

Outcome I. Graduates will have a recognition of the need for, and an ability to engage in, life-long learning.

Course	Performance indicators
MAE 343, 454	Awareness and understanding of long life learning implications.
MAE 343, 454	Development of self-taught skills.
MAE 343, 454	Grade distribution.

Tools used: Course assessment by faculty, Alumni survey, Employer survey.

Data Collection: The data are collected every semester based on the course offerings.

Frequency of data collection: The data are collected every time courses are taught.

Data Analysis: The data obtained are analyzed every year.

Closing the loop: This outcome is subject to review every year based on performance criteria and metrics and specific action items are developed, if necessary, to revise the content of the courses. The analyzed data are presented separately to the following groups in meetings.

- a) Feedback to students on all assignments
- b) Feedback to faculty, particular from majors.

Outcome and Performance Indicator		Performance Indicator Rubric				
Outcome I “Graduates will have a recognition of the need for, and an ability to engage in, life-long learning”.		Poor	Fair	Good	Very Good	Excellent
PI1	Awareness and understanding of long life learning implications	No notion of life-long-learning (LLL)	LLL barely Mentioned	LLL Addressed in context	LLL Addressed in context and illustrated	LLL Addressed, illustrated & discussed
PI2	Development of self-taught skills	No notion self-taught skills	self-taught skills mentioned	self-taught skills used	self-taught skills used and illustrated	self-taught skills used, illustrated & explained
PI3	Grade distribution	1 (F)	2 (D)	3 (C)	4 (B)	5 (A)
<p>Performance Indicator 1. (PI1). “<u>Awareness and understanding of long life learning implications.</u>” Engineering is a profession which requires continuous self-education and lifelong learning to stay current. The following rubrics are used to assess this indicator:</p> <ul style="list-style-type: none"> - Poor. This rubric is used when an assignment offers no evidence addressing the issue of self-learning or creative use of resources. - Fair. This rubric is used when an assignment offers some evidence of self-learning and some creative use of resources. - Good. This rubric is used when an assignment offers clear evidence of self-learning and creative use of resources. - Very Good. This rubric is used when an assignment offers clear evidence of self-learning and creative use of resources that leads to solutions. - Excellent. This rubric is used when in addition to the previous rubric, the self-learned material is illustrated and resources used are listed and documented. <p>Performance Indicator 2. (PI2). “<u>Development of self-taught skills.</u>” Engineering is a profession which often requires self-taught skills to formulate and solve engineering problems. The following rubrics are used to assess this indicator:</p> <ul style="list-style-type: none"> - Poor. This rubric is used when an assignment offers no evidence of self-taught skills used in the formulation and/or solution of engineering problems. - Fair. This rubric is used when an assignment offers some evidence self-taught skills which are referenced in the formulation of engineering problems or in their solution. - Good. This rubric is used when an assignment offers evidence of self-taught skills which are then used in the formulation of engineering problems and applied in their solution. - Very Good. This rubric is used when an assignment offers clear evidence of self-taught skills which are used in the formulation of engineering problems, applied in their solution and are illustrated. 						

- **Excellent.** This rubric is used when in addition to the previous rubric; the self-taught skills are illustrated, explained and documented.

Performance Indicator 3. (PI3). Grade distribution from class on applicable assignments or exercises. A, B, C, D ,F