2015 Fall Breakfast Kicks Off Largest Senior Design Class

The fall 2015 semester began with the Kickoff Breakfast on Friday September 4. There are 265 students enrolled in Senior Design 1, the first course in a two-semester sequence. Teams are working on 55 projects, of which 38 are supported by industry partners. Four of the projects are dual, with two teams working independently to develop two separate solutions. In addition, 123 students enrolled in Senior Design 2 will complete 28 projects by December. This is the largest Senior Design class in the history of the College of Engineering. Students in Senior Design 1 and 2 will showcase prototype designs and final designs, respectively, at the Expo on December 11.

Thank you to all of our industry supporters!

Students will be challenged this year by the most technically complicated projects in the history of the program. Senior Design projects represent a cross section of both large and small industry supporters from as far away as California. Project descriptions can be found on the Industrial Solutions Lab website at https://srdesign.uncc.edu/senior-design-program/projects/2015-fall-projects.

What’s inside? Senior Design Teams Win National Awards!
THANK YOU FALL 2015 INDUSTRY SUPPORTERS!

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Penske Technology Group

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Spiroflow

Global Leaders in Material Handling

Toter

Technimark

UNC Charlotte

Energy Production and Infrastructure Center (EPIC)

venturewell

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Senior Design Teams Win National Awards

A project supported by CB&I to design an intake structure for the future Duke Energy William States Lee Nuclear Power Plant came in second place in a national competition sponsored by the Structural Engineering Institute of ASCE. The competition was held at the Structures Congress in Portland Oregon on April 21, 2015.

The structural design came in second in a competition with 18 other finalists that had been invited to compete. Judging was based on the team’s oral presentation and written presentations at the Congress to a group of judges.

The team determined the optimum location, then performed a finite element analysis of the structure for all possible dead, live and dynamic loads, including earthquake loads.

Thirty-five teams, from 18 states and Puerto Rico, launched single-stage rockets during the 15th annual competition. To determine the winning teams, data from each of the flights was analyzed over the following weeks and the results of the analyses were combined with results from technical design reviews and other products required before launch day.

The team spent eight months designing, building and testing their small high-powered rocket, scientific payload and ground support equipment using the same launch criteria as NASA.

"Student Launch enables teams to research innovative solutions to technical problems, which could potentially advance future NASA missions," said Tammy Rowan, manager of the Academic Affairs Office at NASA’s Marshall Space Flight Center. "Students demonstrate advanced concepts of 3-D printing, carbon-fiber engineering and autonomous systems, all which may benefit NASA exploration or the development of new aerospace industry or products."

The Lee College of Engineering Rocket Team came in third place in the 2015 NASA Student Launch Challenge that was held April 11 near the NASA Marshall Space Flight Center in Huntsville, Alabama. The UNC Charlotte rocket was designed and fabricated in Senior Design.

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2015-16 EVENTS – Mark Your Calendar Now!

Look for new projects starting in the spring semester!
Project descriptions will be posted in early December.
http://srdesign.uncc.edu/senior-design-program/projects

- December 11, 2015  Fall Expo, Student Activity Center, OPEN TO PUBLIC at 11 a.m.
- January 15, 2016  Kick-off breakfast for industry supporters, project mentors, and student teams
- May 5, 2016  Spring Expo, Student Activity Center, OPEN to PUBLIC at 11 a.m.

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