COMMITTEE ON ACADEMIC PLANNING AND REVIEW
ANNUAL PROGRAM REPORT

College	CSCI
Department	Engineering
Program Unit	Construction Management
Reporting for Academic Year	2013-2014
Department Chair	Saeid Motavalli
Date Submitted	10/14/2014

1. SELF-STUDY (about 1 page)

A. Five-year Review Planning Goals

The Engineering Department offers undergraduate and graduate degree programs in Construction Management. The Department is planning to apply for the accreditation of the undergraduate Construction Management degree program by the American Council for Construction Education (ACCE) during the 2015-16 academic year. The first cohort of students graduated in June 2013.

The Construction Management program started at the graduate level in Winter 2009, and the undergraduate degree program was initiated in Fall 2010. This is the second CAPR report for the Construction Management program.

The Engineering Department has prepared a proposal for a Civil Engineering Degree program, supported by the Construction Management and Engineering faculty.

B. Five-year Review Planning Goals Progress

The Department has initiated the process to hire a third TT Faculty for 2015-2016. All faculty hired for the Construction Management program hold a Bachelor in Civil Engineering in anticipation of starting a Civil engineering program.

C. Program Changes and Needs

A new concrete laboratory was constructed during the summer. This laboratory is being implemented as part of the larger Sustainable Construction Materials Laboratory plan to serve the teaching and research needs of the Construction Management program, and the anticipated needs of the future Civil Engineering program. Equipment for the development of a surveying laboratory has been purchased. We are planning to install this equipment in one of our existing

lab spaces (SSC 247). Several curriculum modification proposals have been approved by the College of Science Curriculum Committee and are expected to go through approval process by the University Committees this academic year. These changes are required for the program to be able to apply for accreditation under ACCE requirements. Based on the new curriculum, our Construction Management program has received the qualification approval to apply for accreditation. Part of these changes, are the addition of Math and Business requirements of the program and also the addition of a Surveying course.

2. **SUMMARY OF ASSESSMENT (about 1 page)**

A. Program Student Learning Outcomes

A yearly schedule for assessment of program LOs has been generated. The program LOs have remained unchanged to match with the recommended (a-h) learning outcomes suggested by ACCE. These are as follows:

a. Students will have knowledge in the core construction management areas (construction materials and methods, safety, codes, scheduling, commissioning, planning and control, project management, construction law, cost accounting, human resources management, environmental and safety issues in construction).

b. Students will have knowledge in broad areas of construction management beyond the core areas.

c. Students will have the ability to communicate effectively.

d. Students will have the ability to function in teams.

e. Students will have the knowledge of sustainable building and construction techniques and relevant state regulations.

f. Students will have an awareness of the complex environment (involving professional and ethical responsibilities) in which they will practice their profession.

g. Students will have the ability to educate themselves and be prepared for lifelong learning and professional development.

h. Students will have experience in solving real life problems in construction. list all outcomes in the box below, and append a curriculum map showing alignment of the Program Student Learning Outcomes and CSUEB Institutional Learning Outcomes.

B. Program Student Learning Outcome(s) Assessed

Outcomes d, e, and f are being assessed during the 2013-2014 academic year.

C. Summary of Assessment Process

Our assessment process is based on the requirements established by the American Council for Construction Education (ACCE). The program outcomes are grouped in four main categories: General Education, Mathematics and Science, Business and Management, Construction Science, and Construction.

Every course outcome is linked to a program outcome, and is assessed by a student survey at the end of the quarter. Additionally, course outcomes are mapped to quizzes, exams and project requirements, and assessed by each faculty using Department of Engineering course assessment forms. Also, mappings of program outcomes to the University ILO's have been developed.

D. Summary of Assessment Results

Objective assessment based on tests, quizzes and projects indicate the following results: for outcome (d), the average student score was 73%; for outcome (e), the average student score was 72%; for outcome (f), the average score was 75%. Based on an established threshold of 70%, we determined that on the average, students did achieve the aforementioned outcomes. We will monitor these scores and relate them to the changes we are making to the curriculum. Changes that have resulted from the assessment Process are:

Add more team projects and assess ability of students to work on teams more frequently.
Revised the Environmental issues in Construction course to emphasis sustainable building and construction.
Current issues in Construction course is being revised to also emphasis sustainability.

3. STATISTICAL DATA (about 1 page)

Planning and Institutional Research produce program statistics annually in standard format. These statistics will be attached to the Annual Report of the Program Unit. This statistical document is expected to be approximately one page long and will contain the same data as required for the five-year review including student demographics of majors, student level of majors (e.g. Juniors, Seniors), faculty and academic allocation, and course data.

California State University, East Bay

APR Summary Data
Fall 2009 - 2013

Engineering					
	Fall Quarter				
	2009	**2010**	**2011**	**2012**	**2013**
A. Students Headcount					
1. Undergraduate	152	149	172	217	223
2. Postbaccalaureate	4	3	1	0	0
3. Graduate	85	92	97	70	86
4. Total Number of Majors	241	244	270	287	309
	College Years				
B. Degrees Awarded	**08-09**	**09-10**	**10-11**	**11-12**	**12-13**
1. Undergraduate	13	7	11	12	19
2. Graduate	5	23	18	30	32
3. Total	18	30	29	42	51
	Fall Quarter				
	2009	**2010**	**2011**	**2012**	**2013**
C. Faculty					
Tenured/Track Headcount					
1. Full-Time	4	5	5	6	7
2. Part-Time	0	0	0	0	0
3a. Total Tenure Track	4	5	5	6	7
3b. % Tenure Track	100.0%	100.0%	83.3%	85.7%	77.8%
Lecturer Headcount					
4. Full-Time	0	0	0	0	0
5. Part-Time	0	0	1	1	2
6a. Total Non-Tenure Track	0	0	1	1	2
6b. % Non-Tenure Track	0.0%	0.0%	16.7%	14.3%	22.2%
7. Grand Total All Faculty	4	5	6	7	9
Instructional FTE Faculty (FTEF)					
8. Tenured/Track FTEF	2.3	4.4	3.6	6.0	5.2
9. Lecturer FTEF	1.2	0.2	0.4	0.5	0.6
10. Total Instructional FTEF	3.6	4.6	4.1	6.5	5.8
Lecturer Teaching					
11a. FTES Taught by Tenure/Track	56.7	84.3	80.5	82.7	83.7
11b. % of FTES Taught by Tenure/Track	70.0%	91.3%	78.4%	87.8%	77.7%
12a. FTES Taught by Lecturer	24.3	8.0	22.1	11.5	24.0
12b. % of FTES Taught by Lecturer	30.0%	8.7%	21.6%	12.2%	22.3%
13. Total FTES taught	80.9	92.3	102.7	94.1	107.7
14. Total SCU taught	1214.0	1384.0	1540.0	1412.0	1615.0
D. Student Faculty Ratios					
1. Tenured/Track	24.3	19.2	22.1	13.7	16.2
2. Lecturer	19.8	38.1	50.4	23.8	39.3
3. SFR By Level (All Faculty)	22.7	20.0	25.2	14.5	18.6
4. Lower Division	17.5	11.9	25.8	15.9	16.5
5. Upper Division	29.3	21.8	23.4	14.2	17.4
6. Graduate	19.1	22.5	27.0	14.4	21.9
E. Section Size					
1. Number of Sections Offered	15.7	21.9	21.8	26.6	28.8
2. Average Section Size	22.9	20.0	25.1	20.6	21.6
3. Average Section Size for LD	21.0	21.5	33.3	27.0	23.8
4. Average Section Size for UD	23.5	13.8	15.5	18.5	19.1
5. Average Section Size for GD	22.8	26.2	42.3	19.4	24.5
6. LD Section taught by Tenured/Track	1	4	3	4	5
7. UD Section taught by Tenured/Track	7	12	12	12	16
8. GD Section taught by Tenured/Track	7	9	9	12	10