

تقرير متابعة خطة تحسين البرنامج

A. Program Constituencies

The success of the civil engineering graduates is an integral part of the success of the Civil Engineering Program and department. However, in order to produce successful civil engineering graduates, the Civil Engineering Program must be sensitive to the needs of civil engineering industry and other potential employers. The Civil Engineering Program has in place a continuous improvement process that always seeks the participation and input from the following constituencies:

1. Students
2. Alumni
3. Employers
4. Faculty
5. Civil Engineering Industrial Advisory Council (CE-IAC)
6. Government and National Professional Engineering Societies
7. International Engineering Professional and Societies

D.1 Students

Students are the product of the program. The knowledge and skills gained by the students enrolled in the program represent the product of the learning experience. It is the responsibility of the program to prepare and guide the students to maximize their potential and to contribute to the likelihood of securing a suitable job and the longer-term issue of developing a career. Students are best able to provide feedback while with the program on a course-by-course basis and when close to graduation by reflecting on the way in which the educational components have supported learning in a broader sense. POE's help prospective students in their decision to pursue the degree for possible career in Civil Engineering.

D.2 Alumni

Students especially after few years their graduation (3-5 years), are likely to gain additional perspectives about the Civil Engineering Program and even some of the specific course work. The alumni see the value of their degrees not only in terms of their own skills but also the future reputation of the department. Their view is one that incorporates the experience of matriculating in the program as well as practicing the profession. The alumni are, therefore, critical to providing general feedback about the program and the curriculum, and to viewing the program in terms of how it has supported their career growth. They represent a mirror in which the current students can see their future image.

D.3 Employers

Engineers are essential in providing inputs to the program. The program improvement is strongly influenced by their needs and opinion. Their satisfaction reflects a positive image of our alumni, affects the reputation of the program, and places our graduates at a competitive advantage in the job market. The input of employers is obtained through their participation in the Civil Engineering Advisory Council. This committee meets once a year where it reviews and provides input for the curriculum and approves any improvement of the Program Educational Objectives. POE's provides guidance to employers for determining if the graduates from the program will be the best fit for employment in their business or industry.

D.4 FacultyStaff

Faculty staff consists of members of the departmental teaching staff who are responsible for meeting the program outcomes and objectives during the teaching process.

D.5 Civil Engineering Industrial Advisory Council (CE-IAC)

CE-IAC is composed of members of industrial experience in the Civil Engineering sectors of Saudi Arabia. These members not only understand the needs of potential employers of our students, but they are also interested in career and academic issues associated with Civil engineering education in general. The council meets at least once a year. The input from CE-IAC has been primarily in the form of critiques/advice on issues related to the learning atmosphere, cooperation with the industry, as well as the research activities of the department. Meeting with the council usually concentrated on more systematic reflection on program educational objectives, program learning outcomes, and other accreditation related activities. POE's provides guidance to CE-IAC to determine if the graduates from the program will be adequately prepared for the career in Civil Engineering area.

D.6 Government and National Professional Engineering Societies

Several government and national professional engineering organization were consider in designing the curriculum of civil engineering program. The program made to meet the needs and requirements fromthese organization. Ministry of higher education, Saudi Engineering Council is the most important organization under this category. Several requirements set by Ministry of Higher Education (MOHE) and National Commission for Academic Accreditation & Assessment (NCAAA) were maintained in designing civil engineering program. Sample of important documents such as National Qualifications Framework and Standards for Quality Assurance and Accreditation of Higher Education Programs are shown in Figure 2-5.

D.7 International Engineering Professional and Societies

Input from several international organization related to civil engineering education were consider. ABET and ASCE is the most important organization in this category. In designing the civil engineering program and forming the PEO and SO, requirements of ABET and ASCE were considered and several useful document were used as referenced such as vision of engineering 2025, BOK2 and ABET criteria. Samples of these Documents is shown in Figure 2-6.

B. Process for Review of the Program Educational Objectives

E.1 Establishment of PEOs

Initially, the PEOs were established by a process that involved discussions with the faculty, and consultants with experience in the assessment of PEOs. Also, the PEOs were presented to the graduating students during the exit interviews to determine their acceptance of the PEOs. A survey of randomly selected employers of our graduates was also performed in 2012. Figure 2.5 shows the response of the employers to the question asked about PEOs. The question was simply how well they agree that a particular PEO has been attained by our graduates. The percentage-weighted average of the response with the weights associated to each rubric (“Strongly Agree” has a weight of 5 and “Strongly Disagree” has a weight of 1).

During this process of the establishment of the PEOs, several times the wordings were modified and finally the PEOs were approved with the current wording by the departmental council October 2012. The PEOs were then presented to the members of the Industrial Advisory council (CE_IAC) of the Civil Engineering Department in their first meeting on 2013/2104. The CE_IAC includes representatives of the employers of civil engineering graduates, alumni and the local community. Selected faculty members of the Civil Engineering Department are also part of the council. The CE_IAC members discussed the PEOs and approved them.

E.2. Revision Process of the PEOs

The review process of the PEOs is planned to be launched every four years. It involves consultations with the program’s constituencies. From these consultations the Assessment and Evaluation Committee will propose revisions to the PEOs. The process is as follows:

1. Students will be involved in the process three ways:
 - a. Each semester exit surveys are held for the graduating students. In this survey, the graduating students are asked about their opinion about the PEOs.
 - b. The current PEOs are published on the department web page and students are encouraged to present proposed revisions through the CE Student Advisory Committee (CE_SAC).
 - c. The civil engineering student can give their opinion on the following:

- i. Do the PEOs support the program, Faculty of engineering and Najran university mission?
 - ii. Do the PEOs represent their needs?
 - iii. Do they suggest any modification or revision?
 - iv. What is the degree of their acceptance to the PEOs?
2. Alumni will be involved in the revision process through a survey of randomly selected alumni graduated within a period of 1 to 4 years from the date of survey. They will be sent a questionnaire to give their opinion on the following:
 - a. Do they see consistency between the University mission and the PEOs?
 - b. Do the PEOs reflect their needs?
 - c. Do they suggest any revisions?
3. Employers will also be involved in the revision process through a survey of major employers of the program graduates.
4. Faculty staff will also be involved in the revision process through a survey.
5. Based on the data obtained through student survey, alumni surveys, employers' surveys, and the faculty survey data during the last three years, the Assessment and Evaluation committee will form proposals for revisions of the PEOs.
6. The proposals will be presented to the faculty in the department council meeting. Faculty will play the most important role in revising the PEOs through the department council meetings. The following will be analyzed:
 - a. Consistency of the revised PEOs with the institutional mission
 - b. Consistency of the revised PEOs with the needs of the constituencies
 - c. Consistency of the revised PEOs with the General Criteria
7. The revised PEOs approved by the department council will be sent to CE_IAC members. CE_IAC members will present their opinions in the CE_IAC annual meeting.
8. The department council will consider the recommendations of CE_IAC and will give final approval to the revisions.

Table 2-8.Summary of Revision Process Tools for CE Program PEOs.

No.	Name of assessment	Assessment Time Line	Evaluation Time Line	Person/Unit Conduct the Revision Process	Person/Unit Conduct the Evaluation
1.	Alumni Survey	Annual	Every 4 years	Survey Committee	Quality and Accreditation Committee
2	Employers Survey	Annual	Every 4 years	SurveyCommittee	Quality and Accreditation Committee

3	Faculty Staff Survey	Annual	Every 4 years	Survey Committee	Quality and Accreditation Committee
4	Student Exit Survey	Annual	Every 4 years	Survey Committee	Quality and Accreditation Committee
5	CE Industrial Advisory Council Input (CE-IAC)	Annual	Every 4 years	Meeting Recognizer	Quality and Accreditation Committee
6	CE Student Advisory Committee (CE-SAC)	Annual	Every 4 years	CE Student Advisory Committee	Quality and Accreditation Committee