Bridging Capstone Design with Industry Needs

Abstract

When entering into a relationship to have a capstone design project completed with a university there are certain expectations that both the industry sponsor and academia are looking to achieve. These expectations are best met through communication between industry sponsors and student teams, training of liaison engineers and faculty coaches, and involvement from both industry and academia.







Communication

Managing Sponsor Needs and Expectations

- Set expectations
- Regular personal visits and follow up telephone calls
- External relations manager asssists in resolving problems
- Follow up surveys sent to sponsors three times throughout the year

Working With Student Teams

- Set expectations to bridge Capstone and Industry together
- Weekly Capstone class lectures
- Students required to send weekly report to sponsor
- Weekly phone/video conference with liaison engineer

Training

Liaison engineers: expectations and training

- Liaison Engineer Guide
- Provides regular communication
- Monitors progress and provides regular feedback
- Supports the design process as taught in class
- Makes time available for the team
- Lets the team know the impact the project will have on the company

Faculty Coach

- Faculty coach guide
- Creates/maintains relationship with Liaison Engineer

Involvement

Student Involvement

- Regular student design reviews and presentation "pratice runs"
- Weekly team progress reports sent to sponsors
- Reinforce sponsor's needs/expectations to student teams
- Plant tours and site visits allow students to see "big picture"

Industry Involvement

- Encourage students through proactive communication
- Participation in formal design presentations
- Weekly telephone/video conferences
- Feedback on weekly progress reports







Conclusion

BYU's capstone program seeks to effectively train both the faculty coach and the sponsor's liaison engineer. Bridging Capstone design with industry needs allows students the opportunity to apply knowledge rather than just learning in a classroom environment, while sponsors receive their desired outcome.