Assessment results for Industrial Engineering, Engineering Management and Construction Management (BS and MS).

Figure 1 shows that the assessment plan for the industrial engineering program was outcome 6 as indicated in Figure 1.

Year 1: 2021-2022	Industrial Engineering
1. Which PLO(s) to assess	6. An ability to develop and conduct Appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions. (ILO 1 & 2)
2. Is it aligned with ILO	Yes ILO 1, 2
3. Sample (courses/# of students)	Several IE courses
4. SLO from the course	Outcome assessed via the student's Final Oral Presentation and Written Report
5. Assessment indicators	Final report and presentation
6. Assese ARKROE&6.nie0Eg2Spring	g 2022, <b>ā</b> II 2021

8. Responsible person(s)	Dr. Bowen, Dr. Ganjeizadeh
9. Ways of reporting (how, to who)	The results (qualitative and quantitative) will be reported by faculty to the department chair via completion of the course Faculty Self-Assessment form.

Figure 1 Industrial Engineering Assessment for the Year 21-22

#### Assessment results:

### Outcome 6

"An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions", was assessed in INDE 420, INDE 460, INDE 492, ENGR 340, and ENGR 210.

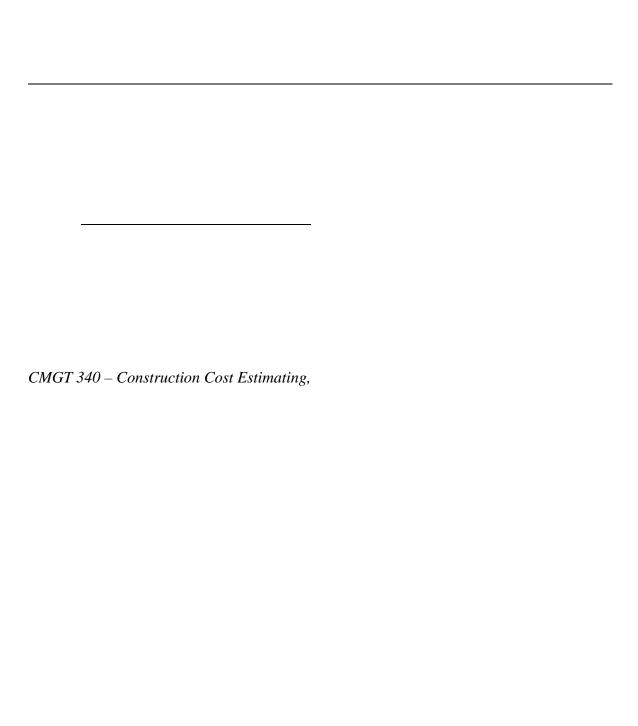
### ENGR 200 - Introduction to Engineering and Design

Year 2: 2021-2022	Engineering Management
1. Which PLO(s) to assess	PLO d - Have the ability to effectively and persuasively communicate (ILO 2)
2. Is it aligned to an ILO?	Yes, ILO 2
3. Assessment activity	Team project
4. Assessment instrument	Department rubric
5. Sample (courses name)	ENGR 650 Project Management

6. SLO from the course

Methodology	8%
Application	5%
Written report	20%
Team Presentation	20%
Team member evaluation	5%
Peer evaluation	2%
Clarity of Presentation	10%
Presentation material	10%
Team transactions	5%
Individual presentation ability	10%

According to this rubric 70% of the grade is based on students' communication skills. For the 13 students participating in this evaluation, the average grade was 80% with the lowest grade of 70% and the highest of 95%. Majority of students achieved the communications skills outcome.



## Computer Engineering B.S.

Year 3: 2021-2022	
1. Which PLO(s) to assess	
2. Assessment activity	
. Assessment instrument	
t. Sample (courses/# of students)	
5. SLO from the course	
Time (which semester(s))	
7. Responsible person(s)	
3. Ways of reporting (how, to who)	
. Ways of closing the loop	

#### **Summary of Assessment Results**

The course CMPE 330 involves solving time-domain signal problems using frequency domain analysis. The problem taken for assessment was a series of related subproblems asked as part of a final exam. The course teaches problem solving with relation to optimization of power consumption and optimization of cost. By teaching optimization of power consumption students learn detailed problem solving skills applicable to minimizing power consumption of devices and also minimizing environmental and economic costs as well. The details of the assessment metric are as follows:

Performance	Indicator	3.
remormance	: marcator	.7.

# **Performance level:**

**Rubric:** 

## **Assessment 1:**

Score	# of Students
1	7
2	4
3	5
4	7

classes to ensure that students are learning the proper problem solving techniques for power optimization or cost optimization.

First, a more comprehensive review will be conducted in ENGR 230 and CMPE 492 in order to confirm that this is an isolated incident as suspected. If it is not isolated, professors in the Computer Engineering program will confer separately to discuss these findings and develop a plan to improve the program overall.