

Engineering Management Assessment 2018-19

SUMMARY OF ASSESSMENT (suggested length of 1-2 pages)

Program Learning Outcomes (PLOs) and their relation to ILOs

Students graduating with a M.S. Engineering Management degree from Cal State East Bay will be able to:		I.L.O Alignment
a	Develop advanced analytical skills in optimization, planning and control, and other quantitative management techniques	1, 6
b	Effectively manage teams of multi-disciplinary and multi-cultural professionals.	3, 4
c	Understand the impact of engineering and management decisions in a global, economic, environmental, and societal context	5
d	Have the ability to effectively and persuasively communicate	2
e	Recognize the need for, and have an ability to engage in, life-long learning	6

Program Learning Outcome(s) Assessed:

1. Which SLO(s) to assess	SLO e - Recognize the need for, and have an ability to engage in, life-long learning
2. Assessment indicators	Capstone projects
3. Sample (courses/# of students)	ENGR 6800
4. Time (which quarter(s))	Spring 2018
5. Responsible person(s)	Prof. Farnaz Ganjeizadeh
6. Ways of reporting (how, to who)	Teams peer evaluation and group team project evaluations are done in presence of the department Chair and faculty. Later discussed at the Engineering Advisory Board meetings.
7. Ways of closing the loop	More stringent requirement on the project originality and possible implementation of research results.

Summary: Students work on research projects. Majority of the projects are based on real data from industry. As part of this research they perform a comprehensive literature review and identify the research problem. A comprehensive report and presentation of research work are required. Alumni have evaluated the course material as valuable in their professional career. The performance indicators for assessment of this outcome and the rubric used are as follows. The rubric used for assessing communications skills and research weightage is as follows:

Title	Weightage
Project Idea originality	10%
PowerPoint presentation	5%
Professional Attire – Visual Appearance	5%
Methodology	10%
Literature Research	15%
Team Co-ordination	5%
Analysis	15%
Individual Contribution	10%
Peer Evaluation	10%
Viva- Q/A	10%
Conclusion/Future Endeavors	5%

According to this rubric 70% of the grade is based on students' research and analytics. For the 16 students participated in this evaluation the average grade was 85% with the lowest grade of 70% and the highest of 95%. Majority of students achieved the technical skill outcome.