

## ACADEMICS

### **The New CE 494/495 Capstone Class**

The CE senior capstone class provides students with the sort of design experience they would get on the job and includes areas such as structures, geotechnical engineering, transportation and planning, and sanitary and environmental engineering. The class simulates the submission and acceptance processes used in the design phases of a real-world civil engineering project and familiarizes students with the preparation of sketch plans, preliminary engineering design and all phases in between to the end of a project. At the end of the project, students prepare written reports and oral presentations in defense of the project.

To streamline students' experience, the department established a one-year co-hort capstone experience section for students. Students enrolled in the CE 494/495 capstone class will now work on a single project with the same group from site plan to building design. The new format will give them a chance to work on areas ranging from structural engineering to geotechnical engineering to transportation engineering to environmental engineering to construction management, all within the same project. "Going through the process of completing a project from the beginning to the end makes for well-rounded students and helps make them more marketable. It also gives them the chance to work within various disciplines like they would in the real world and they are able to get a more uniform experience by taking the knowledge they have obtained and applying it to a complete project," says CEE professor Stephanie Santos.

In two exciting new developments, capstone students will be able to consult a network of mentors, including professors and industry professionals, and will have the chance to work with Building Information Modeling (BIM). The BIM process uses 3D-modeling technology to help them plan, design, construct and manage buildings and infrastructure, all vital aspects of any civil engineering project. Students are scheduled to present their projects at the end of April.