Internationalizing an Industrial Energy Management Course

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Abstract

For a number of years internationalizing the curriculum at the University of Florida (UF) has been an area of great interest. The College of Engineering (COE) at UF is currently exploring and investing on it. In this work we discuss the recent experience on internationalizing the curriculum in the COE, particularly in the Department of Industrial and Systems Engineering (ISE). Two new avenues that relate to a course in Industrial Energy Management (IEM) are discussed. The first approach was to give an international component to the IEM course through a module that showed to the student energy audits performed to industries in Chile and Ecuador. These case studies were done through a grant from the president of the University of Florida. The second instance has been the creation of a new course: International Industrial Energy Consulting. This course, framed as an study abroad one, focuses in Latin America's economy, climate, and energy usage patterns in particular, all narrowed down to Chile. In the middle of the semester, and for 2 weeks, the students are taken to Santiago-Chile to perform 2 industrial energy assessments (i.e., industrial energy consulting). The students experience, implications and consequences of these two programs are discussed in this work. The impact perceived by the students as an international learning experience in their field is also addressed. Finally, the generation of new programs at the undergraduate and graduate levels in IEM at the University of Florida College of Engineering, influenced by these international approaches, are discussed.