A procedure to assess ABET student outcomes in the Penn State surveying programs Wes Parks, Frank Derby, Charles Ghilani, Sal Marsico and Tom Seybert

ABSTRACT

In 2009 the faculty of the Penn State Surveying Engineering and Surveying Engineering Technology programs developed a new procedure to assess the degree that student outcomes are met in preparation for periodic ABET reviews. The procedure was used in the successful reaccreditation of both programs following 2012 ABET general reviews. This paper reviews the development of the procedure which is based on ABET manual "Faculty Workshop on Assessing Outcomes." The plan of periodic outcome assessment over the six years between general reviews is outlined. The plan of selection of particular courses on which to base periodic assessment is described. The development of performance criteria to assess a particular outcome is described. The plan of particular course work used to measure the degree to which performance criteria are met is described. The development of grading criteria for course work is described. The evaluation of the periodic outcome assessment combining different course work into a single assessment of the degree to which an outcome is met is described. The various components of evaluation, combining of scores from different course work, commentary by faculty teaching the courses, curriculum committee review, industrial advisory committee review, and finally the determination of remedial action, where necessary, to improve results of future year's assessments is described. The periodic updating of the assessment accounting the effect of changes to courses is described.