



UNIVERSITY OF CENTRAL FLORIDA
COLLEGE OF ENGINEERING
& COMPUTER SCIENCE



Progress Energy

***UCF - PROGRESS ENERGY
SENIOR DESIGN IN RENEWABLE &
SUSTAINABLE ENERGY
UCF COLLEGE OF ENGINEERING AND COMPUTER SCIENCE***

Monday, April 27th, 11:00 a.m. — 3:00 p.m.

Location: Student Union—Pegasus Ballroom (1st floor)

Free Parking with permit in Garage A — e-mail mmae-dept@mail.ucf.edu for permit.

You are cordially invited to join UCF College of Engineering & Computer Science undergraduate students showcasing their innovation, research and talent in Renewable & Sustainable Energy at the Progress Energy Senior Design Inaugural Symposium. The event is free and open to the public.

(407) 823-2416 - www.cecs.ucf.edu & campusmap.ucf.edu/flash/index.php

Presentations and exhibits include:

- Wind Turbine Electric Power Generation (MMAE)
- Wind Power Generation System (EECS)
- Low Power Wind Turbine Energy Maximizer (EECS)
- Reversible Hydrogen Fuel Cell (MMAE)
- Hybrid Electric Golf Cart Teams #1 & #2 (MMAE)
- ASHRAE - Competition Design & Selection (MMAE)
- UCF Shuttle Bus ridership tracking (MMAE)
- Power Allocation Management for Seminole Country Environmental Services (SCES) (IEMS)
- DynaLite - home LED based lighting (EECS)
- Coconut Processing for Biodiesel (MMAE)
- Biodiesel 9000 (EECS)
- E.E. Byke - Exercise Bicycle (EECS)
- Remote Controlled Jet Engine (MMAE)
- ...and other renewable & sustainable Sr. Design Projects

Engineering Talent for The Next Wave in Renewable & Sustainable Energy: The UCF Commitment

In keeping with university mission and commitments, the **UCF – Progress Energy Senior Design Challenge** is focused on developing socially conscious engineering projects in **Renewable & Sustainable Energy**. UCF President John Hitt is a member of the American College & University Presidents Climate Commitment leadership circle. As an important initiative, UCF has adopted the U.S. Green Building Councils Leadership in Energy and Environmental Design standards for buildings that are new or undergoing renovations.

During their senior year, **UCF College of Engineering & CS engineering students** bridge the gap between academic experience and professional experience by participating in year-long design projects that involve **Renewable & Sustainable Energy**. Along with their faculty advisors, engineering students work to develop innovative product proposals, conduct the design analysis, design and build a prototype, prepare engineering reports, and present at the **Progress Energy Senior Design Symposium**. Besides showcasing engineering innovation and talent development for the next wave of UCF engineers in the Clean Energy Sector, results include invaluable experiences in leadership and teamwork building.

Corporate Sponsor: Progress Energy. Contributing Sponsors: UCF Facilities—Dept. of Sustainability & Energy Mgt., ASHRAE, and Siemens Energy.