Integration of Industry Partners into a Capstone Design Program

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Abstract

The objective of this paper is to present our findings and experiences in how to use industrial projects successfully, especially in terms of guidelines for selecting projects and managing them throughout the course. This paper will convey the impact of the changes to student learning and overall experience of the faculty involved using industry projects.

The goal was to significantly elevate the quality of project work undertaken, and this was accomplished by having teams of three or four students working under real world constraints of time and budget, to produce a product or process that meet client's specifications. The first step in this process was to secure several projects from industry together with a commitment from a practicing engineer to serve as project liaison (the client). At the end of the semester, the college will hold a senior-project symposium in which each student team will present the results of its work to their clients and other invited to participate in the evaluation process.

This paper will discuss the development of industry-sponsored projects into a mechanical engineering capstone design courses. Examples of the current projects will be presented.

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