1. Program/Department Description

1A. Description

Ventura College offers a two-year lower-division engineering program that prepares students for transfer to colleges and universities in California and across the nation. The first two years of the engineering curriculum, at most colleges and universities, are similar with specialization commencing in the junior year. Completion of the lower division core courses listed is essential in facilitating progress as an upper division engineering transfer student. It is important that engineering students meet with an engineering transfer counselor and/or the Engineering Department for specific requirements for transfer.

Degrees/Certificates

Program's courses are designed to articulate to UC and CSU for transfer students.

1B. 2012-2013 Estimated Costs (Certificate of Achievement ONLY)

Required for Gainful Employment regulations.

	Cost		Cost		Cost		Cost
Enrollment		Enrollment					
Fees	1700	Fees					
Books/		Books/					
Supplies	1400	Supplies					
Total	3100	Total		Total		Total	

1C. Criteria Used for Admission

Meet prerequisites for courses.

1D. College Vision

Ventura College will be a model community college known for enhancing the lives and economic futures of its students and the community.

1E. College Mission

Ventura College, one of the oldest comprehensive community colleges in California, provides a positive and accessible learning environment that is responsive to the needs of a highly diverse student body through a varied selection of disciplines, learning approaches and teaching methods including traditional classroom instruction, distance education, experiential learning, and co-curricular activities. It offers courses in basic skills; programs for students seeking an associate degree, certificate or license for job placement and advancement; curricula for students planning to transfer; and training programs to meet worker and employee needs. It is a leader in providing instruction and support for students with disabilities. With its commitment

to workforce development in support of the State and region's economic viability, Ventura College takes pride in creating transfer, career technical and continuing education opportunities that promote success, develop students to their full potential, create lifelong learners, enhance personal growth and life enrichment and foster positive values for successful living and membership in a multicultural society. The College is committed to continual assessment of learning outcomes in order to maintain high quality courses and programs. Originally landscaped to be an arboretum, the College has a beautiful, park-like campus that serves as a vital community resource.

1F. College Core Commitments

Ventura College is dedicated to following a set of enduring Core Commitments that shall guide it through changing times and give rise to its Vision, Mission and Goals.

- Student Success Innovation
- Respect Diversity
- Integrity
- Quality
- Collegiality
- Access

Service Collaboration

Sustainability

Continuous Improvement

1G. Program/Department Significant Events (Strengths and Successes)

The Engineering Program continues to successfully transfer 25 – 35 students each year to competitive programs at universities to complete their baccalaureate degrees in engineering while having less than one FTEF.

The Engineering Program supports MESA, Math Engineering and Science Achievement, and the Ventura College Student Chapter of SHPE, the Society of Professional Hispanic Engineers as well as being actively involved in the California Engineering Liaison Council which is currently collaborating with Academic Senate for California Community Colleges in developing a statewide Transfer model Curriculum Degree for Engineering.

K. Organizational Structure

President: Robin Calote Executive Vice President: Ramiro Sanchez Dean: David Oliver Department Chair: Michelle Millea

Instructors and Staff

Name	Michelle Millea
Classification	Professor
Year Hired	1992
Years of Work-Related Experience	7 years engineering experience
Degrees/Credentials	B.S., M.S., P.E.

Name	George Warren
Classification	Adjunct Professor
Year Hired	2007
Years of Work-Related Experience	40 years engineering experience
Degrees/Credentials	B.S., M.S., PhD, P.E.

2. Performance Expectations

2A. Student Learning Outcomes

2A1. 2012-2013 - *Institutional* Student Learning Outcomes

- 1. Communication written, oral and visual
- 2. Reasoning scientific and quantitative
- 3. Critical thinking and problem solving
- 4. Information literacy
- 5. Personal/community awareness and academic/career responsibilities

2A2. 2012-2013 - <u>Program</u>Level Student Learning Outcomes For programs/departments offering degrees and/or certificates

1. Be able to apply fundamental concepts of mathematics (through calculus), science and engineering.

- 2. Identify, formulate, and solve basic engineering problems.
- 3. Conduct experiments and analyze and interpret data.
- 4. Make basic design decisions concerning appropriate-level engineering problems.

2A3. 2012-2013 - Course Level Student Learning Outcomes

Attached to program review (See appendices).

2B. 2012-2013 Student SUCCESS Outcomes

1. The program will maintain or increase the retention rate above the average of the **program's** retention rate for the prior three years.

2. The program will maintain or increase student success rate above the **program's** average student success rate for the prior three years.

3. Increase the number of students earning a certificate to a minimum of 20% of the number of students enrolled in second-year courses.

2C.2012-2013 Program OPERATING Outcomes

1. The program will meet or exceed the efficiency goal of 380 set by the district.

2D. Mapping of Student Learning Outcomes - Refer to TracDat

	PLSLO #1	PLSLO #2	PLSLO #3	PLSLO #4
ENGRV01		I.		1
ENGRV 2	T	Р		1
ENGRV 12	Р	Μ	I	Р
ENGRV 16	Μ	Р		Р
ENGRV 16L		Р	Μ	
ENGRV 18	Р	Р		Μ
ENGRV 18L	Р		Ρ	Р

3. Operating Information

3A. Productivity Terminology Table

Sections	A credit or non-credit class
Sections	Does not include not-for-credit classes (community education)
Census	Number of students enrolled at census (typically the 4 th week of class for fall and spring).
FTES	Full Time Equivalent Students
	A student in the classroom 15 hours/week for 35 weeks (or two semesters) = 525
	student contact hours.
	525 student contact hours = 1 FTES.
	Example: 400 student contact hours = $400/525 = 0.762$ FTES.
	The State apportionment process and District allocation model both use FTES as the
	primary funding criterion.
FTEF	Full Time Equivalent Faculty
	A faculty member teaching 15 units for two semesters (30 units for the year) = 1 FTE.
	Example: a 6 unit assignment = 6/30 = 0.20 FTEF (annual). The college also computes
	semester FTEF by changing the denominator to 15 units. However, in the program
	review data, all FTE is annual.
	FTEF includes both Full-Time Faculty and Part-Time Faculty.
	FTEF in this program review includes faculty assigned to teach extra large sections (XL
	Faculty). This deviates from the prior practice of not including these assignments as part
	of FTEF. However, it is necessary to account for these assignments to properly represent
	faculty productivity and associated costs.
Cross	FTEF is assigned to all faculty teaching cross-listed sections. The FTEF assignment is
Listed	proportional to the number of students enrolled at census. This deviates from the
FTEF	practice of assigning load only to the primary section. It is necessary to account for these
	cross-listed assignments to properly represent faculty productivity and associated costs.
XL FTE	Extra Large FTE: This is the calculated assignment for faculty assigned to extra large
	sections (greater than 60 census enrollments). The current practice is not to assign FTE.
	Example: if census>60, 50% of the section FTE assignment for each additional group of
	25 (additional tiers).
WSCH	Weekly Student Contact Hours
	The term "WSCH" is used as a total for weekly student contact hours AND as the ratio of
	the total WSCH divided by assigned FTEF.
	Example: 20 sections of 40 students at census enrolled for 3 hours per week taught by
	4.00 FTEF faculty. $(20 \times 40 \times 3) = 2,400$ WSCH / 4.00 FTEF = 600 WSCH/FTEF.
WSCH to	Using the example above: 2,400 WSCH x 35 weeks = 84,000 student contact hours =
FIES	84,000 / 525 = 160 FIES (See FIES definition).
District	Simplified Formulas: FTES = WSCH/15 or WSCH = FTES X 15
District	Program would ratio goal. Would'r IEF
Goal	ine district goal was set in 2006 to recognize the differences in program productivity.

3B: Student Success Terminology

Census	Number of students enrolled at Census (typically the 4 th week of class for fall and
	spring). Census enrollment is used to compute WSCH and FTES for funding purposes.
Retain	Students completing the class with any grade other than W or DR divided by Census
	Example: 40 students enrolled, 5 students dropped prior to census, 35 students were
	enrolled at census, 25 students completed the class with a grade other than W or DR:
	Retention Rate = 25/35 = 71%
Success	Students completing the class with grades A, B, C, CR or P divided by Census
	Excludes students with grades D, F, or NC.

Program specific data was provided in Section 3 for all programs last year. This year, please refer to the data sources available at

http://www.venturacollege.edu/faculty_staff/academic_resources/program_review.shtml

In addition, the 2011-2012 program review documents will provide examples of last year's data and interpretations.

3C:2012 - 2013Please provide program interpretation for the following:

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	Program Review	Expenses for Engi	neerina		Funds 111	. 113. 114.	128*. 445	
			FY09	FY10	FY11	FY12	Bud FY13	
	Total Program Review E	xpenses by Major Budget	Categories for Engineering					
	1	FT Faculty	118,114	122,701	37,268	40,000	43,437	
	2	PT Faculty	23,143	18,867	20,320	25,800	23,882	
	3	Classified	6,080	0	0	0	0	
	4	Student Hourly	13,376	0	0	0	0	
	6	Managers	592	0	0	0	0	
	7	Supplies	2,509	522	1,246	600	0	
	8	Services	2,379	0	950	0	0	
	9	Equipment	3,766	0	0	0	0	
	Total Expenses for Engi	neering	169,959	142,090	59,784	66,400	67,319	
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	Budget by Major Budget	Category Program:	090100 - Engineering, General	(req calc) tfr				
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3C1: Interpretation of the Program Budget Information

Prior to FY 11, the full-time faculty pay and benefits had been incorrectly allocated. In FY11 and FY12, the full-time faculty pay and benefits are correctly reported. The P/T faculty expense increased in FY11 when ENGV18L was added to the curriculum.

The supply budget has been approximately \$600 for the past three years (A donation allowed for a larger expenditure in FY11). This is inadequate for the supplies of engineering courses, including four lab sections and should be rectified.

Equipment expenditures were markedly less in FY09 through 11 due to a large expenditure in FY08 from a two-year STEM grant. These funds were non-recurring. No institutional support is given to Engineering for equipment or maintenance of equipment, a situation that should be rectified.

3C2: Interpretation of the Program Inventory Information

N/A Inventory of instructional equipment is in needed.

3C3: Interpretation of the Program Productivity Information

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66	ENGR Produ	uctivity Measures	FY09	FY10	FY11	3 Yr Avg	F	Y12 (Change		
		Sections,	8	8	8	8		10	25%		
		Census,	220	236	255	237		301	27%		
		FTES,	18	21	23	21		27	29%		
		FT Faculty,	0.17	0.33	0.33	0.28		0.33	20%		
		PT Faculty,	0.50	0.40	0.40	0.43		0.50	15%		
		XL Faculty,	0.00	0.00	0.00	0.00		0.00	0%		
		Total Faculty,	0.67	0.73	0.73	0.71		0.83	17%		
	ENGR	District WSCH Ratio: WSCI	H / (FTFTE +	PTFTE)							
	Course	Title	FY09	FY10	FY11	3 Yr Avg	FY12	% Change	Dist Goal	% Goal	
	ENGRV01	Introduction to Engineering,	604	686	645	645	698	8%	380	184%	
	ENGRV02	Engineering Graphics & Design,	320	384	375	364	441	21%	380	116%	
	ENGRV12	Engineering Statics,	465	315	585	455	465	2%	380	122%	
	ENGRV16	Electronic Circuits & Devices,	390	405	435	410	480	17%	380	126%	
	ENGRV16L	Elec Circuits & Devices Lab,	518	495	563	525	675	29%	380	178%	
	ENGRV18	Engineering Materials,	375	469	525	456	495	8%	380	130%	
	ENGRV18L	Engineering Materials Lab,	0	0	0	0	388	0%	380	102%	
\$		Annual WSCH Ratio for ENGR	411	431	481	442	486				
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Productivity within the program increased in FY 12.

3C4: Interpretation of the Program Course Productivity Information

District WSCH Ratios increase in all courses in FY12. All courses exceed the District goal.

NOTE: College and District WSCH Ratio data is the same.

3C5: Interpretation of Program Retention, Student Success, and Grade Distribution

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	Studen	t Success by Sub	oject, F	iscal	Yea	r, Teri	m, C	ours	e	Ven	tura	College	9				
	ENGR C	omparative Summary	y														
		Fiscal Year	А	в	С	P CR	D	F	NP NC	w	Graded	1	Con	npleted	Suc	cess	
		FY09	95	50	31	0	5	17	0	23	221	0	198	90%	176	80%	
		Distribution %	43%	23%	14%	0%	2%	8%	0%	10%							
		FY10	85	51	42	0	7	7	0	38	230	0	192	83%	178	77%	
		Distribution %	37%	22%	18%	0%	3%	3%	0%	17%							
		FY11	122	54	34	0	5	6	1	29	251	0	222	88%	210	84%	
		Distribution %	49%	22%	14%	0%	2%	2%	0%	12%							
	ENGR Price	or Three Year Average	101 43%	52 22%	36 15%	0 0%	6 2%	10 4%	0 0%	30 13%	234	0	204	87%	188	80%	
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		FT12 Distribution %	150 51%	23%	29 10%	0%	2%	2%	0%	34 12%	295	1	201	00%	247	04%	
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Success and retention rates remain high in FY12. Retention data closely mirrors the college as a whole; however, the success rate is 14% higher than the college success rate. Engineering students tend to be focused on academic success.

The grade distribution shows a much higher proportion of A's than the college as a whole. This is primarily due to the introductory to engineering course that filters out students without the interest, background or commitment to the field of study. The introduction to engineering courses focuses on academic planning and success factors as well as exploring a career in engineering. Students staying in the course are dedicated to a goal of getting a BS in engineering. And put in a high level of effort, resulting in high grades in the one-unit course.

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			200903	Spring	0	3	2	1	
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			200907	Fall	0	2	0	2	-
			201003	Spring	1	7	2	6	
	FY1	0 Engineerin	g		1	9	2	8	
			201007	Fall	0	1	0	1	-
			201103	Spring	0	3	0	3	
	FY1	1 Engineerin	g		0	4	0	4	
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3C6: Interpretation of the Program Completion Information

The Engineering Department is proud to report more than a 200% increase in certificates and degrees awarded.

The vast majority of Engineering students transfer to a university without an associate degree. The degree requires 45 units. Often, students are not able or interested in completing the extra courses required for the A.S. degree. Students will be made aware of the availability of Certificates and A.S. degrees and be encouraged to apply upon completion of the program.

3C7: Interpretation of the Program Demographic Information

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	Student	t Demographics	by Subj	ect, Ye	ear, Te	erm, C	ourse					Vent	tura C	ollege	
	Course	Year or Title	Hispanic	White	Asian	Af Am	Pac I	Filipino	Nat Am	Other	Female	Male	Other	Avg Age	
	ENGR	FY09	84	88	15	3	2	6	0	23	30	191	0	25	
			38%	40%	7%	1%	1%	3%	0%	10%	14%	86%	0%		
	ENGR	FY10	114	75	10	1	0	13	0	17	37	193	0	25	
	ENOD	EV/4.4	50%	33%	4%	0%	0%	6%	0%	7%	16%	84%	0%	0.4	
	ENGR	FY11	111	97	9	2	0	20	1	11	35	216	0	24	
	ENGR	Prior 3 Year Average	44 /0	87	4 /0	2	1	13	0%	4 /0	34	200	0/0	25	
	LINGIN	There real Average	44%	37%	5%	1%	0%	6%	0%	7%	15%	85%	0%	20	
	ENGR	FY12	124	124	17	4	0	11	1	14	44	251	0	23	
	2.11011		42%	42%	6%	1%	0%	4%	0%	5%	15%	85%	0%	20	
	College	Prior 3 Year Average	35,417	33,507	2,963	3,014	652	2,480	1,210	6,906	47,665	38,082	403	27	
-			41%	39%	3%	3%	1%	3%	1%	8%	55%	44%	0%		
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While the racial demographic distribution closely mirrors the college as a whole, the gender distribution is skewed toward male. This follows the demographics of engineering undergraduates nationally where 17% of engineering undergraduates are female. The distribution of Hispanic students is almost nine times higher than the national demographic of 5.4%.

4. Performance Assessment

4A1:2012-2013 Institutional Level Student Learning Outcomes

Institutional Level Student Learning Outcome 1	Performance Indicators					
Communication	Program is not assessing this ISLO.					
	Operating Information					
Analysis – Assessment						

Institutional Level Student	Performance Indicators	
Learning Outcome 2		
	Program is not assessing this ISLO.	
Reasoning – Scientific and		
Quantitative		
Operating Information		
Analysis – Assessment		

Institutional Level Student	Performance Indicators	
Learning Outcome 5		
	Will be assessing with the college in the established cycle.	
Critical Thinking and		
problem solving		
Operating Information		
	Analysis – Assessment	

Institutional Level Student	Performance Indicators	
Learning Outcome 4		
	Program is not assessing this ISLO.	
Information Literacy		
Operating Information		
Analysis – Assessment		

Institutional Level Student	Performance Indicators	
Learning Outcome 5		
Personal/community		
awareness and academic /	Program is not assessing this ISLO.	
career responsibilities		
Operating Information		
Analysis – Assessment		

<u>4A2:</u> <u>2012-2013</u> Program Level Student Learning Outcomes - For programs/departments offering degrees and/or certificates

Program-Level Student Learning Outcome 1	Performance Indicators	
Be able to apply fundamental concepts of mathematics (through calculus), science and engineering.	Program is currently developing our SLO assessment cycle.	
Operating Information		
Analysis – Assessment		

Program-Level Student Learning Outcome 2	Performance Indicators	
Identify, formulate, and solve basic engineering problems.	80% of the students assessed should be able to successfully answer specified exam questions directly related to the outcome.	
Operating Information		
Quiz and exam questions will be used to assess this PSLO.		
Analysis – Assessment		
Not completed yet this term		

Program-Level Student	Performance Indicators	
Learning Outcome 3		
Conduct experiments and	Program is currently developing our SLO assessment cycle.	
analyze and interpret data.		
Operating Information		
Analysis – Assessment		

Program-Level Student	Performance Indicators	
Learning Outcome 4		
Make basic design decisions	Program is currently developing our SLO assessment cycle.	
concerning appropriate-		
level engineering problems.		
Operating Information		
Analysis – Assessment		

4A3: 2012-2013 Course Level Student Learning Outcomes - Refer to TracDat

4B: 2012-2013 Student Success Outcomes

Student Success Outcome 1	Performance Indicators	
The program will maintain or increase its retention rate from the average of the program's prior three- year retention rate. The retention rate is the number of students who finish a term with any grade other than W or DR divided by the number of students at census.	The program will maintain or increase the retention rate above the average of the program's retention rate for the prior three years.	
Operating Information		
The programs previous 3-year average retention rate was 87%. The retention rate for FY 12 was 88%		
Analysis – Assessment		
Even with a high retention rate, there was an increase in retention.		

Student Success Outcome 2		Performance Indicators	
The program will increase the student succe	The program will increase the student success rates		
from the average of the program's prior three-year		student success rate above the	
success rates. The student success rate is the	e	program's average student success	
percentage of students at census who receive	ve a grade	rate for the prior three years.	
of C or better.	0	· · · · ·	
Operat	ing Informat	ion	
The programs previous 3-year average succe	ess rate was	80%. The success rate for FY 12 was	
84%			
Analys	is – Assessm	ent	
The program met its goal.			
Student Success Outcome 3		Performance Indicators	
Student Success Outcome 3 Students will complete the program	Increase t	Performance Indicators he number of students earning a	
Student Success Outcome 3 Students will complete the program earning certificates and/or degrees.	Increase t certificate	Performance Indicators he number of students earning a to a minimum of 20% of the number of	
Student Success Outcome 3 Students will complete the program earning certificates and/or degrees.	Increase t certificate students e	Performance Indicators he number of students earning a to a minimum of 20% of the number of enrolled in second-year courses.	
Student Success Outcome 3 Students will complete the program earning certificates and/or degrees.	Increase t certificate students e	Performance Indicators he number of students earning a to a minimum of 20% of the number of enrolled in second-year courses.	
Student Success Outcome 3 Students will complete the program earning certificates and/or degrees.	Increase t certificate students e	Performance Indicators he number of students earning a to a minimum of 20% of the number of enrolled in second-year courses.	
Student Success Outcome 3 Students will complete the program earning certificates and/or degrees. Operat	Increase t certificate students e ing Informat	Performance Indicators he number of students earning a to a minimum of 20% of the number of enrolled in second-year courses.	
Student Success Outcome 3 Students will complete the program earning certificates and/or degrees. Operat The program had awarded 24 degrees and 1	Increase t certificate students e ing Informat	Performance Indicators he number of students earning a to a minimum of 20% of the number of enrolled in second-year courses.	
Student Success Outcome 3 Students will complete the program earning certificates and/or degrees. Operat The program had awarded 24 degrees and 1 3 certificates were awarded in FY12.	Increase t certificate students e ing Informat	Performance Indicators he number of students earning a to a minimum of 20% of the number of enrolled in second-year courses.	
Student Success Outcome 3 Students will complete the program earning certificates and/or degrees. Operat The program had awarded 24 degrees and 1 3 certificates were awarded in FY12.	Increase t certificate students e ing Informat	Performance Indicators he number of students earning a e to a minimum of 20% of the number of enrolled in second-year courses. cion in the previous 4 years. 11 degrees and	
Student Success Outcome 3 Students will complete the program earning certificates and/or degrees. Operat The program had awarded 24 degrees and 1 3 certificates were awarded in FY12. Analysi	Increase t certificate students e ing Informat certificate	Performance Indicators he number of students earning a to a minimum of 20% of the number of enrolled in second-year courses. cion in the previous 4 years. 11 degrees and ent	
Student Success Outcome 3 Students will complete the program earning certificates and/or degrees. Operat The program had awarded 24 degrees and 1 3 certificates were awarded in FY12. Analysi The program greatly increased the number of	Increase t certificate students e ing Informat certificate	Performance Indicators he number of students earning a e to a minimum of 20% of the number of enrolled in second-year courses. cion in the previous 4 years. 11 degrees and ent awarded certificates and degrees.	

4C. 2012-2013 Program Operating Outcomes

Program Operating Outcome 1	Performance Indicators	
The program will maintain	The program will meet or exceed the efficiency goal of 380 set	
WSCH/FTEF above the 380	by the district.	
goal set by the district.		
Operating Information		
The program exceeded the efficiency goal set by the district.		
Analysis – Assessment		
The program will continue to focus on efficiency.		

4D. Program Review Rubrics for Instructional Programs

Point Value	Element	Score
Up to 6	Enrollment demand	4
Up to 6	Sufficient resources to support the program (ability to find	3
	qualified instructors; financial resources; equipment; space)	
Up to 4	Agreed-upon productivity rate	4
Up to 4	Retention rate	4
Up to 3	Success rate (passing with C or higher)	3
Up to 3	Ongoing and active participation in SLO assessment process	3
Total Points	Interpretation	
22 – 26	Program is current and vibrant with no further action	
	recommendation	
18 – 21	Recommendation to attempt to strengthen the program	
Below 18	Recommendation to consider discontinuation of the program	

Academic Programs

TOTAL

Point Value	Element	Score
Up to 6	Enrollment demand	
Up to 6	Sufficient resources to support the program (ability to find	
	qualified instructors; financial resources; equipment; space)	
Up to 6	Program success (degree / certificate / proficiency award	
	completion over 4 year period)	
Up to 4	Agreed-upon productivity rate	
Up to 4	Retention rate	
Up to 4	Employment outlook for graduates / job market relevance	
Up to 3	Success rate (passing with C or higher)	
Up to 3	Ongoing and active participation in SLO assessment process	
Total Points	Interpretation	
31 - 36	Program is current and vibrant with no further action	
	recommendation	
25 - 30	Recommendation to attempt to strengthen the program	
Below 25	Recommendation to consider discontinuation of the program	

CTE Programs

5. Findings

2012-2013 - FINDINGS

Finding 1: Student success rates are significantly higher than the college average.

Finding 2: The conversion of the engineering laboratory to a smart classroom has saved time and improved student learning.

Finding 3: Student advising has increased the number of students earning degrees and certificates.

Finding 4: There is a significant drop in enrollment from the first year engineering courses to the second year courses.

Finding 5: Students lack problem solving skills and the ability to apply knowledge from math and science courses to solve engineering problems.

Finding 6: The College does not adequately support the Engineering program's equipment needs. There are no maintenance programs in place, no funding for calibration of machines or plans for replacement of equipment.

Finding 7: The College does not adequately support the Engineering program's supply needs. The program is low on required consumables.

Finding 8: Engineering laboratory does not have the computer capability to adequately support student learning.

6. Initiatives

6B:2012-2013 INITIATIVES

Initiative

Collaborate with Math and Physics Department, informing them of the knowledge of vectors the engineering students require for success in engineering courses.

Initiative ID: ENGR 1-12

Links to Finding 2

From Finding 5, student's knowledge of vectors in Math V21B and PHYSV04/04L does not adequately prepare them for success in engineering courses. Work with the departments to make them aware of what engineering students require.

Benefits:

Improving students ability to problem solve will increase success and retention in 2nd year engineering courses.

Request for Resources None

Funding Sources

No new resources are required (use existing resources)		
Requires additional general funds for personnel, supplies or services		
(includes maintenance contracts)		
Requires computer equipment funds (hardware and software)		
Requires college equipment funds (other than computer related)		
Requires college facilities funds		
Requires other resources (grants, etc.)		

Initiative Change Prerequisite for ENGRV02

Initiative ID: ENGR 2-12

Links to Findings 4 and 5

Benefits

Student performance will be enhanced. Students will be better prepared and retention/success will be favorably impacted in both the course and the program, increasing the number of certificates and degrees awarded.

Request for Resources

None

Funding Sources

Please check one or more of the following funding sources.

No new resources are required (use existing resources)	Х	
Requires additional general funds for personnel, supplies or services		
(includes maintenance contracts)		
Requires computer equipment funds (hardware and software)		
Requires college equipment funds (other than computer related)		
Requires college facilities funds		
Requires other resources (grants, etc.)		

Initiative

Change Prerequisites for ENGRV12

Initiative ID: ENGR 3-12

Links to Finding 5

Benefits

Student performance will be enhanced. Students will be better prepared and retention/success will be favorably impacted in both the course and the program, increasing the number of certificates and degrees awarded.

Request for Resources None

Funding Sources

Please check one or more of the following funding sources.

No new resources are required (use existing resources)	
Requires additional general funds for personnel, supplies or services	
(includes maintenance contracts)	
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	

Initiative

Purchase three computers, one printer and have network cable installed in Engineering Laboratory.

Initiative ID: ENGR 4-12

Links to Findings 6 and 8

The laboratory currently has only two computers. Students require computer and internet access for research, analysis of data, computer simulation and modeling, viewing images via a microscope camera, etc. No budget is in place for purchase of equipment.

Benefits

Enhance student learning, success and retention. Have resources to maintain course articulation.

Request for Resources: Require \$5200 - \$6200

Funding Sources

No new resources are required (use existing resources)		
Requires additional general funds for personnel, supplies or services		
(includes maintenance contracts)		
Requires computer equipment funds (hardware and software))	Х	
Requires college equipment funds (other than computer related)		
Requires college facilities funds		
Requires other resources (grants, etc.)		

Initiative

Build shield to be used with the Universal Tester in lab.

Initiative ID: ENGR 5-12

Links to Finding 7

Work with machine or manufacturing shop to build frames for shield to be used with the Universal Tester in lab. The Engineering Department will the design frame and supply polycarbonate for shield.

Benefits

Maintain a safe learning environment

Request for Resources: \$200 - \$400 to purchase polycarbonate, cut to size

Funding Sources

No new resources are required (use existing resources)		
Requires additional general funds for personnel, supplies or services		
(includes maintenance contracts)		
Requires computer equipment funds (hardware and software))		
Requires college equipment funds (other than computer related)		
Requires college facilities funds		
Requires other resources (grants, etc.)		

Initiative:

Increase the budget for engineering equipment

Initiative ID: ENGR 6-12

Links to Finding 6

The Engineering program does not have equipment funding identified in the 111 fund.

Much of the Materials laboratory equipment is out of calibration and maintenance is required. Purchase equipment for strain measurement – amplifiers and conditioners as well as extensometers for long-range displacements.

Purchase maintenance contracts for testing machines.

Upgrade equipment in Engineering Circuits Lab Course (ENGRV16L), much of which is maintenance intensive or outdated.

Benefits

Enhance student learning, success and retention. Maintain currency in engineering education to maintain course articulation with universities.

Request for Resources

Increase the budget for engineering equipment – include as part of the 111 fund Funding Sources

No new resources are required (use existing resources)		
Requires additional general funds for personnel, supplies or services		
(includes maintenance contracts)		
Requires computer equipment funds (hardware and software)		
Requires college equipment funds (other than computer related)	Х	
Requires college facilities funds		
Requires other resources (grants, etc.)		

Initiative:

Purchase required consumables for labs

Initiative ID: ENGR 7-12

Links to Finding 7

As indicated in A1, the Engineering program's supply budget is insufficient for the consumable supplies required for the 4 lab sections taught each year.

Benefits

Enhance student learning, success and retention. Maintain currency in engineering education to maintain course articulation with universities.

Request for Resources

Increase the supply budget for the engineering program

Funding Sources

No new resources are required (use existing resources)		
Requires additional general funds for personnel, supplies or services		
(includes maintenance contracts)		
Requires computer equipment funds (hardware and software)		
Requires college equipment funds (other than computer related)		
Requires college facilities funds		
Requires other resources (grants, etc.)		

6C: 2012-2013 Program Initiative Priority Ratings

Program	Finding Number	Category	Program Priority (R, H, M, L)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost
ENGR							ENGR1301	Collaboration with Math and Physics Departments	Instructor Time	0
ENGR							ENGR1302	Change Prerequisite for ENGRV02	Instructor Time	0
ENGR							ENGR1303	Change Prerequisite for ENGRV12	Instructor Time	0
ENGR			Н				ENGR1304	Computer purchase for laboratory	Purchase 3 computers, printer and have network cable installed	5200-6200
ENGR			R				ENGR1305	Shield for use with Universal Tester	Purchase polycarbonate	200-400
ENGR			Μ				ENGR1306	Budget for engineering equipment	Increase the budget for engineering equipment	7,000- 20,000 some years costs would be high as some equipment is quite expensive
ENGR			Н				ENGR1307	Budget for engineering consumables	Increase the budget for engineering consumables	1000

6D: PRIORITIZATIONS OF INITIATIVES WILL TAKE PLACE AT THE PROGRAM, DIVISION, COMMITTEE, AND COLLEGE LEVELS:

Program/Department Level Initiative Prioritization

All initiatives will first be prioritized by the program/department staff. Prioritize the initiatives using the **RHML** priority levels defined below.

Division Level Initiative Prioritization

The program initiatives within a division will be consolidated into division spreadsheets. The dean may include additional division-wide initiatives. All initiatives will then be prioritized using the **RHML** priority levels defined below.

Committee Level Initiative Prioritization

The division's spreadsheets will be prioritized by the appropriate college-wide committees (staffing, technology, equipment, facilities) using the **RHML** priority levels defined below.

College Level Initiative Prioritization

Dean's will present the consolidated prioritized initiatives to the College Planning Council. The College Planning Council will then prioritize the initiatives using the **RHML**priority levels defined below.

R: Required – mandated or unavoidable needs (litigation, contracts, unsafe to operate conditions, etc.).

H: High – approximately 1/3 of the total program/department/division's initiatives by resource category (personnel, equipment, etc.)

M: Medium – approximately 1/3 of the total program/department/division's initiatives by resource category (personnel, equipment, etc.)

L: Low – approximately 1/3 of the total program/department/division's initiatives by resource category (personnel, equipment, etc.)

7. Process Assessment and Appeal

7A. Purpose of Process Assessment

The purpose of program review assessment is to evaluate the process for continual improvement. The process is required for accreditation and your input is very important to us as we strive to improve.

7B. 2012 - 2013 ASSESSMENT QUESTIONS

1. Did you complete the program review process last year, and if so, did you identify program initiatives? YES and YES

2a.Were the identified initiatives implemented? Partially implemented

2b.Did the initiatives make a difference? The conversion of the engineering laboratory to a smart classroom has saved time and improved student learning.

3. If you appealed or presented a minority opinion for the program review process last year, what was the result? N/A

4. How have the changes in the program review process worked for your area? Unable to yet assess.

5. How would you improve the program review process based on this experience? Hopefully the process will improve itself. The first two years have been challenging and unpleasant. Hopefully, as the process evolves, it will become more useful, efficient and worthy of the time spent. Better feedback on how this information is being used would be appreciated. It was time-consuming and frustrating to have to find all required data from the college website and to input to this document. Much of it was done with screenshots, which is not the best method of reproducing data. There are too many places that ask for the same information.

7C. Appeals

After the program review process is complete, your program has the right to appeal the ranking of initiatives.

If you choose to appeal, please complete the appropriate formthat explains and supports your position. Forms are located at the Program Review VC website.

The appeal will be handled at the next higher level of the program review process.

Year/Semester:	This course-level student learning outcome will not be revisited specifically to address the changes made.		
	Spring 2012		
Program:	Engineering		
Faculty members in attendance at	Millea		
meeting:			
Course:	ENGRV01		
Course-level SLO assessed:	Create solutions to simple problems using an		
(Attach copy of rubric for this SLO)	engineering design process		
Assessment Tool(s)/Assignments	Student design project: Design, build, test and document		
Used by Faculty. (describe brieny)			
STUDENT PERFORMANCE			
INDICATORS:			
What achievement level goal has			
been agreed upon by the faculty	85 % or more of students will perform at		
who teach this course?	satisfactory level (or higher)		
Note: The achievement level would			
nave been determined previously			
Faculty SLO assessment form			
Was this goal achieved?	O Ves		
	© No		
ASSESSIVIENT:	<u>31</u> # students performed at or above the		
Summary of Assessment Results			
(include data when available).	6 # students performed below the achievement level		
(
FINDINGS:	Six students did not complete the project. It was due at		
Explain the performance	the end of the course. The other students did well		
assessment results using the data	designing, building and documenting the project.		
collected and assessed.			
Actions that will be taken to	Revise content of assignment/activities		
SIO in future somestore: (check all			
SLO III IULUI E SEITIESLEIS: (LITECK all			

that apply)	State goals or objectives of assignment/activity more explicitly
	Revise the amount of writing/oral/visual/clinical or similar work
	Revise activities leading up to and/or supporting assignment/activities
	Increase in-class discussions and activities
	Increase student collaboration and/or peer review
	Provide more frequent or fuller feedback on student progress
	Increase guidance for students as they work on assignments
	Use methods of questions that encourage competency
	State criteria for grading more explicitly
	Increase supplemental learning activities
	Have colleagues critique assignments
	Collect more data
	Revisions to the course outline are needed
	Revisions to the curriculum are needed
	Nothing – assessment indicates no improvement necessary
	☑ Other actions (please list)
	Contact students who do not show up towards the end of class
PROGRAM INITIATIVES:	
From the list of possible actions ab (i.e. Revise activities in the assignm	oove, list your highest priorities below and give them a title. nent; increase collaboration; etc.) The faculty teaching this of initiatives. Please place them in priority order
	More contact with students
INTIATIVE #1 TITLE;	
What steps will be taken:	Email students who do not show up at the second to last
	class meeting. Encourage participation in the project

What is your timeline:	⊙ Fall	O Spring	2013	
What resources does your	none			
initiative				
require? (i.e. equipment,				
space,				
training, personnel, budget,				
etc.)				
INITIATIVE #2 TITLE:				
What steps will be taken:				
What is your timeline:	O Fall	O Spring	Year?	
What resources does your				
initiative				
require? (i.e. equipment,				
space,				
training, personnel, budget,				
etc.)				
If significant changes are made	0.5.11	Ofering		
to address the course-level	O Fall	⊖ Spring	Year?	
student learning outcome, it is				
recommended that the outcome				
be revisited soon rather than as				
part of a regular cycle. This				
course-level student learning				
outcome will be revisited:				
CLOSING THE LOOP: (Fall 2011				Engineering
and beyond)	ā			
What is the status of the				
priorsemester's initiatives?				
Other comments:				
Submitted by <u>Michelle Millea</u>	_			

Year/Semester:	○ Fall
Program:	Engineering
Faculty members in attendance at meeting:	Michelle Millea
Course:	ENGRV02
Course-level SLO assessed: (Attach copy of rubric for this SLO)	Apply technical graphics principles to the solution of engineering problems
Assessment Tool(s)/Assignments Used by Faculty:(describe briefly)	Graphite and CAD Assignments
STUDENT PERFORMANCE INDICATORS: What achievement level goal has been agreed upon by the faculty who teach this course? Note: The achievement level would have been determined previously and should be on the Individual Faculty SLO assessment form	90 % or more of students will perform at satisfactory level (or higher)
Was this goal achieved?	⊙ Yes ○ No
STUDENT PERFORMANCE ASSESSMENT: Summary of Assessment Results (include data when available).	<u>19</u> # students performed at or above the achievement level <u>2</u> # students performed below the achievement level
FINDINGS: What did you learn from the assessment?	Very helpful to go work through a demonstration lab assignment together – doing rather than just explaining.

(based on discussion)	by step with the students doing the same process at their docks, not just watching.
	uesks, not just watching
Actions that will be taken to	Revise content of assignment/activities
increase student learning for this SLO in future semesters: (check all	State goals or objectives of assignment/activity more explicitly
	Revise the amount of writing/oral/visual/clinical or similar work
Generate an initiative for	Revise activities leading up to and/or supporting assignment/activities
	Increase in-class discussions and activities
	□ Increase rigor or complexity of assignment being assessed
	Increase student collaboration and/or peer review
	progress
Generate an initiative for	Increase guidance for students as they work on assignments
each checked action.	Use methods of questions that encourage competency
	State criteria for grading more explicitly
	Increase supplemental learning activities
	Have colleagues critique assignments
	Collect more data
	Revisions to the course outline are needed
	Revisions to the curriculum are needed
	SLO/assessment/rubric revision
	None. This was a follow- up assessment based on a prior initiative/ change made this semester. (Explain fully in the "Closing the Loop" section).
	Other actions (please list)

PROGRAM INITIATIVES:

From the list of possible actions above, list your highest priorities below and give them a title. (i.e. revise activities in the assignment; increase collaboration; etc.) The faculty teaching this course will determine the number of initiatives. Please place them in priority order

INITIATIVE #1 TITLE:	Develop demonstations
Provide a specific explanation	Develop worksheets to have students follow along doing
for	the work themselves as it is explained
how the change will be made	the work themselves as it is explained
(e.g. <i>,</i>	
course materials, method of	
instruction, scheduling, etc.)	
What is your timeline:	
what is your timeline.	● Fall ○ Spring 2012
· · · ·	
List resources required,	
	For a lab constant of the set
INITIATIVE #2 TITLE:	Ensure lab properly equipped
Provide a specific explanation	Purchase replacement drafting equipment for broken/lost
for	
how the change will be made	equipment
(e.g.,	
course materials, method of	
instruction, scheduling, etc.)	
What is your timeline:	● Fall ○ Spring
	2012
List resources required,	Supply budget
if applicable	
If significant changes are made	
to address the course-level	
student learning outcome, it is	V Fall O Spring Year?
recommended that the outcome	This course-level student learning outcome will not
be revisited soon rather than as	be revisited specifically to address the changes made.
part of a regular cycle. This	
course-level student learning	

For each action checked above, create an initiative.

outcome will be revisited:	
CLOSING THE LOOP:	Prior SLO assessed: Communicate graphically using computer tools and freehand sketching
What is the status of the prior semester's initiatives?	
It is important to explain/show progress even if the initiative is not complete.	Status:There were no initiatives in fall 2011
MUST BE COMPLETED FOR ALL COURSES.	

Other comment	s <u>:</u>			
Submitted by	Michelle Millea	Date	APR 12, 2012	

Year/Semester:	○ Fall
Program:	Engineering
Faculty members in attendance at	George Warren, Michelle Milleai
meeting:	
Course:	Engineering Statics
Course-level SLO assessed:	Demonstrate an understanding of forces and
(Attach copy of rubric for this SLO)	vectors
Assessment Tool(s)/Assignments Used by Faculty:(describe briefly)	Exams, quizzes, homework problem sets, class work. (two exams, 8 quizzes, and 30 homework problems, in addition of class work)
STUDENT PERFORMANCE INDICATORS:	
What achievement level goal has	
been agreed upon by the faculty	<u>_75</u> % or more of students will perform at <u>B</u> level (or
Note: The achievement level	higher)
would have been determined	
previously and should be on the	
Individual Faculty SLO assessment	
form. Was this goal achieved?	
was this goal achievea.	O Yes
	⊙ No
STUDENT PERFORMANCE	
ASSESSMENT:	<u>19</u> # students performed at or above the achievement
Summary of Assessment Results	
(include data when available).	<u>9</u> # students performed below the achievement level
FINDINGS:	The students struggle with fundamental concepts of
What did you learn from the	vectors and vector operations.
assessment?	Two/thirds of those who performed below the
	achievement level had higher absenteeism than the rest
	of the class and did not respond to offers of one-on-one
	personal instruction.

SUGGESTIONS FROM FACULTY: (based on discussion)	
Actions that will be taken to	Revise content of assignment/activities
increase student learning for this SLO in future semesters: (check all	State goals or objectives of assignment/activity more explicitly
that apply)	Revise the amount of writing/oral/visual/clinical or similar work
Generate an initiative for	Revise activities leading up to and/or supporting assignment/activities
	Increase in-class discussions and activities
	Increase rigor or complexity of assignment being assessed
	Increase student collaboration and/or peer review
	Provide more frequent or fuller feedback on student progress
Generate an initiative for	Increase guidance for students as they work on assignments
each checked action.	Use methods of questions that encourage competency
	State criteria for grading more explicitly
	Increase supplemental learning activities
	Have colleagues critique assignments
	Collect more data
	Revisions to the course outline are needed
	Revisions to the curriculum are needed
	SLO/assessment/rubric revision
	None. This was a follow- up assessment based on a prior initiative/ change made this semester. (Explain fully in the "Closing the Loop" section).
	Other actions (please list)

PROGRAM INITIATIVES:

From the list of possible actions above, list your highest priorities below and give them a title. (i.e. revise activities in the assignment; increase collaboration; etc.) The faculty teaching this course will determine the number of initiatives. Please place them in priority order

INITIATIVE #1 TITLE:	Consider increasing the number of class sessions while	
	decreasing the amount of material presented per session	
Provide a specific explanation for	Class currently meets twice a week for 1.5 hours. Change	
how the change will be made	the schedule to meet three times per week for 1 hour. The	
(e.g. <i>,</i>	change will allow the student more time to work with less	
course materials, method of instruction, scheduling, etc.)	new material and reduce the impact of absenteeism.	
What is your timeline:	○ Fall	
List resources required, if applicable	None.	
INITIATIVE #2 TITLE:	Seek guidance and support from Math and Physics	
	Departments.	
	Change Math)/21D to prove suisite from the surrout of	
	Change Mathv21B to prerequisite from the current co-	
	requisite.	
Provide a specific explanation	Request more emphasis on vector fundamentals and	
for	operations in MathV21B and PHYSV04, enhancing vector	
how the change will be made		
(e.g.,	application to forces, moments, and couples.	
instruction, scheduling, etc.)		
What is your timeline:	○ Fall ● Spring 2013	
List resources required, if applicable	None	
If significant changes are made	O Fall Spring 2013	
to address the course-level		
	Inis course-level student learning outcome will not	

For each action checked above, create an initiative.

be revisited specifically to address the changes made.

student learning outcome, it is recommended that the outcome	
be revisited soon rather than as	
part of a regular cycle. This	
course-level student learning	
outcome will be revisited:	
CLOSING THE LOOP:	Prior SLO assessed: Draw Free Body Diagrams
What is the status of the prior	Status: There has been significant improvement in this SLO.
semester's initiatives?	Over 70 percent of the class performed at or above the necessary achievement level compared with 56 percent last
It is important to explain/show	year. This was primarily due to increased class
progress even if the initiative is	demonstration activity.
not complete.	
-	
MUST BE COMPLETED FOR ALL	
COURSES.	

Other comments: Submitted by <u>George Warren</u> Date <u>April 15, 2012</u>

Year/Semester:	○ Fall Spring 2012
Program:	Engineering
Faculty members in attendance at meeting:	Hadi Darejeh
Course:	ENGRV16
Course-level SLO assessed: (Attach copy of rubric for this SLO)	Students will learn basic DC, AC, Circuit analysis, first, second order crcuits , AC power analysis, and power transformers.
Assessment Tool(s)/Assignments Used by Faculty:(describe briefly)	Tests and homework
STUDENT PERFORMANCE INDICATORS: What achievement level goal has	
been agreed upon by the faculty who teach this course? Note: The achievement level would have been determined previously and should be on the Individual Faculty SLO assessment form.	_40_ % or more of students will perform at _B_ level (or higher)
Was this goal achieved?	⊙ Yes
	UNO
STUDENT PERFORMANCE ASSESSMENT:	_10# students performed at or above the achievement level
(include data when available).	_7# students performed below the achievement level
FINDINGS: What did you learn from the assessment?	Students learned subjects thru in class work, homework, and tests
SUGGESTIONS FROM FACULTY:	

(based on discussion)	
Actions that will be taken to	Revise content of assignment/activities
increase student learning for this SLO in future semesters: (check all that apply)	State goals or objectives of assignment/activity more explicitly
	Revise the amount of writing/oral/visual/clinical or similar work
Generate an initiative for	Revise activities leading up to and/or supporting assignment/activities
	Increase in-class discussions and activities
	Increase rigor or complexity of assignment being assessed
	Increase student collaboration and/or peer review
	Provide more frequent or fuller feedback on student progress
Generate an initiative for	Increase guidance for students as they work on assignments
each checked action.	Use methods of questions that encourage competency
	State criteria for grading more explicitly
	Increase supplemental learning activities
	Have colleagues critique assignments
	Collect more data
	Revisions to the course outline are needed
	Revisions to the curriculum are needed
	SLO/assessment/rubric revision
	None. This was a follow- up assessment based on a prior initiative/ change made this semester. (Explain fully in the "Closing the Loop" section).
	Other actions (please list)

PROGRAM INITIATIVES:

From the list of possible actions above, list your highest priorities below and give them a title. (i.e. revise activities in the assignment; increase collaboration; etc.) The faculty teaching this course will determine the number of initiatives. Please place them in priority order

INITIATIVE #1 TITLE:	Do more problems in class.	
Provide a specific explanation for how the change will be made (e.g., course materials, method of instruction, scheduling, etc.)	Have students do additional problems during class hours.	
What is your timeline:	○ Fall	
List resources required, if applicable		
INITIATIVE #2 TITLE:	Give hints on how to solve harder assignments at the end	
	of lecture.	
Provide a specific explanation for how the change will be made (e.g., course materials, method of instruction, scheduling, etc.)	This started in spring of 2012, and will continue into 2013.	
What is your timeline:	○ Fall Spring 2013	
List resources required, if applicable		
If significant changes are made to address the course-level student learning outcome, it is	O Fall O Spring Year?	
recommended that the outcome be revisited soon rather than as part of a regular cycle. This	This course-level student learning outcome will not be revisited specifically to address the changes made.	

For each action checked above, create an initiative.

course-level student learning outcome will be revisited:	
CLOSING THE LOOP:	Prior SLO assessed:
What is the status of the prior semester's initiatives?	Adapted new text book in Spring of 2012
It is important to explain/show progress even if the initiative is not complete.	Status: Well liked by students as compared to the previous text.
MUST BE COMPLETED FOR ALL COURSES.	

Other comments	<u>:</u>		
Submitted by	Hadi Darejeh	Date _	_4-16-12

Year/Semester:	○ Fall ● Spring 2012
Program:	Engineering
Faculty members in attendance at meeting:	Hadi Darejeh
Course:	ENGRV16L
Course-level SLO assessed: (Attach copy of rubric for this SLO)	Students Will build and test simple AC/DC circuits. They will also use PSPICE (circuit simulation) to verify results.
Assessment Tool(s)/Assignments Used by Faculty:(describe briefly)	Students will turn completed lab reports.
STUDENT PERFORMANCE INDICATORS:	
what achievement level goal has been agreed upon by the faculty who teach this course? Note: The achievement level would have been determined previously and should be on the Individual Faculty SLO assessment form.	_80_ % or more of students will perform at _B_ level (or higher)
Was this goal achieved?	⊙ Yes
	O No
STUDENT PERFORMANCE ASSESSMENT: Summary of Assessment Results (include data when available).	_22# students performed at or above the achievement level _8# students performed below the achievement level
FINDINGS: What did you learn from the assessment?	Students learned how to use Electronic instruments in the Lab
SUGGESTIONS FROM FACULTY:	

(based on discussion)	
Actions that will be taken to increase student learning for this SLO in future semesters: (check all that apply)	Revise content of assignment/activities
	State goals or objectives of assignment/activity more explicitly
	Revise the amount of writing/oral/visual/clinical or similar work
Generate an initiative for	Revise activities leading up to and/or supporting assignment/activities
	Increase in-class discussions and activities
	Increase rigor or complexity of assignment being assessed
	Increase student collaboration and/or peer review
Ganarata an initiativa for	Provide more frequent or fuller feedback on student progress
	Increase guidance for students as they work on assignments
each checked action.	Use methods of questions that encourage competency
	State criteria for grading more explicitly
	Increase supplemental learning activities
	Have colleagues critique assignments
	Collect more data
	Revisions to the course outline are needed
	Revisions to the curriculum are needed
	SLO/assessment/rubric revision
	None. This was a follow- up assessment based on a prior initiative/ change made this semester. (Explain fully in the "Closing the Loop" section).
	Other actions (please list)

PROGRAM INITIATIVES:

From the list of possible actions above, list your highest priorities below and give them a title. (i.e. revise activities in the assignment; increase collaboration; etc.) The faculty teaching this course will determine the number of initiatives. Please place them in priority order

INITIATIVE #1 TITLE:	Lab reporting structure.	
Provide a specific explanation	Show sample reports (graded at 100%) to students before	
for	students turn in their lab reports	
how the change will be made	students turn in their Lab reports.	
(e.g. <i>,</i>		
course materials, method of		
instruction, scheduling, etc.)		
What is your timeline:	O Fall	
	2013	
List resources required,		
if applicable		
INITIATIVE #2 TITLE:	Use circuit simulation to show lab results prior to start.	
Provide a specific explanation	Have students perform simulations in the Lab	
for	nave students perform simulations in the Lab.	
how the change will be made		
(e.g.		
course materials, method of		
instruction, scheduling, etc.)		
What is your timeline:	O Fall O Saving	
	2013	
List resources required.		
if applicable		
If significant changes are made		
to address the course-level		
student learning outcome, it is	O Fall O Spring Year?	
recommended that the outcome	This course-level student learning outcome will not	
be revisited soon rather than as	be revisited specifically to address the changes made.	
part of a regular cycle. This		
course-level student learning		

For each action checked above, create an initiative.

outcome will be revisited:	
CLOSING THE LOOP:	Prior SLO assessed:
	Extra time is allotted to show the students how the
What is the status of the prior	electrical instruments are used and operated.
semester's initiatives?	
	Status: This shows a good level of competency of
It is important to explain/show	knowledge by the students.
progress even if the initiative is	
not complete.	
MUST BE COMPLETED FOR ALL	
COURSES.	

Other comments<u>:</u>
Submitted by ____Hadi Darejeh______ Date __4-16-12_____

INDIVIDUAL FACULTY SLO ASSESSMENT RESULTS FORM NOTE: All sections of the course taught by the instructor must be assessed.

Year/Semester:	• Fall O Spring Year?
Program:	Program?
Faculty Name:	
Course:	
Number of sections you teach of this	
course (Note: All sections need to be	Sections taught
assessed.)	
* Course Level SLO assessed:	
Assessment Tool/Assignment:	
(nlease describe briefly)	
*Rubric Used to Evaluate Student	(Attach a copy of the course-level rubric for this
Performance of this SLO:	SLO)
STUDENT PERFORMANCE INDICATORS:	
*What achievement level has been	% or more of students will perform at
agreed upon by the faculty who teach	level (or higher)
this course?	
Was this goal achieved?	O Yes
	O No
STUDENT PERFORMANCE ASSESSMENT:	students performed at an above the agreed
Number of students in your course(s)	students performed at or above the agreed
who performed at/above OR below the	
achievement level:	students performed below the agreed
	achievement level
Explain any extenuating circumstances	
that may have affected performance of	
this SLO.	
If your students <u>did or did not</u> meet the	
goal, what suggestions do you have to	

improve student learning (e.g. modification to instruction or assignment):

t learning (e.g. instruction or

* This information needs to be determined by the department (or by the faculty teaching this course) prior to the completion of the form.

Send a copy of this form to your Department Head and keep a copy for yourself. You will be using this form in discussions with other faculty teaching this course in completing the COURSE LEVEL SLO ASSESSMENT SUMMARY SHEET.