

# Iberian Partnership for Technician Excellence

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## Overview

Study abroad programs are common within the 4-year bachelor degree programs in the United States but such program opportunities are not often available to students enrolled in 2-year Associate of Science (A.S.) degree programs. The Florida Advanced Technological Education Center of Excellence-FLATE, as Florida's National Science Foundation Center of Excellence for Advanced Technological Education, is aware of this situation and recognizes the importance for faculty and students to keep current with advances in their technology and manufacturing and the importance to expand their expertise. As a result FLATE together with TKNIKA, an innovation institute for vocational training established by the Vice Ministry of Education of the Basque government, developed the "Iberian Partnership for Technician Excellence" project.

This is an international educational exchange program in the two year A.S. degree in engineering technology and is one of eight NSF OISE pilot projects awarded to NSF Advanced Technological Education (ATE) Centers, to support high educational experience to community college students.

This paper summarizes the construction and development of the "Iberian Partnership for Technician Excellence" program, with a focus on the lessons learned from faculty and students experiences in creating a capstone course in a vocational college of Spain.



## Phase 1 - Exploratory

### Mentors' trip

- 7 Mentors-AS Florida ET Colleges and industry visited the Basque region of Spain and worked together with the host institution TKNIKA to develop the course
- Special Topics in Modern Manufacturing
- July 9 – 16, 2012



From top left to right:  
 M. Ennis (Harris GCSD)  
 Dr. R. Gilbert, (University of South Florida)  
 Dr. A. Anzalone (Hillsborough Community College)  
 M. Almeer (Brevard Community College)  
 Dr. M. Barger (Florida Advanced Tech. Ed. Center)  
 A. "Gould-Chequerette" (State College of Florida)  
 D. Orozco (Florida Advanced Tech. Ed. Center)

## Phase 2 - Technical Training

Student Training at Hillsborough Community College, U.S.A. and IEFPS USURBIL GBLHI, Spain

- Course: Special Topics in Modern Manufacturing, ETI 1931
- Students Enrolled in 3 credit hour course @ HCC
- 8 Students-Second year AS ET from 4 Florida colleges
- Age range: 20's – 50's
- Working students: 2 FT and 6 PT
- 7 Mentors-AS Florida ET Colleges
- Three week training in Spain: May 12 – June 02, 2012
- Daily journal required



## Training Schedule



ET Students, from left to right:

- Brevard Community** : J. Merrill, K. Andino, T. Moehler and K. Hannan  
**State College of Florida:** A. Sink  
**Polk State College:** A. Mahamed  
**Hillsborough Community:** B. Bellamy

WK 1	Mon	Tues	Wed	Thur	Fri
9-10 am		Spanish			
10-11 am	Welcome	Biomass	Solar Thermal	Biomass	Solar Thermal
11-12	Solar Thermal				
12-1 pm	Solar Thermal				Biomass
1-2 pm	Break for lunch				
2-4 pm	Automated Controls Systems				

WK 2	Mon	Tues	Wed	Thur	Fri
9-10 am		Spanish			
10-1 pm	Site visits: TKNIKA	Photovoltaic			Site visits: Hydraulic Energy WWTP-Biomass Energy System
1-2 pm	ALECOPI	Break for lunch			
2-4 pm	MCC	Automatic Syst.	Hydraulic Energy	Hydraulic Energy	

WK 3	Mon	Tues	Wed	Thur	Fri
9-11 am	Photovoltaic			Final presentations & Closure	Site visits
11-1 pm	Solar Thermal				
1-2 pm	Break for lunch				
2-4 pm	Final Project				



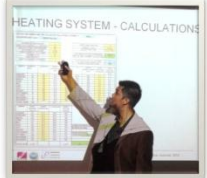
# Here's what they say.....



"...I consider myself to be a more well-rounded person after having completed this overseas training. ...The academic knowledge I gained was first-class, and the cultural knowledge was something that I don't think I could have ever gotten to experience on my own."  
*Andrew Suck*



"...It has been a priceless experience that cannot be duplicated. This opportunity was not only very educational academically but in all forms and very insightful. Thank you for giving this opportunity...I hope this is just the beginning...as many futures will be paved by it."  
*Ahmad Mahamed*



"... This trip has left me with many interesting learning experiences: How the school and businesses work together to build a stronger community. ...A much better understanding of the Spanish culture. I never understood how different the various Spanish cultures ( Mexico, Spain etc.)"  
*Merrill Jim*



"... This has been a great experience. With the learning from this experience I will ...Improve my career and job opportunities... -Appreciate and respect more cultural differences."  
*Kelly Andino*



"...I will encourage a more hands-on approach in my studies. I will seek to apply and spread more alternative energies back home. Thank You! To the mentors, for making this trip happen To our instructors, for your patience guidance and time To the students, for sharing this experience and making it a great trip."  
*Kian Hannan*



## Phase 3 - Evaluation

### Lessons learned and benchmarking of outcomes

- Metric system immersed at commercial and professional level.
- Different but equally effective work schedule.
- Common mission (TKNIKA/FLATE): Both Centers work with regional industry to advocate/ advance incumbent skills-set certifications.
- Both centers service OEM manufacturing infrastructure with increased equipment automation requirements.
- Expanded appreciation for cultural similarities and differences.
- Opportunity to create cooperative system as an economically and socially viable way to support both centers' manufacturing community.
- Unique/delicious Basque diet with interesting dining hours.



### For further information contact:

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