

Sibley School Procedure for Surveying Graduates, Employers, and Alumni

Required UPC Assessment, Evaluation, and Improvement Actions

The UPC has the responsibility to provide school-wide oversight of the attainment of the M.E. Program Outcomes (POs) and of the attainment and content of the M.E. Program Educational Objectives (PEOs). This oversight provides the required feedback for purposes of continuously improving the program. Three categories of action are involved in this process. They are assessment, evaluation, and improvement. Assessment means the collection of data that are used to determine the levels of attainment of the POs and the PEOs along with the appropriateness of the PEOs based on the needs of the program's constituents. Evaluation means consideration of these data and drawing conclusions from them. Improvement is a process of implementing program changes in response to any program weaknesses that are uncovered as part of evaluation.

Individual course instructors and disciplinary groups have the responsibility for assessment, evaluation, and improvement of the attainment of specific POs by specific courses. The duty of the UPC is to provide program-wide oversight that assures that the individual components of the curriculum function together in a way that achieves the POs and the PEOs in their entirety. To that end, the duties of the UPC are as follows:

Assessment:

The Associate Director for Undergraduate Programs, in consultation with the UPC, is responsible for conducting 2 annual surveys. One is the senior exit survey. The other is the survey of alumni in the class that has graduated 5 years ago. The primary goal of the senior exit survey is to provide an indirect measure of the attainment of the POs. The primary goal of the alumni survey is to provide an indirect measure of the attainment of the PEOs and of the appropriateness of the PEOs. The alumni survey also provides indirect measures of the adequacy of the program's design education and of its graduates' abilities to work professionally in both the thermal and mechanical systems areas.

The Associate Director for Undergraduate Programs, again in consultation with the UPC, will coordinate with the office of Engineering Co-op and Career Services to conduct surveys of employers and recruiters when they visit campus.

The Undergraduate Program Coordinator will oversee the archiving of data from the three surveys, those of the seniors, the alumni, and the employers/recruiters.

Evaluation:

The UPC will review all three sets of survey response data, and it will use these data to decide three things. First, it will decide whether the POs are being adequately attained. This evaluation will be based primarily on senior exit survey data. Second, it will decide whether the PEOs are appropriate based on the needs of the program constituents, which are its alumni and future alumni, i.e., the students, and their employers/future employers. This evaluation will be based primarily on the alumni and employer/recruiter survey data. Third, it will decide whether the PEOs are being adequately attained. This evaluation also will be based primarily on the alumni and employer/recruiter survey data.

Note that these evaluations may also consider data from the College of Engineering's careers survey. The engineering careers survey is conducted annually by the College of Engineering's Co-op and Career Services department. It is a survey of the most recent class of B.S. degree recipients. Its results are tabulated by discipline. The College of

Engineering also conducts surveys of other alumni from time to time, alumni who graduated a number of years ago. The UPC will consider such data whenever it becomes available.

Improvement:

Actions to improve the program will be taken whenever a deficiency is uncovered in the above-described evaluation process. Various types of improvement actions are open to the UPC. If the PEOs are determined to be inadequate, then the UPC will formulate revised PEOs, present them to the program faculty, and secure the faculty's approval. Such changes will normally be accompanied by additional curricular changes aimed at supporting attainment of the revised PEOs.

If PEOs or POs are not being adequately attained, then the UPC will recommend changes to individual course syllabets or changes to the required curriculum. The latter changes may involve the creation of new courses or the deletion of existing courses. All such changes will be initiated by the UPC, which will also conduct the initial stages of review of the proposed changes. Eventually, all such curriculum changes will be approved by vote of the entire school's faculty at a regular faculty meeting.

Additional Actions to Assess, Evaluate, and Improve:

The assessment, evaluation, and improvement actions noted in this document represent program-wide actions. Such program-wide actions are initiated solely by the UPC under normal circumstances. Additional actions to assess, evaluate, and improve the program are taken regularly by program faculty and by cooperative efforts of the UPC and the program faculty. The primary vehicle for such actions is the set of bi-annual course assessment meetings. This document does not cover those aspects of the program's continuous improvement plan.

UPC Assessment, Evaluation, and Improvement Schedule

The UPC will perform the above-described assessment, evaluation, and improvement actions on a regular schedule. That schedule is as follows:

Assessment Schedule:

The Undergraduate Program Coordinator will conduct annual senior exit surveys and annual surveys of alumni 5 years out. Both of these surveys take place in the spring.

The College of Engineering's Co-op and Career Services department will conduct employer/recruiter surveys in conjunction with its on-campus recruiting sessions. These will be conducted at least annually, but they may be conducted as often as once per semester.

Evaluation Schedule:

The UPC will review the senior exit survey data, the alumni survey data, and the employer/recruiter survey data every other year. During each evaluation cycle, the UPC will review all new available survey data. Thus, it will review 2 years worth of new survey data during each evaluation cycle. The UPC will report its PO and PEO evaluation results to the Sibley School faculty at a faculty meeting. This report will be made before the end of February of the academic year in which the evaluation is being conducted.

Improvement Schedule:

The UPC will formulate recommendations for program improvements, whether to individual courses, to the course content of the required curriculum, or to the PEOs, on an as-

needed basis. Any improvements that are indicated during the bi-annual evaluation will be formulated and proposed to the Sibley School faculty at a faculty meeting that takes place before the end of February of the academic year in which the evaluation is being conducted.