

Master of Science in Civil Engineering Program now Offered at USA

A new Master's degree program in Civil Engineering is now being offered at USA. The program includes two core courses that provide civil engineering expertise specific to the coastal environment.

The program's first class of students are now enrolled and the program offers a unique opportunity for civil engineers seeking an advanced degree with emphasis on design in coastal areas. USA now has the only master's degree program in civil engineering along the upper Gulf Coast, and the only graduate program with a coastal focus, from New Orleans, La., to Tallahassee, Fla.

The new master's program allows civil engineers with a bachelor's degree to pursue more advanced education and expertise in one of several civil engineering areas: environmental, geotechnical, structural, transportation, and water resources/coastal engineering. All students in the program will be required to take core courses that help prepare them for civil engineering design in vulnerable coastal environments.

According to Dr. Kevin White, chair of the department of civil engineering at USA, regional demand for highly qualified civil engineers has grown significantly since hurricanes Ivan and Katrina battered the Gulf Coast, causing more than \$2 billion in damage to roadways and billions more in structural damage. Efforts to rebuild will be greatly enhanced by USA's new program that emphasizes the unique design considerations in coastal areas.

"We have a very complex set of conditions that we have to deal with on the coast," White said. "Issues such as high water tables, storm surges and waves, sensitive environments, and hurricane winds all require that we design to a higher level"

"Essentially, we need this master's program to provide state-of-the-art education to the civil engineering community so that we'll be able to design and build infrastructures appropriate to the coastal area," White explained.

According to Dr. John Steadman, dean of the College of Engineering at USA, the advanced degree program is vital to the area's economic wellbeing and safety.

"Providing graduate education in civil engineering is a critical step in expanding our partnership with local industry to support economic growth in Mobile and the Gulf Coast. There are several hundred civil engineers in our area who need advanced education to provide the special design services that are essential in the coastal environment."

The implementation of the new program also addresses a national movement to require a master's degree to become licensed and practice civil engineering.

In August, the National Council of Examiners for Engineering and Surveying, the agency that formulates licensing policy for engineers and surveyors, passed a new model law that states that by 2015 engineers must have a master's degree or its coursework equivalent in order to sit for the licensure exam.

“As important as this new program is currently, it will only become more important as the Alabama licensing board adopts the proposed rules requiring graduate education to become a licensed professional engineer,” Steadman said.

“We are very pleased that the Alabama Commission on Higher Education has unanimously approved our program and thank all the local firms who have helped us in the process.”

The new master's in civil engineering degree program at USA includes both a thesis option and a coursework-only option for those engineers already professionally employed. For more information on this and other programs in USA's College of Engineering, visit online at www.southalabama.edu/engineering/ or call (251) 460-6174. For admissions information, call USA's Office of Admissions at (251) 460-6141 or visit online at www.southalabama.edu/admissions/.

USA Department of Civil Engineering

The department of civil engineering at USA currently enrolls more than 175 undergraduate students and is home to the Coastal Transportation Engineering Research and Education Center. The Center, over the last several years, has attracted several million dollars in research funds and has led to numerous publications and reports related to the storm surge and wave processes that caused bridge damage from hurricanes Ivan and Katrina; hurricane storm surge prediction; and storm water management structures that can protect sensitive, coastal environments. Many of the Center's findings have been recently adopted and used by the Federal Highway Administration and the Alabama Department of Transportation.