

<u>Question</u>	<u>Answer</u>
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Title of Paper	Continuous Improvement in CES Capstone Design Course at UW Tacoma

Abstract

The Computer Engineering and Systems (CES) program in the Institute of Technology at the University of Washington, Tacoma (UWT) was established in 2006. The program produced its first graduates in June, 2009 and was recently accredited by ABET in August 2011.

The CES capstone design project at UWT is a two-quarter (Winter and Spring) sequence that is developed in accordance with the ABET requirements for engineering programs. During the two quarters, students apply what they have learned from earlier courses in the program to develop either an individual or a small group engineering project that is an integration of hardware and software components. It was first offered in 2009; we have introduced and discussed that experience in our paper titled “Computer Engineering and Systems Capstone Design Course at UW Tacoma” and published in 2010. In that paper, objectives, organizations, as well as outcomes of the two-quarter course were presented; future plans to improve the teaching and learning were also proposed in the paper.

This paper summarizes our efforts in improving the course since 2010. As an example, when the course was offered in 2009, we paired freshmen acting as interns with seniors working on capstone projects for the whole two quarters; starting in 2010, interns got involved only in the Spring quarter. Other course improvements to be described in this paper include: course assessment changes based on the ABET recommendations; updating course teaching materials to help students understand the project design process; adding quizzes and in-class exercise to keep students motivated; exposing students to a series of activities to assess students' perceptions of engineer's social responsibility; creation of the project screen committee to help student eliminate any ambiguity in their project concepts and further ensure their successful implementations.