Engineering Program Review

2013-2014

DRAFT 1

Section I – Accomplishments and Status of 2012 Program Review Report

A. Last Year's Initiatives

2012-2013 INITIATIVES NOT REQUIRING FUNDING

Initiative ENGR 1201
Collaborate with Math and Physics Department, informing them of the knowledge of vectors the engineering students require for success in engineering courses.

- A memo was sent to faculty in the math and physics department outlining the knowledge of vectors engineering students require to have from prerequisite courses. The math faculty responded with the way they had incorporated the information into their classes, or why they did not. Collaboration was less than what the engineering department had hoped for. No improvement in student learning was noted.

Initiative ENGR 1202
Change Prerequisite for ENGRV02

- Continuing to work with Curriculum to change the prerequisite for ENGRV02

Initiative : ENGR 1203
Change Prerequisites for ENGRV12

- Continuing to work with Curriculum to change the prerequisite for ENGRV12

2012-2013 INITIATIVES REQUIRING FUNDING

Initiative ENGR 1204

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

- The computer capability has greatly enhanced the student learning environment. Success and retention will be reviewed at the end of the fall semester.

Initiative ENGR 1205

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

- Polycarbonate material was procured. Working with VC welding Department to fabricate shield.

Initiative: ENGR 1206
Increase the budget for engineering equipment
NOT FUNDED

Initiative: ENGR 1207
Purchase required consumables for labs
NOT FUNDED

B. **Updates/accomplishments pertaining to any of the Student Success or Operating Goals from last year's report.**

FY13 Student Success Goals

1. **The program will maintain or increase the retention rate above the average of the program's retention rate for the prior three years**. The retention rate increased by 2% over the prior three-year average.

2. **The program will maintain or increase student success rate above the program's average student success rate for the prior three years.** The success rate increased by 1% over the prior three-year average.

3. **Increase the number of students earning a certificate to a minimum of 20% of the number of students enrolled in second-year courses.** Goal was to be met as 10 students completed the program and there were approximately 35 students taking second-year engineering courses

FY 13 Operating Goals

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

Section II - Description

A. **Description of Program/Department**
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.

B.   Program/Department Significant Events (Strengths and Successes), and Accomplishments

ENGRV12 schedule changed from 2 days/ weeks to 3 days/week.

Microscope cameras purchased through VC Foundation grant.

An articulation study was undertaken to determine the state of constantly changing engineering articulation with CSU's and UC's.

Faculty participated in Faculty Discipline Review Group (FDRG) for Engineering TMC and C-IDs.

Engineering Lab expansion and remodel began – phase I complete.

Computers purchased and installed with microscopes and printer to facilitate student learning in ENGRV18 Lab.

Program is currently impacted by the inability to meet student needs for TAG agreements with some UC's. An example of this is the inability of students to have a TAG with UCBS because we do not have a MATLAB course.

C.   2013-2014 Estimated Costs/Gainful Employment – for Certificates of Achievement ONLY

	Cost		**Cost**		**Cost**		**Cost**
Enrollment Fees	2900*	Enrollment Fees					
Books/ Supplies	1800	Books/ Supplies					
Total	4700	Total		Total		Total	

*At $50/unit and includes 15 units of prerequisite courses – MATHV20, CHEMV20 and PHYSV01

D.   Criteria Used for Admission

Meet prerequisites for courses.

E.   College Vision

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

F.   **College Mission**
   At Ventura College, we transform students' lives, develop human potential, create
   an informed citizenry, and serve as the educational and cultural heart of our
   community. Placing students at the center of the educational experience, we serve a highly diverse
   student body by providing quality instruction and student support, focusing on associate degree and
   certificate completion, transfer, workforce preparation, and basic skills. We are committed to the
   sustainable continuous improvement of our college and its services.

G.   **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
- Respect
- Integrity
- Quality
- Collegiality
- Access

- Innovation
- Diversity
- Service
- Collaboration
- Sustainability
- Continuous Improvement

H.   **Organizational Structure**
   President: Greg Gillespie
           Executive Vice President: Daniel Seymour
               Dean: Dan Kumpf
                   Department Chair: Michelle Millea
                       Faculty/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.

Name	Hadi Darejeh
Classification	Adjunct Professor
Year Hired	2010
Years of Work-Related Experience	30 years engineering experience
Degrees/Credentials	B.S., M.S.

Section IIIa – Data and Analysis

A. **SLO Data**

ENGRV18, Engineering Materials Laboratory, was the only course assessed in FY13. Only 70% of students were able to analyze materials in a design project at a level of B or above. Students are intimidated and some are overwhelmed with initial exposure to complex, multifaceted problem solving that is required in engineering materials.

Initiatives:

We need more exposure to demonstrations followed by hands-on problems. Initiative does not require resources unless determined that equipment or supplies are needed for demonstrations.

Suggest a pre-term weeklong session of indoctrination to engineering materials and what is expected of students as future engineers to ease the transition from math/science to engineering. The Engineering faculty is willing to develop the curriculum (no financial resources required) but financial resources are required to hold the class/workshop.

SLO rotational plan, mapping and assessments are up to date. Faculty is in the process of reviewing SLO's and rubrics for all courses and will continue to update TracDat.

B. **Performance Data**

1. **Retention – Program and Course**

Retention data is just above the college as a whole and remain stable over the past three years at 88-89%.

Retention of all ethnicities mirrors the college rates though we continue to focus on an increase in retention.

2. **Success – Program and Course**

Success rates remain high in FY13. The success rate is significantly higher (12% higher in FY 13) 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 and B's than the college as a whole and a lower proportion of D's, F's. 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 in the course are dedicated to a goal of getting a BS in engineering.   They put in a high level of effort, resulting in high grades in the one-unit course.

While the success of all ethnicities is well above than the college average, the engineering department always seeks to improve that number. Preparation of students for engineering coursework continues to be our focus.

3. **Program Completion – for "Programs" with Degrees/Certificates Only**

The vast majority of Engineering students transfer to a university without an associate degree or certificate.   The degree requires 43 units, not including prerequisite math, physics and chemistry courses often required. Often, students are not able or interested in completing the extra courses required for the A.S. degree. Students are being made aware of will be made aware of the availability of Certificates and A.S. degrees in the Introduction to Engineering Course and are encouraged to visit with a counselor to determine eligibility prior to transfer. Though the college does not collect transfer data, the engineering department asks engineering majors in our highest level math, physics and engineering courses to tell us where they are transferring. We have 30 – 40 transfers each year.

Our program is completed with a certificate or AS degree by about 10 students per year. In the past four years, 19% of those completing the program with a certificate or AS degree have been female, slightly higher that the percent of females in the department.

Our goal is to have the number of students earning a certificate be a minimum of 20% of the number of students enrolled in second-year courses. We will to work with counselors to determine eligible students and continue to encourage students to complete the program. Funding may be required to have a database formulated with students eligible for degrees and certificates and outreach to those students.

C. **Operating Data**

1. **Demographics - Program and Course**

While the racial demographic distribution 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 eight times higher than the national demographic of 5.4%.

 While our three year average is the same as the college, we are seeing a downward trend in the number of Hispanics in the program and an increase in the number of Whites, though the numbers may be too small to be of significance.

2. **Budget**

> x Program members have reviewed the budget data.
> ☐ No comments or requests to make about the budget

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 to maintain the viability of the lab courses.

Equipment expenditures are $0 for FY 10, FY11 and FY12. $3,956 in computer equipment was purchased via program review in FY 13. $0 is budgeted for FY14. No institutional support is given to Engineering for equipment or maintenance of equipment, a situation that should be rectified.

3. **Productivity – Program and Course**

The programs WSCH Ratio is above the district goal. Some courses were higher than the 3 year average, some the same and one course and lab was lower. Engineering enrollments ebb and flow, following the economy. An additional impact on the program may be due to Moorpark College's recently expanded Engineering program. They now offer double the number of engineering course section previously taught.

FY13 enrollment and productivity ratios were below expectation in ENGRV18 and 18L. We are working to improve the classroom and lab environment.

D. **Resources**

1. **Faculty**
   None requested

2. **Classified Staff**
   None requested

3. **Inventory**
   Inventory list appears accurate though condition of some equipment may be mislabeled.
   VC12009313 is not in SCI-101
   VC12009276 was removed by M&O Summer 2013
   Some additional items require verification.

The Engineering Department is requesting three metallurgical microscopes with UBS digital cameras to ensure a functional inventory to maintain a quality learning environment.
In addition, a service contract is required for the hardness and tensile testers.

4. **Facilities or other Resource Requests**

We are requesting completion of the improvements to the engineering lab that began last summer. Currently, we have expanded into room SCI-104 and 105, two small rooms. Currently, we must access these rooms by going outside from the main lab room. It is inconvenient and the students and faculty cannot access all necessary equipment. We want to complete the expansion, providing a doorway between the rooms.

Additional/new classroom lighting room MCE-130
Replace white board doors (min. 4' wide surface) in MCE-130

5. **Combined Initiatives**

E. **Other Program/Department Data**
Data is collected from engineering students in MathV21C, MathV24, PhysV05, PhysV06, Engrv12 and EngrV16 near the end of the spring semester. Engineering students who are transferring in the following fall semester provide information on which university program they will be attending. We are proud to have VC engineering students attending a wide variety of CSU's, UC's and private institutions.

Section IIIb – Other Program Goals and Initiatives

A. **Other Program Goals**

Section IV – Program Vitality (Academic Senate Approved Self-Evaluation)
SCORE: 21
The engineering program is healthy but needs to work on a more robust program of student enrollment and retention. We need to have the equipment for our labs maintained and updated and to introduce new courses that are required for transfer to 4-year institutions.

Section V - Initiatives

A. **Initiative: Improve critical Thinking skills in ENGRV02**
Initiative ID: ENGR 1301
Link to Data: Program Review, Section IIIaB3
Expected Benefits: Students will be better prepared to apply critical thinking skills in dimensioning objects and carry those skills forward to other academic areas.
Goal: Increase students' ability to apply guidelines in dimensioning
Performance Indicator: 15% increase in student success.
Timeline: 2015-2016
Funding Resource Category: No new resources needed
Ranking: M

B. **Initiative: Increase number of Certificates and Degrees**
Initiative ID: ENGR 1302
Link to Data: Program Review, Section IIIaB3
Expected Benefits: Meet ACCJC Criteria for standards
Goal: Increase number of Certificates and Degrees awarded
Performance Indicator: Minimum of 20% of students enrolled in second-year courses complete program.
Timeline: 2013-2014
Funding Resource Category: Staffing Funds
Ranking: L

C. **Initiative: Complete renovation to engineering lab**
Initiative ID: ENGR 1303
Link to Data: Program Review, SectionIIIaD4
Expected Benefits: Students have improved access to lab equipment
Goal: Improve student learning and success
Performance Indicator: Lab work complete
Timeline: 2015-2016
Funding Resource Category: Facilities Funds
Ranking: H

D. **Initiative: Student preparedness**
Initiative ID: ENGR 1304
Link to Data: Program Review, Section IIIaB3
Expected Benefits: Improved success in ENGRV12
Goal: Students able to apply prerequisite skills in engineering courses
Performance Indicator: 20% increase in student success in using vectors to solve engineering statics problems
Timeline: 2015-2016
Funding Resource Category: No new resources needed
Ranking: M

E. **Initiative: Change Prerequisite for ENGRV02**
    Initiative ID:ENGR 1305 (formerly 2-12)
    Link to Data: Finding 4 and 5, Program Review FY13
    Expected Benefits: Student performance will be enhanced.
    Goal: Students will be better prepared and retention/success will be favorably impacted
    Performance Indicator: Improve student retention by 10%
    Timeline: 2013-2014
    Funding Resource Category: No new resources needed
    Ranking: M

F. **Initiative: Build shield to be used with the Universal Tester in lab.**
    Initiative ID:ENGR 1306 (Formerly 5-12)
    Link to Data: Finding 7, Program Review FY13
    Expected Benefits: Maintain a safe learning environment
    Goal: Work with welding department to build frame for shield to be used with the Universal
    Tester.
    Performance Indicator: Completion of frame
    Timeline: Fall 2013
    Funding Resource Category: No new resources needed
    Ranking: H

G. **Initiative: Purchase required consumables for labs**
    Initiative ID: ENGR 1307 (Formerly 7-12)
    Link to Data: Finding 7, Program Review FY13
    Expected Benefits: Ability to do required laboratory experiments
    Goal: Maintain currency in engineering education to maintain course articulation with
    universities.
    Performance Indicator: Purchase required consumables
    Timeline: 2013-2014
    Funding Resource Category: Supply Funds
    Ranking: H

H. **Initiative: Review SLO's and rubrics for all courses**
    Initiative ID: ENGR 1308
    Link to Data: Program Review, Section IIIaA
    Expected Benefits:
    Goal: Complete update
    Performance Indicator: All work entered in TracDat
    Timeline: Spring 2014
    Funding Resource Category: No new resources needed
    Ranking: H

I. **Initiative: Develop demonstrations followed by hands-on problems in ENGRV18L**
Initiative ID: ENGR 1309
Link to Data: Program Review, Section IIIaA
Expected Benefits: Students increase the ability to analyze materials
Goal: Successfully analyze materials in a design project
Performance Indicator: 90% of students are able to analyze materials in a design project at a level of B or above
Timeline: 2015-2016
Funding Resource Category: No new resources needed
Ranking: H

J. Initiative: **Investigate the feasibility of preterm weeklong session of and what is expected of students as future engineers to ease the transition from math/science to engineering**
Initiative ID: ENGR 1310
Link to Data: Program Review, Section IIIaA
Expected Benefits: Engineering student introduction to engineering materials and what is expected of students as future engineers.
Goal: Ease the transition from math/science to engineering for engineering majors
Performance Indicator: Course/workshop approved
Timeline: 2015-2016
Funding Resource Category: No new resources needed
Ranking: L

K. **Initiative: Review status of articulation with Articulation Officer**
Initiative ID: ENGR 1311
Link to Data: Program Review, Section IIB
Expected Benefits: Correct any problems in articulation
Goal: Improved articulation
Performance Indicator: More courses articulated to CUS's and UC's
Timeline: 2015-2016
Funding Resource Category: No new resources needed
Ranking: H

L. **Initiative: Purchase Pasco Capstone Software for engineering lecture demonstrations**
Initiative ID: ENGR 1312
Link to Data Link to Data: Program Review, Section IIIaA
Expected Benefits: Increase student visualization of structural geometry and material response to external loads.
Goal: Successfully determine scope and approach to analyze engineering material projects
Performance Indicator: 80% of students are able to analyze material load response at a level of B or above
Timeline: 2013-2014
Funding Resource Category: Technology Funds

Ranking: H

M. **Initiative: Purchase 3 metallurgical microscopes with UBS digital cameras.**
Initiative ID: ENGR 1313
Link to Data: Program Review, SectionIIIaD3
Expected Benefits: Students have improved access to lab equipment
Goal: Improve student learning and success
Performance Indicator: Lab work complete
Timeline: 2014-2015
Funding Resource Category: Equipment-non computer
Ranking: H

N. **Initiative: Purchase maintenance contract for Test Machines**
Initiative ID: ENGR 1314
Link to Data: Finding 7, Program Review FY13; Program Review, Section IIIaD3
Expected Benefits: Ability to do required laboratory experiments
Goal: Maintain currency in engineering education to maintain course articulation with universities.
Performance Indicator: Purchase maintenance contract
Timeline: 2014-2015
Funding Resource Category: Services(including maintenance contracts)
Ranking: M

O. **Initiative: Establish Engineering Department Head Position**
Initiative ID: ENGR 1315
Link to Data: Program Review, Section IIIaA, Initiatives 2-13,3-13,5-13,8-13,11-13
Expected Benefits: Meet College requirements for departments
Goal: Attend to all requirements of College Departments
Performance Indicator: Position established
Timeline: 2014-2015
Funding Resource Category: Staffing Funds
Ranking: H

P. **Initiative: Increase supply budget**
Initiative ID: ENGR 1316
Link to Data: Finding 7, Program Review FY13;
Expected Benefits: Ability to do required laboratory experiments
Goal: Maintain currency in engineering education to maintain course articulation with universities.
Performance Indicator: Supply Budget permanently increased to $1000
Timeline: 2014-2015
Funding Resource Category: Supply Funds
Ranking: H

Section VI – Process Assessment

    A. **How have the changes in the program review process this year worked for your area?**
The process continues to be quite time consuming and takes away from time spent preparing for classes and improving student learning. Initiatives to improve the number of degrees and certificates and like items require no funding but more and more time from engineering faculty and others whose help will be required. While the program review process is focused on improving student learning, it takes away from time to do so.   The value of the exercise is understood, but time built into the work schedule to complete these tasks.

    B. **How would you improve the program review process based on this experience?** All faculty preparing reports should get release time to review and comment on data, write the report and to prepare for and attend division meeting to present initiatives to the division.

    C. **Appeals**

After the program review process is complete, your program has the right to appeal the ranking of initiatives (i.e. initiatives that should have been ranked high but were not, initiatives that were ranked high but should not have been), the division's decision to support/not support program discontinuance, or the process (either within the department/program or the division) itself.

If you choose to appeal, please complete the Appeals form (Appendix E) that 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.

VII – Submission Verification
Instructions: Please complete the following section:

Program/Department: Engineering
Preparer: Michelle Millea
Dates met (include email discussions):   SEPT 22, 25, 30, and OCT 2, 3, 6 and 7
List of Faculty who participated in the program Review Process: Michelle Millea and George Warren

X **Preparer Verification:** I verify that this program document was completed in accordance with the program review process.
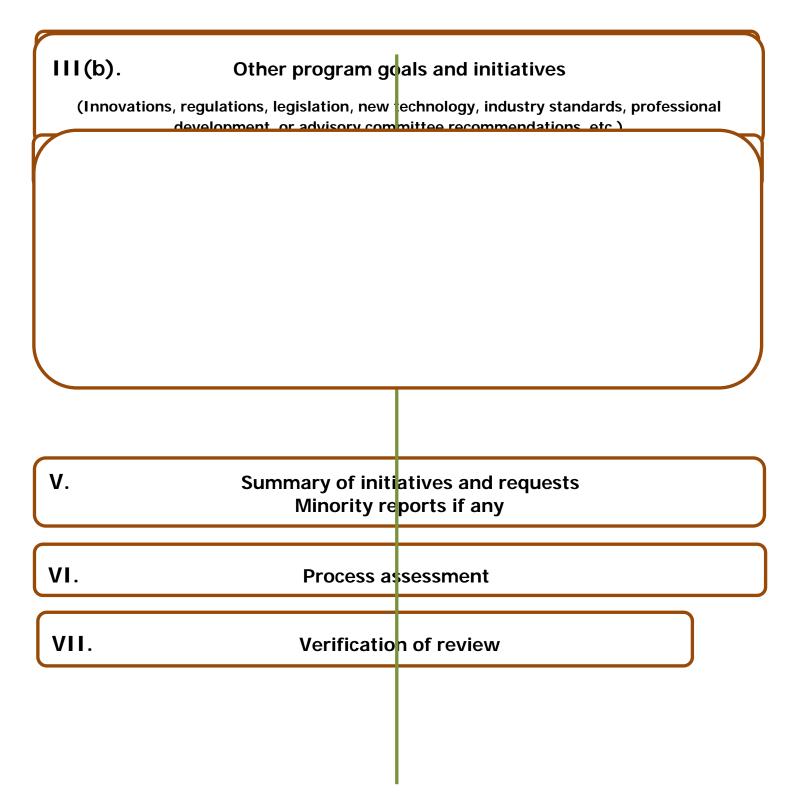
☐ **Dean Verification:** I verify that I have reviewed this program review document and find it complete. Dean may also provide comments (optional):

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Program Review Process Map

III(b).   **Other program goals and initiatives**

(Innovations, regulations, legislation, new technology, industry standards, professional development, or advisory committee recommendations, etc.)

V.   **Summary of initiatives and requests**
Minority reports if any

VI.   **Process assessment**

VII.   **Verification of review**

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Program Review Resource Initiatives Guidelines
WHAT TO LEAVE OUT

The purpose of this document is to clarify what kinds of resource requests should <u>NOT</u> be included in the Program Review Document as initiatives.

The table below summarizes the types of resources that DO NOT need to be included in the Department Plans. The "Who to Contact" column lists who to contact when the resources or services are needed.

Excluded Items	Who to Contact	Explanation
Safety Issues, including but not limited to broken chairs or desks, etc. that can be resolved through the normal process.	Dean, M&O or Appropriate Office	All safety issues should be immediately reported to the Dean, M&O, or appropriate department.
EAC Accommodations that can be resolved through the normal process.	DSPS and Dean	Any accommodation should have the guidance of the DSPS office.
Routine M&O maintenance & repair (light fixtures not working, holes in walls, locks, cleaning, broken desks or chairs, etc.) that can be resolved through the normal process.	M&O or Division Office	Complete an email request to vcmaintenance@vcccd.edu or notify your division office so they can handle for you.
Cyclical Maintenance (painting, flooring, carpet shampooed, windows, etc.) that can be resolved through the normal process.	M&O or Division Office	Complete an email request to vcmaintenance@vcccd.edu or notify your division office so they can handle for you.
Classroom technology equipment repairs (projector light bulb out, video screen not working, computer not working, existing software updates) that can be resolved through the normal process.	Campus Technology Center or Division Office	Complete an email request to vchelpdesk@vcccd.edu or notify your division office so they can handle for you.
Section Offerings/ Change of classrooms	Dean/Department Chair	Dean will take requests through the enrollment management process.
Substitutes	Dean	Dean will process in accordance with existing guidelines.
Conferences, Meetings, Individual Training	Professional Development Committee	Requests should first be addressed by the PDC and only go through program review if costs cannot be covered.

Program Review Resource Initiatives Guidelines

WHAT TO LEAVE IN

The purpose of this document is to clarify what kinds of resource requests should be included in the Program Review Document as initiative.

Faculty and Staff from each department will meet as a division to prioritize initiatives resulting from the Program Review process. The initiatives will then go to each respective governance groups such as Staffing Priorities, Technology Committee, Budget Resource Council, etc., for further prioritization. Administrative Council and the Executive Team will develop the final prioritized list and distribute for implementation.

Included Items	Committee Group	Explanation
Replacement of classroom furniture	Facilities Oversight Group	Only when it is an entire classroom/lab/office at a time or a safety or disability issue that has not been resolve through the normal process.
Upgrade and/or replacement of computer and other technological equipment	Technology Committee	These items will go on to a list for replacement or upgrade per the technology plan.
New Equipment/Furniture/ classroom items (i.e. microscope, etc.)	Budget Resource Council	These items must be approved included in a plan to improve student learning and/or services.
Buildings/Office Space (new renovation, modernization)	Division Dean	The division dean will work with Administrative Council and the Fog Committee to pursue the projects.
New Software	Technology Committee	These items must be approved included in a plan to improve student learning and/or services.
New Faculty Positions	Faculty Staffing Priorities	Requests for new positions will compiled on a list and sent to the FSP committee.
New Classified Positions/or increase in percentage of existing positions.	Classified Staffing Priorities	Requests for classified positions will compiled on a list and sent to the CSP committee.
New Programs/certificates	Curriculum Committee	These program/certificates must be approved by the curriculum committee.
Training and Professional Development above normal	Professional Development/ Budget Resource Council	These are items over and above what the PDC can provide.
Expansion/Conversion to Distance Learning	Dean of Distance Learning and Distance Learning Committee	Requests will be compiled and sent to the committee process for discussion.
Service Agreements	Budget Resource Council	Requests must include justification.
Instructional Materials and Office Supplies/	Budget Resource Council/Dean	These items must include a compelling reason and be above what the normal

Advertising/Student Workers/Printing/Duplicating		budget will allow.

Rubric for Instructional Program Vitality-Academic (non-CTE)

The purpose of this rubric is to aid a program in thoughtful, meaningful and reflective self-evaluation. This rubric is also a defensible and objective way at looking at program viability and efficacy. This rubric should not be used as the mechanism to justify funding requests or for resource allocation. Lastly, a low score on this rubric does not preclude a program from requesting documented and necessary resource requests in other parts of this program review document.

Academic programs:

Point Value	Element	Score
Up to 6	**Enrollment demand** [1]	
	A "6" would be the ability to fill 100% of sections prior to the start of the semester.	
	A "5" would be the ability to fill 95% or greater of class sections prior to the start of the semester for the past two terms.	
	A "4" would be the ability to fill 90% or greater of class sections prior to the start of a semester for the past two terms.	
	A "3" would be the ability to fill 85% or greater of class sections prior to the start of a semester for the past two terms.	3
	A "2" would be the ability to fill 80% or greater of class sections prior to the start of a semester for the past two terms.	
	A "1" would be the ability to fill 75% or greater of class sections prior to the start of a semester for the past two terms.	
	A "0" would be the ability to fill less than 75% of class sections prior to the start of a semester for the past two terms.	

Point Value	Element	Score
	Sufficient capital / human resources to maintain the program, as defined by:	
Up to 3	**Ability to find qualified instructors**	
	A "3" would indicate that no classes have been canceled due to the inability to find qualified instructors.	3
	A "2" would indicate that rarely but occasionally have classes been canceled due to the inability to find qualified instructors.	
	A "1" would indicate that a significant number of sections in the past year have been canceled due to the inability to find qualified instructors.	
	A "0" would indicate that classes are not even scheduled due to the inability to find qualified instructors.	

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[1] Enrollment demand is determined by the ability to fill classes.

Up to 3	Financial resources, equipment, space	
	A "3" would indicate that the program is fully supported with regards to dedicated class / lab space, supplies and equipment.	
	A "2" would indicate that the program is partially supported with regards to dedicated class / lab space, supplies and equipment	2
	A "1" would indicate that the program is minimally supported with regards to dedicate class / lab space, supplies and equipment.	
	A "0" would indicate that there is no college support with regards to class / lab space, supplies and equipment.	

Appendix-C

Up to 4	Agreed-upon productivity rate [2]	
	A "4" would indicate that a program has met or exceeded its productivity rate.	4
	A "3" would indicate that a program is at 90% or greater of its productivity rate.	
	A "2" would indicate that a program is at 80% or greater of its productivity rate.	
	A "1" would indicate that a program is at 70% or greater of its productivity rate.	
	A "0" would indicate that a program is at less than 70% of its productivity rate.	

Up to 4	Course completion rate [3]	
	A "4" would indicate that the program's course completion rate is greater than 5 percentage points or greater than most recent college-wide course completion rate metric found in the annual "VC Institutional Effectiveness Report."	
	A "3" would indicate the program's course completion rate is equal to or greater than the most recent college-wide course completion rate metric found in the annual "VC Institutional Effectiveness Report."	3
	A "2" would indicate that a program's course completion rate is up to 2 percentage points less than most recent college-wide course completion rate metric found in the annual "VC Institutional Effectiveness Report."	
	A "1" would indicate that a program's course completion rate is up to 5 percentage points less than most recent college-wide course completion rate metric found in the annual "VC Institutional Effectiveness Report."	
	A "0" would indicate that a program's course completion rate is greater than 5 percentage points less than most recent college-wide course completion rate metric found in the annual "VC Institutional Effectiveness Report."	

Up to 3	Success rate [4]	

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[2] Productivity rate is defined as **WSCH/FTEF** as determined by the program faculty at the college.
[3] As defined by the RP Group, the course completion rate is the "percentage of students who do not withdraw from class and who receive a valid grade."

	A "3" would indicate that the sum of the program's course success rates for the past academic year is greater than the most recent college-wide course success rate metric found in the annual "VC Institutional Effectiveness Report."	3
	A "2" would indicate that the sum of the program's success rates for the past academic year is within 4 percentage points of the most recent college-wide course success rate metric found in the annual "VC Institutional Effectiveness Report."	
	A "1" would indicate that the sum of the program's success rates for the past academic year is within 8 percentage points of the most recent college-wide course success rate metric found in the annual "VC Institutional Effectiveness Report."	
	A "0" would indicate that the sum of the program's success rates for the past academic year is lesser than 8 percentage points of the most recent college-wide course success rate metric found in the annual "VC Institutional Effectiveness Report."	

Up to 3	**Ongoing and active participation in SLO assessment process**	
	A "3" would indicate that all required courses, programs and institutional level SLOs as indicated by the programs SLO mapping document found in TracDat have been assessed on a regular and robust manner within the past academic year.	3
	A "2" would indicate that 95% of all required courses, programs and institutional level SLOs as indicated by the program's SLO mapping document have been assessed on a regular and robust manner within the past academic year.	
	A "1" would indicate that 90% of all required courses, programs and institutional level SLOs as indicated by the program's SLO mapping document have been assessed on a regular and robust manner within the past academic year.	
	A "0" would indicate than less than 90% of all required courses, programs and institutional level SLOs as indicated by the program's SLO mapping document have been assessed on a regular and robust manner within the past academic year.	Appendix-C

Note rationale on next page.

In no more than two to three sentences, supply a narrative explanation, rationale or justification for the score you provided, especially for programs with a score of less than 22:

The engineering program is healthy but needs to work on a more robust program of student enrollment and retention. We need to have the equipment for our labs maintained and updated and to introduce new courses that are required for transfer to 4-year institutions.

Score interpretation, academic programs:

22-26   Program is current and vibrant with no further action recommended
18-21   Recommendation to attempt to strengthen program
Below 18   Recommendation to consider discontinuation of the program

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Rubric for Instructional Program Vitality-CTE

The purpose of this rubric is to aid a program in thoughtful, meaningful and reflective self-evaluation. This rubric is also a defensible and objective way at looking at program viability and efficacy. This rubric should not be used as the mechanism to justify funding requests or for resource allocation. Lastly, a low score on this rubric does not preclude a program from requesting documented and necessary resource requests in other parts of this program review document.

CTE programs:

Point Value	Element	Score
Up to 6	**Enrollment demand / Fill rate** [5]	
	A "6" would be the ability to fill 100% of sections prior to the start of the semester.	
	A "5" would be the ability to fill 95% or greater of class sections prior to the start of the semester for the past two terms.	
	A "4" would be the ability to fill 90% or greater of class sections prior to the start of a semester for the past two terms.	
	A "3" would be the ability to fill 85% or greater of class sections prior to the start of a semester for the past two terms.	
	A "2" would be the ability to fill 80% or greater of class sections prior to the start of a semester for the past two terms.	
	A "1" would be the ability to fill 75% or greater of class sections prior to the start of a semester for the past two terms.	
	A "0" would be the ability to fill less than 75% of class sections prior to the start of a semester for the past two terms.	

Point Value	Element	Score
	Sufficient capital / human resources to maintain the program, as defined by:	
Up to 3	**Ability to find qualified instructors**	
	A "3" would indicate that no classes have been canceled due to the inability to find qualified instructors.	
	A "2" would indicate that rarely but occasionally have classes been canceled due to the inability to find qualified instructors.	
	A "1" would indicate that a significant number of sections in the past year have been canceled due to the inability to find qualified instructors.	
	A "0" would indicate that classes are not even scheduled due to the inability to find qualified instructors.	
Up to 3	**Financial resources, equipment, space**	
	A "3" would indicate that the program is fully supported with regards to dedicated class / lab space, supplies and equipment.	
	A "2" would indicate that the program is partially supported with regards to dedicated class / lab space, supplies and equipment	

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[5] Enrollment demand is determined by the ability to fill classes.

	A "1" would indicate that the program is minimally supported with regards to dedicate class / lab space, supplies and equipment.	
	A "0" would indicate that there is no college support with regards to class / lab space, supplies and equipment.	

Up to 4	**Agreed-upon productivity rate** [6]	
	A "4" would indicate that a program has met or exceeded its productivity rate.	
	A "3" would indicate that a program is at 90% or greater of its productivity rate.	Appendix-D
	A "2" would indicate that a program is at 80% or greater of its productivity rate.	
	A "1" would indicate that a program is at 70% or greater of its productivity rate.	
	A "0" would indicate that a program is at less than 70% of its productivity rate.	

Up to 3	**Program Completion**	
	A "3" would indicate that the program has granted 25 or greater combined degrees, certificates and proficiency awards over the past four academic years.	
	A "2" would indicate that the program has granted 20-24 combined degrees, certificates and proficiency awards over the past four academic years.	
	A "1" would indicate that the program has granted 15-19 combined degrees, certificates and proficiency awards over the past four academic years.	
	A "0" would indicate that the program has granted fewer than 14 combined degrees, certificates and proficiency awards over the past four academic years.	

Up to 3	**Employment Outlook for Students/Job Market Relevance**	
	A "3" would indicate that the employment outlook for students in the program is greater than the projected county-wide employment average for the next three years and/or "leavers" of the program make more money in their jobs based on taking courses at the college (with or without having completed a degree) than had they not taken courses at the college.	
	A "2" would indicate the employment outlook for students in the program is about average with the projected county-wide employment average for the next three years.	
	A "1" would indicate that the employment outlook for students in the program is less than the projected county-wide employment average for the next three years.	

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[6] Productivity rate is defined as **WSCH/FTEF** as determined by the program faculty at the college.

A "0" would indicate that the employment outlook for students in the program is significantly less than the projected county-wide employment average for the next three years.	

Up to 3	Success rate [7]	
	A "3" would indicate that the sum of the program's course success rates for the past academic year is greater than the most recent college-wide course success rate metric found in the annual "VC Institutional Effectiveness Report."	
	A "2" would indicate that the sum of the program's success rates for the past academic year is within 4 percentage points of the most recent college-wide course success rate metric found in the annual "VC Institutional Effectiveness Report."	
	A "1" would indicate that the sum of the program's success rates for the past academic year is within 8 percentage points of the most recent college-wide course success rate metric found in the annual "VC Institutional Effectiveness Report."	
	A "0" would indicate that the sum of the program's success rates for the past academic year is lesser than 8 percentage points of the most recent college-wide course success rate metric found in the annual "VC Institutional Effectiveness Report."	

Up to 4	Course completion rate [8]	
	A "4" would indicate that the program's course completion rate is greater than 5 percentage points or greater than most recent college-wide course completion rate metric found in the annual "VC Institutional Effectiveness Report."	
	A "3" would indicate the program's course completion rate is equal to or greater than the most recent college-wide course completion rate metric found in the annual "VC Institutional Effectiveness Report."	
	A "2" would indicate that a program's course completion rate is up to 2 percentage points less than most recent college-wide course completion rate metric found in the annual "VC Institutional Effectiveness Report."	
	A "1" would indicate that a program's course completion rate is up to 5 percentage points less than most recent college-wide course completion rate metric found in the annual "VC Institutional Effectiveness Report."	Appendix-D
	A "0" would indicate that a program's course completion rate is greater than 5 percentage points less than most recent college-wide course completion rate metric found in the annual "VC Institutional Effectiveness Report."	

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[7] As defined by the RP Group, the success rate is "the percentage of students who receive a passing/satisfactory grade" notation of A, B, C, P, IB, or IC.
[8] As defined by the RP Group, the course completion rate is the "percentage of students who do not withdraw from class and who receive a valid grade."

Up to 3	Ongoing and active participation in SLO assessment process	
	A "3" would indicate that all required courses, programs and institutional level SLOs as indicated by the programs SLO mapping document found in TracDat have been assessed on a regular and robust manner within the past academic year.	
	A "2" would indicate that 95% of all required courses, programs and institutional level SLOs as indicated by the program's SLO mapping document have been assessed on a regular and robust manner within the past academic year.	
	A "1" would indicate that 90% of all required courses, programs and institutional level SLOs as indicated by the program's SLO mapping document have been assessed on a regular and robust manner within the past academic year.	
	A "0" would indicate than less than 90% of all required courses, programs and institutional level SLOs as indicated by the program's SLO mapping document have been assessed on a regular and robust manner within the past academic year.	

In no more than two to three sentences, supply a narrative explanation, rationale or justification for the score you provided, especially for programs with a score of less than 22:

Score interpretation, academic programs:

27-32	Program is current and vibrant with no further action recommended
22-26	Recommendation to attempt to strengthen program
Below **22**	Recommendation to consider discontinuation of the program

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APPEAL FORM
(Due to Office of Institutional Effectiveness by November 8)

The program review appeals process is available to any faculty, staff, or administrator who feels strongly that the prioritization of initiatives (i.e. initiatives that were not ranked high but should have been, initiatives that were ranked high but should not have been), the decision to support or not support program discontinuance, or the process followed by the division should be reviewed by the College Planning Council.

Appeal submitted by: (name and program) _____

Date:_____

Category for appeal: _____ Faculty

                      _____ Personnel – Other

                      _____ Equipment- Computer

                      _____ Equipment – Other

                      _____ Facilities

                      _____ Operating Budget

                      _____ Program Discontinuance

                      _____ Other (Please specify)

Briefly explain the process that was used to prioritize the initiative(s) being appealed:

Briefly explain the rationale for asking that the prioritization of an initiative/resource request be changed:

Appeals will be heard by the College Planning Council on November 9, 2011 at its regularly scheduled meeting (3:00 – 5:00 p.m.). You will be notified of your time to present.