

Florida Advanced Technological Education Center (FLATE)
Education - Technician Based Workforce
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Florida Advanced Technological Education Center (FLATE), By Dr. Marilyn Barger

Florida Advanced Technological Education (FLATE): The development of the process for the Florida State College System to respond to FESC's long term strategy to bring energy related technologies out of the Florida University System is well underway. FLATE has the college contacts and processes in place to respond to any FESC and/or regional economic development authority request to provide assistance to a designated State College. These requests can be focused on the technician workforce development need as identified or triggered by industrial partners, FESC university partners or from expanding energy-related companies' operations in the State.

Since October 1, 2011 FLATE has achieved several milestones. Together with the National Science Foundation-funded Energy Systems Technology Technicians (EST²) project team, FLATE has been developing a new Industrial Energy Efficiency specialization for the Engineering Technology (ET) Degree and associated College Credit Certificate. Experts from industry, government, and academia have been instrumental in ensuring that the new specialization is directly aligned with current industry needs. The specialization's first draft is now complete and the framework will be submitted to the Florida Department of Education in the late 2012 so colleges can implement it in the 2013-2014 academic year.

In March, a short survey was administered to gather data to ensure the new framework is comprehensive and covers all areas necessary to produce the skilled workforce needed in this area. In addition, it provided an opportunity to identify individuals interested in collaborating to work on the new curriculum framework. Occupations respondents intend to train students for, included Energy Technicians, Environmental Technicians, Sustainability Planners, Smart Grid Technicians, Energy Auditors and any generally all individuals involved in developing and implementing Energy Management Programs for their company. The vast majority of respondents were very interested in collaborating to craft the new curriculum framework.

The Industrial Energy Efficiency specialization track comes at a time when interest in reducing operating costs through energy efficiency maximization is growing significantly both in Florida and throughout the nation. The new specialization is designed to provide the training necessary to teach manufacturing, industrial, and other appropriate technicians, such as HVAC technicians or electricians, to save energy costs on the plant floor. Upon completion of the program students will be armed with the knowledge and skills necessary to implement energy efficiency strategies in industrial processes/systems, and as a result impact the bottom line.

In September 2011, FLATE and FESC sponsored an energy workshop for high school and college educators at the Center for Innovation and Economic Development at Santa Fe College in Gainesville, FL. Following the success of last year's event, FLATE will be coordinating a second workshop held at the Florida Solar Energy Center in Cocoa in February or March of 2013. Finally, FLATE regularly updates and presents information about energy curricula and training issues at the statewide Florida Engineering Technology Forum that meets twice per year at various colleges across the state.

FESC has made significant progress in its research, education, industrial collaboration, and technology commercialization agenda. FESC faculty members statewide are successfully collaborating in research and

proposal development. Our responses to Energy Storage Innovation HUB and the Joint Clean Energy Research and Development Center (JCERDC) in biomass grants are some of the examples of major multi-university, industry partnerships. One of our FESC-funded UF faculty was the PI for the JCERDC grant application and received US DOE award to form a joint US-India consortia. In addition, FESC education programs are being readied for Florida's clean energy workforce, and our industry partners are actively participating in technology transfer and commercialization of FESC-developed technologies.