

**Outcome F.** Graduates will have an understanding of professional and ethical responsibility.

Course	Performance indicators
ENGR 102, MAE 342, 471	Awareness of professional responsibility.
ENGR 102, MAE 342, 471	Awareness and understanding of ethical conflictive situations.
ENGR 102, MAE 342, 471	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				
<b>Outcome F</b> “Graduates will have an understanding of professional and ethical responsibility.”		<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Very Good</b>	<b>Excellent</b>
PI1	Awareness of professional responsibility	No notion of Prof. Resp.	Prof. Resp. mentioned	Prof. Resp. addressed	Prof. Resp. addressed and assessed	Prof. Resp. addressed and assessed & discussed
PI2	Awareness and understanding of ethical conflictive situations	No notion of ethical issues	Ethical issue mentioned	Ethical issue addressed	Ethical issue addressed and assessed	Ethical issue. addressed and assessed & discussed
PI3	Grade distribution	1 (F)	2 (D)	3 (C)	4 (B)	5 (A)
<p><b>Performance Indicator 1. (PI1).</b> “<u>Awareness of professional responsibility.</u>” Engineers are professionals who engage in formal commitments when they practice their profession. These commitments involve professional responsibilities (PR) in the technical, social and personal areas. The following rubrics are used to assess this indicator:</p> <ul style="list-style-type: none"> <li>- <b>Poor.</b> This rubric is used when exercises offering the opportunity to bring forward PR issues, do not involve any mention or reference to PR issues to address.</li> <li>- <b>Fair.</b> This rubric is used when exercises offering the opportunity to bring forward PR issues, involve some aspects of PR in a very general way.</li> <li>- <b>Good.</b> This rubric is used when exercises involve aspects of PR which are relevant.</li> <li>- <b>Very Good.</b> This rubric is used when exercises involve aspects of PR which are relevant, addressed and implications are presented.</li> <li>- <b>Excellent.</b> This rubric is used when in addition to the previous rubric; there is a discussion of consequences and potential scenarios related to PR.</li> </ul> <p><b>Performance Indicator 2. (PI2).</b> “<u>Awareness and understanding of ethical conflictive situations.</u>” Engineers often engage in professional situations that may put them in ethical dilemmas which call for sound professionally ethical judgment. The following rubrics are used to assess this indicator:</p> <ul style="list-style-type: none"> <li>- <b>Poor.</b> This rubric is used when an exercise offering the opportunity to address an ethical conflictive issue, does not offer evidence of recognition of the ethical conflict.</li> <li>- <b>Fair.</b> This rubric is used when an exercise provides some evidence of recognition an ethical issue of conflict.</li> <li>- <b>Good.</b> This rubric is used when an exercise, provides evidence of recognition of the ethical conflict and suggests an ethical stance.</li> </ul>						

**Very Good.** This rubric is used when an exercise, provides evidence of recognition of the ethical conflict and the potential scenarios of the conflict and proposes an ethical stance.

**Excellent.** This rubric is used when in addition to the previous rubric; there is a description of the rationale involved in the proposed ethical stance and the consequences of failing to exercise ethical judgment.

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