What is it?
Capstone is our one-semester senior design course where students engage in industry projects and practice industrial engineering under the guidance of an experienced Registered Professional Engineer, as well as engineers and managers from the sponsor company. The objective of these projects is to provide economic value to the company and a practical education to the students.

The projects involve four stages of design (Problem Definition, Current State Analysis, Future State Design, and Final Project Validation/Delivery). Students are required to perform in-depth quantitative analysis and design throughout the entire project with a group commitment of 40 hours per week for 14 weeks, and extensive on-site and web/phone company involvement to ensure success.

Why do it?
In the Fall of 2013, 8 projects were performed at 4 different companies. These companies were asked to provide their personal realistic estimate of the economic value of their student projects. The project values ranged from $2,500 to $120,000 with an average value of $37,000 and 7 of 8 projects having a value of over $20,000. Since these projects cost $3,000 to $5,000 per company, the average return was over 7-fold.

Over 85% of our students have industry experience, and 25% have international experience, prior to working in Capstone. These engineers are mature, experienced and motivated, with extensive oversight.

What kind of projects?

What is new?
Intense focus on achieving BUSINESS VALUE in mostly economic terms. Objective is to leverage solid engineering fundamentals packaged within a systematic workflow to deliver results with an independent and objective perspective.

What is my commitment?
A minimum of two projects per semester for two semesters. Some companies could do Spring Only. Payment, subject to your satisfaction, is $3,000 to $5,000 per student project (covers costs). You determine the amount you are willing to pay, based upon the value that you receive. Students and Faculty are able to sign NDA and IP agreements. You would need to assign a project manager for each project and ensure that this manager has the time, ability and resources to assist the students with access to data and facilities in a timely manner.

How do I get started?
Contact Dave Sly, 515-450-2335 (davesly@iastate.edu)