Capstone Design [1]

Capstone Design in the Department of Mechanical Engineering at the University of Houston has been in existence with more or less the same requirements since 1981. The course itself has taken several forms over the years including a joint course with Industrial Engineering (from 1985 to 2010) and with Electrical and Computer Engineering (2003 to 2005). It was a three-credit-hour course until the fall of 2010. Currently, the capstone design requirement is two, ?mechanical engineering only?, three-credit-hour courses taken in the fall (MECE 4340) and continued in the spring (MECE 4341). For the fall 2015 and spring 2016, the course had 147 students working in 39 teams on 34 different projects, including 8 projects related to the designing, building and competing in the 2016 Formula SAE competition in Lincoln, NE, June 14 through June 18, 2016. The UH team finished 26th out of 80 entrants. Multiple teams are allowed to work on the same projects under certain conditions.

The Accreditation Board for Engineering and Technology (ABET) requires that engineering curricula provide a ?capstone? experience to students. The ABET also requires that students be involved in design activities in which ?realistic? constraints are imposed and in which results in the ?realization? of an artifact. Industrial involvement in the capstone courses is extremely important since industry can provide the ?realistic? projects that are desired in the capstone experience. Industrial sponsors are expected to cover all expenses for their projects and to provide technical support to the teams. With prior agreement an industrial sponsor can retain any intellectual property derived from its project if the project has involved no University resource, e.g., lab space or equipment. Industrial sponsors are asked to make a $2000 donation to the Department to help cover the expenses of other unsponsored projects, e.g., regional and national design competitions and service projects.

On this website you will find the current ?Call for Projects? and the ?Project Solicitation Form.? Should you have any questions regarding the Capstone Design Program, please call or email me. I look forward to hearing from you.

Regards,
Richard Bannerot, Ph.D., P.E.
Capstone Instructor
Professor of Mechanical Engineering
Telephone: 713-743-4511
Email: rbb [at]uh [dot] edu

© University of Houston Cullen College of Engineering, Department of Mechanical Engineering

Links:
[1] http://www.me.uh.edu/undergraduate/capstone-design