rubric. In some cases	s will be different course al issue recognition, specific items may not have				
	We looked at the minimum average	e average obt	tained for each course section nd each of the senior-level of	n assessed, with each of the ourse sections targeted to ac	e junior-level course section chieve a minimum average	ns targeted to achieve a of 3.00. It was observed that				

	all assessed cou	all assessed course sections met their targets.							
	We also calcula one for all asses averages were e of 3.52 and 3.66	We also calculated two weighted rubric averages for this Outcome this academic year: one for all assessed junior-level course sections and one for all assessed senior-level course sections. This was done to determine if, overall, the Outcome was met. The minimum weighted averages were expected to be 2.50 and 3.00, respectively. This was our Program Success Target. As indicated above, we achieved averages of 3.52 and 3.66.							
Measurement Instrument 2	Senior Exit Sur your ability to a must consider th being the higher	enior Exit Surveys were given to students taking the senior design course during Fall 2020 and Spring 2021. Students were asked to "Rate our ability to ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which oust consider the impact of engineering solutions in global, economic, environmental, and societal contexts" on a scale of 1 to 5 (with 5 eing the highest).							
Criteria for Student Success									
Program Success Target for this	s Measurement	Target average of 3.75	Percent of Program Achieving Target Weighted Average:	4	.00				
Methods	For this year the received on this	ere were 9 scores total, 6 for Fall 2020 and 3 for particular item from both semesters.	or Spring 2021. The above average of 4.00	) is the average of	all 9 scores				
Based on your results, circle or l	highlight whethe	r the program met the goal Student Learni	ng Outcome 3.	🛛 Met	Not Met				
Actions (Describe the decision-ma	aking process and	actions for program improvement. The actio	ns should include a timeline.)		·				
The EE program met on May 13, 2 No other actions required for this (	2021, to discuss ru Outcome.	ibric results. Ethics has been taken out of ENG	R 490 for the upcoming fall, so will need	to be taken out of t	he assessment plan.				
Follow-Up (Provide your timeline	e for follow-up. It	f follow-up has occurred, describe how the act	ions above have resulted in program impr	ovement.)					
The EE program assessment plan of	calls for rubric co	llection each semester (fall and spring), and a	meeting of EE faculty to discuss the rubri	c results.					
Next Assessment Cycle Plan (Ple	ease describe your	assessment plan timetable for this outcome)							
See above.									

		Student Lear	ming Outcome 5								
Student Learning Outcome	ABET EAC Outcome	e #5: Upon graduation, our stu	idents have the ability to	o function effectively on	a team whose members	together provide					
Measurement Instrument 1	Artifacts were assessed in some or all sections of the following courses: EE 300, EE 431, EE 460, ENGR 490, ENGR 491										
Criteria for Student Success	The following rubric is used when assessing student performance:										
	Student Learning Outcom collaborative and inclusiv	Student Learning Outcome 5: Upon graduation, our students have the ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives									
		Capstone	Miles	tones	Benchmark						
	Contributes to Team	4 Helps the team move forward by	3 Offers alternative solutions or	2 Offers new suggestions to	I Shares ideas but does not						
	Meetings (Teamwork VALUE Rubric)	articulating the merits of alternative ideas or proposals.	courses of action that build on the ideas of others.	advance the work of the group.	advance the work of the group.						
	Facilitates the Contributions of Team Members (Teamwork VALUE Rubric)	Engages team members in ways that facilitate their contributions to meetings by both constructively building upon or synthesizing the contributions of others as well as noticing when someone is not participating and inviting them to engage.	Engages team members in ways that facilitate their contributions to meetings by constructively building upon or synthesizing the contributions of others.	Engages team members in ways that facilitate their contributions to meetings by restating the <u>views</u> of other team members and/or asking questions for clarification.	Engages team members by taking turns and listening to others without interrupting.						
	Individual Contributions Outside of Team Meetings (Teamwork VALUE Rubric)	Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project. Proactively helps other team members <u>complete</u> their assigned tasks to a similar level of excellence.	Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project.	Completes all assigned tasks by deadline; work accomplished advances the project.	Completes all assigned tasks by deadline.						
	Fosters Constructive Team Climate (Teamwork VALUE Rubric)	Supports a constructive team climate by doing all of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or encouragement to team members.	Supports a constructive team climate by doing any three of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or encouragement to team members.	Supports a constructive team climate by doing any two of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body <u>language</u> to convey a positive attitude about the team and its work. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or <u>encouragement</u> to team members.	Supports a constructive team climate by doing any one of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or encouragement to team members.						
	Responds to Conflict (Teamwork VALUE Rubric)	Addresses destructive conflict directly and constructively, helping to manage/resolve it in a way that strengthens overall team cohesiveness and future effectiveness.	Identifies and acknowledges conflict and stays engaged with it.	Redirecting focus toward common ground, toward task at hand (away from conflict).	Passively accepts alternate <u>View points</u> /ideas/opinions.						
	We look for a minimu Of the courses assess	um average of 2.50 for each a ed for this Outcome, EE 300 a	ssessed junior-level cou and EE 431 are consider	rse section, and 3.00 for red junior-level, with the	r each assessed senior-le e remaining courses cons	vel course section. sidered senior-					
Program Success Target for this	Ievel. Measurement Tor	get weighted averages are 25	i) for	Porcent of Program	Junior-level oc	urse sections: 3.16					
1 rogram Success rarget for this	measurement 1a	get weighten averages ale 2.3	101	tereent of riogram	Junior-level CO	uise sections. 5.10					

		assessed junior-level course sections	Achieving Target	Senior-level co	ourse sections: 3.23		
		combined, and 3.00 for assessed senior-	Weighted Averages for				
	-	level course sections combined.	course sections assessed:				
Methods	Instructors choose artifacts to assess, using the above rubric, in their respective courses/sections. These artifacts will be different course section-to-course section, instructor-to-instructor, and semester-to-semester. Each item of the rubric (e.g., contributes to team meetings, facilitates the contributions of team members, etc.) was weighted equally when scoring the rubric. In some cases, specific items may not have been scored. We looked at the average obtained for each course section assessed, with each of the junior-level course sections targeted to achieve a minimum average of 2.50, and each of the senior-level course sections targeted to achieve a most assessed course sections met their targets, but some did not. We also calculated two weighted rubric averages for this Outcome this academic year: one for all assessed junior-level course sections and one for all assessed senior-level course sections. This was our Program Success Target. As indicated above, we achieved averages						
	01 0110 010 012						
Measurement Instrument 2	Senior Exit Surveys were given to students taking the senior design course during Fall 2020 and Spring 2021. Students were asked to "Rate your ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives" on a scale of 1 to 5 (with 5 being the highest).						
Criteria for Student Success							
Program Success Target for thi	s Measurement	Target average of 3.75	Percent of Program Achievi Tary Weighted Averag	ng 3. get ge:	80		
Methods	For this year there were 10 scores total, 7 for Fall 2020 and 3 for Spring 2021. The above average of 3.80 is the average of all 10 scores received on this particular item from both semesters.						
Based on your results, circle or	highlight whethe	r the program met the goal Student Learning	g Outcome 3.	🛛 Met	Not Met		
Actions (Describe the decision-m	aking process and	l actions for program improvement. The actions	should include a timeline.)				
The EE program met on May 13, 2021, to discuss rubric results. We do not see a need to address the rubric scores for this particular Outcome, except to watch to see if there is a trend of low scores in a particular course over several years.							
Follow-Up (Provide your timeling	e for follow-up. I	f follow-up has occurred, describe how the action	ns above have resulted in program i	mprovement.)			
The EE program assessment plan	calls for rubric cc	llection each semester (fall and spring), and a m	eeting of EE faculty to discuss the r	ubric results.			
Next Assessment Cycle Plan (Pl	ease describe you	r assessment plan timetable for this outcome)					
See above.	J.	•					

Student Learning Outcome 6									
Student Learning Outcome	ABET EAC Outcome #6: Upon graduation, our students have the ability to develop and conduct appropriate experimentation, analyze and								
-	inte	interpret data, and use engineering judgment to draw conclusions.							
Measurement Instrument 1	Arti	Artifacts were assessed in some or all sections of the following courses: EE 431, EE 460, ENGR 490 and ENGR 491							
	<b>701</b>	0.11			0				
Criteria for Student Success	The	The following rubric is used when assessing student performance:							
	Student Learning Outcome 6: Upon graduation, our students have the ability to develop and conduct appropriate experimentation, analyze and interpret data, and use								
		cing incoming jud	Sment to draw t	Canatana	Mgi	ectonec	Banchmark		
					3	2	Benchmark	1	
		Design Process	(Inquiry and	All elements of the methodology	Critical elements of the	Critical elements of the	Inquiry design demonstrates a	1	
		Analysis VALU	JE Rubric)	or	methodology or	methodology or	misunderstanding of the	1	
				theoretical framework are	theoretical framework are	theoretical framework are	methodology	1	
				developed. Appropriate	developed, however, more	incorrectly developed, or	or meoretical framework.	1	
				methodology or	subtle	unfocused.		1	
				theoretical frameworks may be	elements are ignored or			1	
				synthesized from across	unaccounted			1	
				from relevant subdisciplines.	55X			1	
		Conclusions (Inquiry and Analysis VALUE Rubric)		States a conclusion that is a	States a conclusion focused	States a general conclusion that,	States an ambiguous, illogical,	1	
				logical	solely on the	because	or	1	
				findings.	conclusion arises	bevond the	inquiry	1	
				5	specifically from and responds	scope of the inquiry findings.	findings.	1	
					specifically to the inquiry				
		Compliance with Standards		Test performed in full	Test performed in general	Test performed in general	Test not performed in		
				compliance with applicable	compliance with standard with	compliance with standard, but a	compliance with standard and	1	
				standard	only minor procedural error	procedural error resulted in	results invalid	1	
					invalidate the result	Tauny results			
	Application of Results		Results	Results of experiment applied	Results applied	Results applied	Results not applied correctly to		
				situation	with only a minor error	with a few errors	the situation	1	
	Designing an experim		xperiment or	Students select and/or design all	Students generally select and/or	Students select or design some	Students select or design some	1	
		experimental pr	ocedure	to the situation at hand.	process (es) to the situation at	appropriate tests or processes, with a notable error or	appropriate tests or processes, with significant errors or	1	
					hand.	omission.	omissions.		
								1	
	We	look for a mi	inimum ave	rage of 2.50 for each assess	ed junior-level course sec	tion, and 3.00 for each asse	essed senior-level course se	ection.	
	Oft	the courses as	ssessed for t	his Outcome, EE 431 is cor	nsidered junior-level, with	the remaining courses con	sidered senior-level.		
<b>Program Success Target for this</b>	Mea	surement	Target wei	ghted averages are 2.50 for	Percer	t of Program	Junior-level course section	s: 2.85	
			assessed junior-level course sections		Ach	ieving Target	Senior-level course section	s: 3.14	
		combined.		and 3.00 for assessed senic	or- Weighted	Averages for			
			level cours	evel course sections combined.		ons assessed:			

Methods	Instructors choose artifacts to assess, using the above rubric, in their respective courses/sections. These artifacts will be different course section-to-course section, instructor-to-instructor, and semester-to-semester. Each item of the rubric (e.g., design process, conclusions, etc.) was weighted equally when scoring the rubric. In some cases, specific items may not have been scored. We looked at the average obtained for each course section assessed, with each of the junior-level course sections targeted to achieve a minimum average of 2.50, and each of the senior-level course sections targeted to achieve a minimum average of 3.00. It was observed that most assessed course sections met their targets, but one did not. We also calculated two weighted rubric averages for this Outcome this academic year: one for all assessed junior-level course sections and one for all assessed senior-level course sections. This was done to determine if, overall, the Outcome was met. The minimum weighted averages were expected to be 2.50 and 3.00, respectively. This was our Program Success Target. As indicated above, we achieved averages of 2.85 and 3.14.						
Measurement Instrument 2	Senior Exit Surveys were given to students taking the senior design course during Fall 2020 and Spring 2021. Students were asked to "Rate your ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions" on a scale of 1 to 5 (with 5 being the highest).						
Criteria for Student Success							
Program Success Target for thi	s Measurement	Target average of 3.75	Percent of Program Achieving Target Weighted Average:	3	.60		
Methods	For this year there were 10 scores total, 7 for Fall 2020 and 3 for Spring 2021. The above average of 3.60 is the average of all 10 scores received on this particular item from both semesters.						
Based on your results, circle or	Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 3.						
Actions (Describe the decision-m	aking process and	l actions for program improvement. The actions s	should include a timeline.)				
( <b>NOTE</b> : Student Learning Outcom Instrument 2 is an INDIRECT me	me 6 was marked a casure of student le	as "Met" even though the target average of 3.75 v earning. Measurement Instrument 1, however, is a	vas not attained in Measurement Instrur a DIRECT meaure of student learning.)	nent 2. This is bee	cause Measurement		
The EE program met on May 13, low scores in a particular course of	2021, to discuss r over several years.	rubric results. We did not identify any actions req	uired for this Outcome this year, excep	t to watch to see i	f there is a trend of		
Follow-Up (Provide your timeline	e for follow-up. It	f follow-up has occurred, describe how the action	s above have resulted in program impro	vement.)			
The EE program assessment plan	calls for rubric co	llection each semester (fall and spring), and a me	eting of EE faculty to discuss the rubric	results.			
Next Assessment Cycle Plan (Pla	ease describe your	r assessment plan timetable for this outcome)					
See above.							

			Student Learning	Outcome 7				
Student Learning Outcome	ABET EAC Outcome #7: Upon graduation, our students have the ability to acquire and apply new knowledge as needed, using appropriate							
	learning strategies.							
Measurement Instrument 1	Artifacts were assessed in some or all sections of the following courses: EE 300, ENGR 490, ENGR 491							
Criteria for Student Success	The following ru	ubric is used	when assessing student perf	formance:				
	стата () ал с 9 лися на							
	Student Learning	g Outcome 7: U	Jpon graduation, our students have th	he ability to acquire and apply new	knowledge as needed, using ap	propriate learning strategies.		
			Capstone	Mile	stones	Benchmark		
			4	3	2	1		
	Independence(I	Foundations	Educational interests and	Beyond classroom	Beyond classroom	Begins to look beyond		
	and Skills for L	ifelong	pursuits exist and flourish	requirements, pursues	requirements, pursues	classroom requirements,		
	Learning VAL	UE Kubric)	outside classroom requirements.	substantial, additional	additional knowledge and/or	snowing interest in pursuing		
			are pursued independently	actively pursues independent	independent	Kilowicdge, independently.		
			are possible independently.	educational experiences.	educational experiences.			
	Transfer (Foun	dations and	Makes explicit references to	es explicit references to Makes references to previous		Makes varue references to		
	Skills for Lifelo	ng Learning	previous			previous learning but does not		
	VALUE Rubrie	ng Dearning	learning and applies in an	shows evidence of applying	attempts to apply that	apply knowledge		
		,	innovative (new	that knowledge and those skills	knowledge and	and skills to demonstrate		
			and creative) way that	to demonstrate	those skills to demonstrate	comprehension		
			knowledge and	comprehension and	comprehension and	and performance in novel		
			those skills to demonstrate	performance in novel	performance in novel	situations.		
			in novel	situations.	situations.			
			situations.					
	Initiative(Foun	dations and	Completes required work,	Completes required work,	Completes required work and	Completes required work.		
	Skills for Lifelo	ng Learning	generates and	identifies and	identifies			
	VALUE Rubrie	:)	pursues opportunities to expand	pursues opportunities to	opportunities to expand			
			knowledge, skills, and abilities.	expand	knowledge, skills,			
				knowledge, skills, and abilities.	and abilities.			
	We look for a m	inimum ava	rage of 2.50 for each assesse	d junior level course section	n and $3.00$ for each asso	seed senior level course section		
	Of the courses a	seesed for t	his Outcome EE 300 is cons	sidered junior level with the	he remaining courses con	videred senior-level		
Program Success Target for this	Measurement	Target wei	ighted averages are 2 50 for	Percent	f Program	unior-level course sections: 3 25		
	i i i cusui cincite	assessed in	injor-level course sections	Achiev	ing Target	enior-level course sections: 3.05		
		combined	and 3.00 for assessed senior	- Weighted A	verages for			
		level cours	se sections combined course section		s assessed.			
Methods	Instructors choo	se artifacts t	o assess using the above rul	oric in their respective course	rses/sections These artifa	cts will be different course		
Witchous	section_to_cours	e section in	structor_to_instructor_and set	mester_to_semester Each it	rem of the rubric (e.g. in)	lenendence transfer etc.) was		
	weighted equally when scoring the rubric. In some cases, specific items may not have been scored.							
	We looked at the	a avaraga ah	tained for each course section	m accacead with each of th	e junior level course soot	ions targeted to achieve a		
	we looked at the	c average 00	nd analy of the conjor lovel and	assessed, with each of the	c junior-rever course sect	tons targeted to achieve a		
	minimum average	20 01 2.30, a	nu cach of the semoi-level co	ourse sections targeted to a	cineve a minimum averas	c of 5.00. It was observed that		

	most assessed course sections met their targets, but some did not.							
	We also calculated two weighted rubric averages for this Outcome this academic year: one for all assessed junior-level course sections and one for all assessed senior-level course sections. This was done to determine if, overall, the Outcome was met. The minimum weighted averages were expected to be 2.50 and 3.00, respectively. This was our Program Success Target. As indicated above, we achieved averages of 3.25 and 3.05.							
Measurement Instrument 2	Senior Exit Survyour ability to a highest).	Senior Exit Surveys were given to students taking the senior design course during Fall 2020 and Spring 2021. Students were asked to "Rate your ability to acquire and apply new knowledge as needed, using appropriate learning strategies" on a scale of 1 to 5 (with 5 being the highest).						
Criteria for Student Success								
Program Success Target for this	s Measurement	Target average of 3.75	Percent of Program Achieving Target Weighted Average:	ing 3.60 get ge:				
Methods	For this year the received on this	For this year there were 10 scores total, 7 for Fall 2020 and 3 for Spring 2021. The above average of 3.60 is the average of all 10 scores received on this particular item from both semesters.						
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 3.								
Actions (Describe the decision-making process and actions for program improvement. The actions should include a timeline.)								
(NOTE: Student Learning Outcome 7 was marked as "Met" even though the target average of 3.75 was not attained in Measurement Instrument 2. This is because Measurement Instrument 2 is an INDIRECT measure of student learning. Measurement Instrument 1, however, is a DIRECT measure of student learning.)								
The EE program met on May 13, 2021, to discuss rubric results. We decided to consult our industrial liaison for information regarding the Independence criterion for the upcoming year, and include that information in our next ABET self-study report. Also, we mean to include the Independence criterion into the Senior Exit Survey. The program faculty did not identify any other actions required for this Outcome this year, except to watch to see if there is a trend of low scores in a particular course over several years.								
Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)								
The EE program assessment plan calls for rubric collection each semester (fall and spring), and a meeting of EE faculty to discuss the rubric results.								
Next Assessment Cycle Plan (Please describe your assessment plan timetable for this outcome)								
See above.								