

University of Anbar  
College of Engineering  
Accreditation and Assurance Department



*Planning for Development & Review of  
the Program Educational Objectives PEO's  
and Program Outcomes PO's*

Prepared by  
Committee of ABET project

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## **Planning for Development & Review of the Program Educational Objectives PEO's and Program Outcomes PO's**

### **Introduction:**

One of the main processes, which are used to establish the various Programs' Education Objectives and Program Outcomes in the College, is to seek inputs from key constituencies through questionnaire form distributed on them at specific time table.

The objectives of the Surveys are:

- To assess the quality of graduating students
- To obtain feedback on the Program outcomes
- To obtain feedback on the Program Educational Objectives
- To assess the work environment
- To assess the overall institutional quality
- To establish baseline data

### **Review of the Program PEO's and PO's**

#### **List of Key Constituencies:**

Faculty

Alumni

Employers

Senior Exit Students

### **Feedback Mechanism for Program Constituencies**

#### **Input from Key Constituencies:**

The following steps summarize the input to be obtained from the key constituencies. The Accreditation and Quality Assurance Department (AQAD) scheduled the process as in Table (1)



***Table 1. Assessment process and timeline***

<b><u>Constituency</u></b>	<b><u>Assessment Tools</u></b>	<b><u>Timeline</u></b>
1. Faculty	Faculty Survey (Appendix A) Class Evaluation (Appendix C)	every year every semester
2. Alumni	Alumni Survey (Appendix B)	every year
3. Employers	Employer survey (Appendix E)	every year
4. Students	Senior exit Survey (Appendix F)	every year

**Faculty Inputs:**

**Faculty Survey**

The survey form contains three parts covering different aspects that the College of Engineering consider important for faculty members to assess (Appendix A).

***PART I***

It has four sections that seek the faculty members' evaluation of students regarding the Program Outcomes, Program Educational Objectives, their opinions about the three most important skills that need more emphasis, and finally an open ended question about what should be done to improve engineering education at Al Anbar University.

***PART II***

It has also four parts. The first three sections assess the level of satisfaction and the quality of services, facilities, and work environment/benefits at the Department, College, and university Levels. The fourth section assesses the time management of activities of the faculty members.

***PART III***

It is about the assessment of overall institutional quality.

**Class Evaluation**

All instructors at the college should carry out course assessment and submit a course assessment file to their departmental assessment coordinators at the



end of the term. For more details see (Appendix D) which shows guidelines on how to prepare the required assessment

### **Alumni Inputs:**

Alumni are important constituent group and should be involved in the evaluation process. Survey of the graduates who are pursuing graduate study locally or abroad can be obtained by inviting them to an annual meeting at the college and/or e-mailing them the survey. Selected Alumni from the industry could also be consulted; Appendix B shows the form used for surveying.

### **Employers Inputs:**

A survey form (Appendix E) could be sent to selective employers for their comments. The results of the employer survey which is distributed every year will be used by including questions about the PEO's and PO's for each engineering program at the college. Also, many of our capstone design courses involve student presentations before a panel of professionals who also represent employers. We can plan to survey these professionals when they visit the department.

### **Senior Exit Student Inputs:**

They are our most important constituent group. The response from students will formally be discussed and addressed with the faculty during their evaluation process. In general, the students' input is considered during the annual departmental assessment meeting and at regular faculty meeting.

- ◆ Seminar will be offered on September to inform all students about ABET process and importance of the evaluation of PEO'S.
- ◆ Survey of student forms (Appendix F) consists of at least 6 junior and senior students, who maintained a reasonable GPA, selected



by faculty advisors, student committee or other means. This could be an initiation of student council for each program.

- ◆ Survey of graduating students who are taking senior project course.

### **The documents that will be provided to ABET evaluators**

#### **Program Educational Objectives (PEO)**

##### **Short-term outcomes**

##### 1. "Program Educational Objectives"

The purpose of this document is to state the objectives and then to explain them. It should include:

- a. A list of the PEO
- b. A detailed discussion of the objectives, showing how each one is consistent, where it is appropriate, with the mission of the institution, the needs of key constituencies, and with the spirit of continual improvement desired in the EC 2000 criteria.
- c. A description of the relationship between the objectives and the program's curriculum (via Criterion 3) and other relevant EC 2000 criteria.

##### To be prepared by the end of second semester

##### 2 "Establishing Program Educational Objectives"

The purpose of this document is to describe the process created for establishing the PEO. It should emphasize the degree of involvement of the key constituencies and the role of the institutional mission in the process. It may include appropriate portions of the process log as an appendix. This document ought to include:

- a. A list of the key program constituencies



- b. A discussion of how and why those constituencies were identified as key to the process of establishing objectives.
- c. A delineation of the way individuals or groups were chosen to represent the key constituencies, how and why they were selected.
- d. A description of the initial plan for establishing the objectives and how you arrived at that plan.
- e. A detailed outline of the process you followed.

To be prepared by the end of second semester

### **Long Term Outcomes**

To be prepared at the end and before the ABET visit

#### 3. "A Process for Periodic Review of Educational Program Objectives"

The purpose of this document is to show that a thorough and realistic procedure is in place and allows to review, in consultation with key constituencies, the extent to which the programs are achieving the objectives and also to review the objectives themselves, all of which leads to a more effective and responsive program. This document should include:

- a. A formal outline for the review procedure: assessment cycles, kinds of information to be used for evaluation, how key constituencies will be involved in the review, how the results of the review will be used to improve the effectiveness of the program and/or revise the objectives.
- b. Reports for each of the review cycles detailing the particular process undertaken, the results of the review, the recommendations for any changes in the program or changes in the PEO, and the process of implementing the changes.



#### 4. "A System for Continual Improvement"

The purpose of this document is to demonstrate that the various parts of any program contribute to the goal of continual improvement of the whole program. The whole system should be described, the parts of it that influence the PEO, the parts that work together to attain those objectives, and the processes by which various reviews and assessments drive the system toward continual improvement. This document should include:

- a. A description of the program as a system. Using the PEO as the core of the description, showing how all the parts of the system are related to them. Some parts, such as the institutional mission and the needs of the key constituents, serve to influence the creation of the objectives. Other parts, such as the curricular outcomes and the faculty and the facilities, serve as the instruments by which the objectives will be achieved. What is important to note, though, is that the objectives provide the crucial link between, say, the mission of the institution and the mission of the department. The description, then, will consist of a graphical and verbal rendering of this system, showing how its parts are strategically and integrally related to its whole.
- b. A description of the system as a means of leading toward continual improvement of the program. The part will focus on the way the various reports and assessments have been used to unite all the parts of the system in the general improvement of the whole. It will summarize the reviews in place, the results of these reviews, and the role that the results have played in making the program better, particularly in terms of the PEO.