

Industrial Solutions Laboratory

Senior Design

SAVE THE DATE!
FALL 2013 Expo
Friday December 6, 2013

Fall 2013 Kickoff Breakfast



The fall 2013 semester began with the Kickoff Breakfast on Friday August 30. We have 227 students enrolled in Senior Design 1 for the fall semester. They will be working on 51 projects, of which 29 are supported by our industry partners. This is in addition to the more than 100 students finishing their 24 projects this semester in Senior Design 2. This is the largest Senior Design 1 class we have ever had.



The projects starting this fall will challenge the students. A list of the projects can be found on our senior design website. The industry supporters are as excited about our new projects as the students. These projects, while designed to provide the students with real world engineering experience, will provide solutions to problems for the industry supporters.

Senior Design Brings Real World Results

As the Spring 2013 teams finished their senior design projects and departed with their engineering degrees, proof that this highly-anticipated competition gets real-world results is now at hand for an exceptional group from 2010.

That team produced the initial feasibility study for a 500 KW solar power project that would rest atop the shade canopies of a bus maintenance facility operated by the Charlotte Area Regional Transit Authority (CATS). So thorough was their work that CATS used the study to successfully compete for a federal grant to build the project. CATS won over \$1.0 million, enough to get 50 percent of the project done. Today the massive installation of over 1,000 solar panels is complete, allowing the canopies to provide not only the essential shade needed to protect the systems' fleet investment, but five percent of the facility's electricity demand as well.

In making the technical case for the solar array, CATS demonstrated how it could cut emissions of greenhouse gases related to fleet maintenance. CATS tracks its solar energy output, and related fossil-fuel offsets, with a real time instrumentation system that has been collecting and communicating data on the project's energy production since it launched in late 2012. (You can obtain real time data from the installation by clicking on the link [real-time instrumentation system.](#)) CATS is so satisfied with the effort that it is pursuing more funds to ramp up the canopy system to its full 500 KW capacity.

THANK YOU TO OUR INDUSTRY SUPPORTERS

A special thank you is extended to the following companies who are supporting senior design projects in fall 2013. Without our industry supporters, this program would not be possible.

SENIOR DESIGN 1 INDUSTRY SUPPORTERS

Our supporters for Senior Design 1 have just begun work with their project teams.



SENIOR DESIGN 2 INDUSTRY SUPPORTERS

Thank you also to the industry supporters for our second semester Senior Design 2 projects that will finish this semester and be displayed at the December Expo.



SPRING 2014 SENIOR DESIGN

Although we have just started the fall 2013 semester, it already time to start thinking about projects for the Spring 2014 semester. Details of project requirements are available at <http://srdesign.uncc.edu/company-information.html>.

2013 SCHEDULE OF EVENTS

Mark your calendars for the following key events in the upcoming 2013-2014 school year.

- December 6 Fall Expo, Student Activity Center, OPEN TO PUBLIC at 11 AM
- January 17 Kickoff breakfast for spring 2013 industrial supporters, project mentors, and student teams
- May 1 Spring Expo, Student Activity Center, OPEN TO PUBLIC at 11 AM

CONTACT US

For information or questions, visit www.srdesign.uncc.edu or contact Terry Jordan at 704-687-5029 or tdjordan@uncc.edu.

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