

Engineering Technology Forum

April 23-24, 2009

St. Petersburg College

General Summary

The 22nd Engineering Technology Forum was hosted by St. Petersburg College at the Clearwater Campus. Representatives from fourteen community colleges, the Department of Education, two state universities, and local industry attended this year's spring Forum. Stan Vittetoe, Provost and Vice President, welcomed the participants to the college with Brad Jenkins providing the overview and agenda of the Forum.

With the theme of this Forum, Technology Innovations, one of the main action items for the participants of the Engineering Technology Forum was the final review and recommendations related to the Engineering Technology Taxonomy and course prefixes.

Brad Jenkins opened the Thursday morning session with a review of the Taxonomy and prefixes that was discussed at the fall ET Forum at Seminole Community College.

The Forum participants agreed on having one common discipline called Engineering Technologies with all the prefixes under this discipline. In this configuration all prefixes used in the engineering technology programs would be under this discipline area. The definition for each prefix was also discussed and changed to reflect readability and consistency within the definition and brought up to date with what those prefixes actually mean for the courses under that prefix.

The major changes in course prefixes include ETE – Engineering Technologies: Electronics, (from EET) and ETS - Engineering Technologies: Specialty (from EST). All the prefixes, except for CET, are now ET followed by the letter in the area of specialization for the consistency. A cover letter explaining the changes and recommendations will be sent to the SCNS for further action.

Other prefix factors discussed included providing for additional decades related to the newer courses now developed in the power plant technology, alternative energy, and biomedical technologies. The Forum participants decided not to include any new prefixes as there are enough prefixes available to add these new courses in the ETE and EST areas.

Ed Niespodziany, from Central Florida Community College, provided an update on his Power Plant Technology program in response to the building of the nuclear power plant with Florida Progress. He also mentioned Nuclear Uniform Curriculum Summit that was held earlier in the week regarding the curriculum development and the role that community colleges should play in developing the future nuclear workforce.

Wael Yousif, from Valencia Community College, gave a presentation on their Cyber Security Education and Digital Forensics NSF project grant. His presentation covered cybercrime, stolen identities, computer espionage, as well as the career paths.

After lunch, a tour of the Engineering Technology & Building Arts facilities and labs was conducted by Brad Jenkins and the faculty in each area.

The afternoon session included presentations from Dan Rodriguez, Keith Simpson, and Ed Clayson from Lab Volt Systems, concerning their new products on the alternative and renewable energy. Mike Leary and Jim Baggett, from Technical Training Aids, discussed the new AutoCAD packages and the new Autodesk software contract requirements.

Eric Roe, Director of FLATE, updated the forum on the A.S. degree in Engineering Technology with the new specialties. A map of the state was shown indicating that 5 community colleges have now implemented the degree with additional 5 community colleges planning to adopt this degree in 2009. There will be some new engineering technology specializations being offered this fall in Biomedical Systems, at St. Petersburg College (SPC), and in Computer Aided Design and Drafting (CADD), at SPC and Manatee Community College (MCC). Two additional specialties developed later this year include Power Operations and Energy Systems. Meer Almeer from Brevard CC also mentioned his new Composite Certificate will be available under the Manufacturing Specialty. Eric Owens, from DOE, remarked that the Engineering Technology degree has one CIP number and as the students complete this degree in a specialty, they cannot receive another ET degree, only additional specialties. He also said that with all the new program development on alternative energy that this may call for a new degree separate from the ET degree.

Eric Roe also provided information about the Automation and Production Technology (APT) certificate that concentrates on automation and robotics. The program frameworks are aligned with the MSSC CPT certification and 4 technical centers have adopted this new program. He updated the Forum on the Made in Florida Campaign as it related to the Lego Mindstorms summer robotic camps and remarked that the Florida Trend NEXT magazine Advertorial for 2009 will be only page this year, with a distribution to all high schools in Florida of approximately 720,000 copies. The FLATE professional development activities were also provided through a handout to the Forum.

Ed Niespodziany was recognized as the winner of the Manufacturing Post Secondary Educator of the Year. Ed was awarded this FLATE Manufacturing Award at the Manufacturing Summit in Jacksonville on November 4.

Regarding grants and other projects, Lenny Portelli, Seminole CC, provided information on an NSF three year research grant to bring technology related courses to the classroom for 9th grade girls. Brad Jenkins informed the Forum that the NSF Medical Devices Industry Education Consortium (MDIEC) project at SPC would seek status as a NSF National Center for Medical Devices. The preliminary grant proposal was completed and sent to NSF. Eric presented the statewide update on the status of the Banner Centers and what some of the changes are for those centers. Eric is also the Principle Investigator for a three-year \$500,000 U.S. Department of Labor Grant that will provide training for skilled workers in the advanced manufacturing industry. Idelia Phillips, from Manatee CC, mentioned that they will have a GIS Summer Camp for minority girls this summer and that she is looking for some extra equipment for this activity.

Eric Owens, the Florida Supervisor of Industrial Education, provided information on a number of state projects including the Gold Standard Career Pathway. He also mentioned that there are 19 industry certifications being considered by the state for articulation into programs with the MSSC certificate being used as a model for these.

The Friday morning session began with an industry round table panel that included members of the SPC Engineering Technology Advisory Committee: Ken Conforti, Manufacturing Manager at Raytheon; Tina Brudnicki, Manager, Southeast Region for SME; David Reese, Engineering Instructor, Hillsborough County School, along with other industry representatives; Tom Lewis, Senior Manufacturing Engineering Manager, ConMed Linvatec, and Don Patz, Patz Technical Services. They discussed general job requirements, including employability skills that graduates should have when applying for technical positions. The discussion included the importance of internships and CO-OP opportunities. Greg Lewis, AutoCAD instructor, SPC, remarked that he is looking to get his students the CO-OP experience and asked for some help in that area. This brought some additional comments and suggestions from both the industry participants as well as the educators. Ken Conforti suggested that the Career Resource Centers at the colleges might be used to enhance CO-OP with the local industries. Also the suggestion that the instructors reach out to the industry to let them know what skills the students could bring to industry was well received.

The university articulation included presentation from Jo Anne Larson, Director Arts and Sciences, USF Polytechnic in Lakeland, who provided information on the new BSAS degree with the concentration in Industrial Operations. She also mentioned that the BAS is accepted into graduate management programs at USF.

Additional Forum discussion on the issues centered high school initiatives related to enrollment and recruitment, the role of counseling in technology programs, workshops for high school teachers, college night activities, open house activities to involve counselors, articulation issues, class size, industry involvement, and enrollment trends around the state.

The next Forum has been scheduled for September, 2009 at a college to be determined at a later date.

A special thanks to Chip Hill, representative of Goodheart-Willcox for providing the refreshments at the breaks.

Following the adjournment of the Forum at 12:00PM, the FL-ATE Manufacturing Technology Workshop, Mechanical Measurement Techniques” was held in the afternoon in the Quality Lab, conducted by Alex Fernandez, SPC, under the direction of Marilyn Barger, the Executive Director of FLATE.

Respectfully submitted,

Brad Jenkins
St. Petersburg College
Chairman ET Forum