

## <u>Undergraduate and graduate Degrees in the School of Architecture and Design</u>

Program/	Institution/	Discipline	head of	Phone	email
Course	City		program	number	
Undergraduate					
and Graduate					
Degrees in the					
School of					
Architecture	University of		Robert	813-974-	
and Design	South Florida	Architecture	MacLeod	4031	rmacleod@arch.usf.edu

The University of Central Florida Civil, Environmental, and Construction Engineering Department has over 1000 undergraduate students pursuing one or more of three undergraduate degree programs.

- The Civil Engineering program is concerned primarily with fundamental civil engineering design
  and analysis in such areas as geotechnical engineering, transportation engineering, water
  resources engineering, structural engineering, and environmental engineering.
- The Environmental Engineering program is concerned primarily with the interations of humans and their environment and the planning, design, and control of systems for environmental quality management for water, land, and air.
- The Construction Engineering program, one of the only eleven such programs in the U.S., is
  concerned with preparing students for the engineering management of construction projects by
  developing skills for the selection of construction methods and processes, construction project
  planning and control, and resource management.

## **Clean Energy Research Center**

Program/ Course	Institution/ City	Discipline	head of program	Phone number	email
Clean					
Energy					http://cerc.eng.usf.edu/
Research	University of		Elias (Lee)		index.php?
Center	South Florida	Engineering	Stefanakos	813-974-7322	option=com_contact&vi

ew=contact&id=1&Itemi

Florida has no substantial indigenous supply of fossil fuels. It must import virtually all the energy it uses. But the Sunshine State has good solar has good solar and biomass resources. Solar and hydrogen resources and technologies, applied both electrically and thermally, can mitigate the state's fossil fuel dependency, improve the environment and provide substantial economic growth opportunities.

The USF Clean Energy Research Center's fundamental investigations into new environmentally clean energy sources and systems (hydrogen, fuel cells, solar energy conversion and biomass utilization) meet the needs of power and energy producers and the transportation sector through multi-disciplinary research, technical and infrastructure development and information transfer.

CERC actively supports regional economic development of manufacturing and high technology businesses, as well as helping to drive the National goals of improving our global competitiveness and technology leadership, through its mission of developing, evaluation and promoting commercialization of renewable energy solutions.

## Accomplishments:

- Developed photocatalytic technology for detoxification and disinfection of water and indoor air.
- Developed the nation's first 20,000 watt solar/electric charging station for electric vehicles.
- Achieved a world record efficiency (15.8%) thin film cadmium telluride solar cells for low cost applications.
- Developed the Rivolta Isigo neighborhood electric vehicle.
- Created a mobile data acquisition system for the U.S. Department of Energy EV Site Operator program
- Constructed a microturbine power plant fueled by landfill gas at the Hillsborough Heights Landfill in Tampa
- Awarded over 415 million in contracts and grants over the past 10 years.