FLORIDA ADVANCED TECHNOLOGICAL EDUCATION CENTER

# FLATE FOCUS

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## ADDITIONAL POINTS OF INTEREST



## Fifth Annual Manufacturers' Summit

### Tools and Strategies for Florida's Manufacturing Future

Maf's fifth annual manufacturers' summit will serve as an avenue for diverse manufacturers to exchange views and concerns regarding the state of manufacturing throughout Florida. It will feature key topics pertinent to Florida manufacturers, and offer strategies to address current and future challenges faced by manufacturers across all sectors.

The focal points of the summit will be on workforce issues, green manufacturing, productivity, and lean manufacturing. The sessions are designed to facilitate an open dialogue between manufacturers, industry leaders and educators, and will offer a platform to discuss key issues and share best-practice solutions on topics confronting modern manufacturing.

During the summit, Dr. Eric Roe, director of FLATE will be facilitating and moderating one of the workforce sessions. The session will emphasize the importance of implementing tools designed to assist manufacturers in meeting workforce requirements of the future. To that effect, Dr. Roe will highlight FLATE's multi-lateral efforts in promoting the importance of workforce development/ education needs from a statewide perspective through various partner activities such as the TRDA teacher quest program, Banner Center initiative, and industry tours.

Other sessions will center on manufacturers' initiatives for sustainable workforce where manufacturers share their vision, initiatives and successes in building a quality workforce; a look at manufacturing by each region and local manufacturers' associations contributions in celebrating Florida manufacturers week. Attendees will also discuss strategies for managing today's workforce, controlling costs, green manufacturing, and its central role in manufacturing operations.

Novel to this year's summit, attendees will identify top three challenges currently faced by manufacturers on the first day of the summit, and formulate a plan targeted to effectively address those challenges in the next three years. Highlights and key findings of the discussion will be presented on the final day of the summit during the closing banquet.

FLATE will also be presenting the Industry and Professional service awards during the president's banquet. The awards recognize outstanding educators, students, and industry members who have made significant contribution to the training and education of today's technology workforce. For more information contact Dr. Eric Roe at 813.259.6579, or visit www.fl-ate.org or www.mafmfg.com.

## What's Made in Florida? You'd be Surprised!

FLATE has created three public service announcements in conjunction with regional manufacturers' associations throughout Florida. The common theme behind this statewide campaign is: "What's Made in Florida..you'd be Surprised!"

The PSA's highlight three aspects of Florida manufacturing. The first focuses on Florida's diverse manufacturers. The second highlights the economic impact, and the third centers on educational and career pathways in manufacturing.

The PSA's are designed to recognize the contributions made by more than 16,000 manufacturers across the state, and will air on regional television stations during Florida Manufacturers week, from November 3-7. For more information visit www.madeinflorida.org.

# From the Executive Director's Desk

Dr. Marilyn Barger
Executive Director

We received our original support for our National Science Foundation Regional Center for Advanced Technological Education in 2004. We would be able to apply for sequential funding 3 years later if we meet NSF's expectations as related to the goals and objectives stated in the initial grant proposal. Last year, we were invited to submit that subsequent grant request and after a complete review by NSF, FLATE received a $2.7 million renewal grant for 3 additional years of operation.

Elements of FLATE that NSF thought are models for other ATE Centers nationwide included our "Made in Florida" campaign. This effort lead by FLATE's Director, Dr. Eric Roe, was highlighted as an "impressive program that has statewide student awareness impact". In addition, the systemic effort to unify Florida's two year college technology-based degrees was cited as one of the main reasons for continued NSF support.

Our successes during our first grant cycle are due to the wonderful people that help us, and the terrific partnerships that have been formed. However, the actual key to our success rests in our collective vision of making Florida a leader in technical workforce education being shared by all.

Creating a competitive proposal that will support a $2.7 million grant request is a complex task. We are proud of our team and obviously pleased with the results of our efforts. As we prepared our renewal proposal, and despite our demanding schedules, there was also a reflective period that allowed FLATE's leadership team to craft a vision statement. As FLATE begins this new phase, we want our partners to understand how important you are to our success, and hope you will continue to help us with our mission to make this vision a reality.

"FLATE will be Florida's leading resource for education and training expertise, leadership, projects, and services to promote and support the workforce in the high performance production and manufacturing community."

In this edition of our newsletter you will find a story highlighting our 2008 industry and educator award winners. We also provide an update on our progress to streamline the state technical course numbering system, and our partners' contributions in serving the needs of engineering and manufacturing technology educators.

Finally, the front page of this issue features activities during Florida Manufacturing Week (Nov 3-7) including the MAF Annual Summit. I hope you enjoy our newsletter. If you have information to share, send us an email to news@fl-ate.org.

## EVENTS CALENDAR

10/29-31: NSF ATE PI Conference. (Washington D.C.)

11/3-7: Florida Manufacturers Week.

11/5-6: MAF Summit. (Jacksonville)

11/19-21: Great American Teach-in. (Tampa)

11/25: One day Lean Green Workshop. ( Tampa )

12/4-5: ACTE Career Tech Expo. (Charlotte, NC)

1/29-30/09 FLATE NVC Meeting. (Bradenton)

2/4-6/09 Conference for Industry, Educator Collaboration. (Orlando)

### Industry Tour Calendar
(November-December)

**11/4:** Rock Lake MS to Featherlite Coaches.

**11/12:** North Port HS to PGT Industries.

**12/10:** Riverview HS to Polypack

# Hillsborough Community College

**A Strategic partner in adopting the engineering technology degree**

Hillsborough Community College (HCC) in Tampa, a key supporter in advancing FLATE's missions, is the most recent college in Florida to adopt the Engineering Technology Degree, with specialization in Advanced Manufacturing. HCC's Academic Affairs Committee recently approved the A.A.S/A.S degree in Engineering Technology, and is poised to offer the degree in spring 2009.

Sabrina Peacock, dean of business and technologies at HCC-Brandon says: *"As the requirement has grown for highly trained technicians in numerous manufacturing-related fields important to the Florida economy, these new training programs will provide students and incumbent workers with the academic preparation to meet those needs."* HCC will also offer four College Credit Certificates designed to advance technical expertise in: Engineering Technology Support; Automation; Lean Manufacturing, and Pneumatics, Hydraulics, and Motors for Manufacturing.


Additionally, the core courses of the degree are part of a comprehensive program that aligns with the national Manufacturing Skill Standards Council Certified Production Technician certification, and articulates to B.A.S., B.S.A.S. and B.S.E.T degrees.

For more information or to learn about other colleges that have already adopted the ET degree as part of their curriculum, visit www.madeinflorida.org/ET_degree, or contact Dr. Marilyn Barger at 813.259.6578.

## INSIDE FLATE

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## Applied Technology Graduates at Brevard Community College

Over 20 employees from Harris Corporation earned the applied technology support specialist certificate at Brevard Community College this summer.

Meer Almeer, professor of engineering technology at Brevard Community College says *"This certificate prepares students for entry-level positions in manufacturing, it helps them troubleshoot and will make them more valuable to their employers."*

For more information visit **www.madeinflorida.org/ET_Degree**

# Snapshot of FLATE Awardees

**Gil Burlew** is the recipient of the 2008 Manufacturing Secondary Educator-of-the-year award. Burlew is an engineering instructor at Braden River High School, and has been teaching engineering for more than 29 years.

As the head of the engineering academy at Braden River High School, Burlew started the manufacturing enterprise targeted to train students on every aspect of the production line. He is a strong proponent of FLATE's initiatives, and credits FLATE's industry tours in giving students a "peek into a giant window of opportunities".

> "There is an avenue out there that is still untouched and manufacturing is no longer the sweat-shop environment".

Burlew says the best way to attract students to manufacturing is to expose them to the world of high-tech manufacturing. He is a hands-on, minds-on person who believes in hard work. "Each of us has the power to change what we don't like and anything good is worth working for ." Morevoer, he was named Florida education technology teacher of the year, as well as the vocational technology education association teacher of the year.

**Ed Niespodziany,** Ph.D. is the recipient of the 2008 Manufacturing Post-Secondary-Educator-of-the-year award. Niespodziany says his interest in "making things" started when he was in high school in Buffalo, NY. He grew up at a time when technology was, as he describes "primitive", but by the time he graduated from high school, Niespodziany had already operated lathes CNC milling machines, wired houses, and installed telephone systems.

Today, he is an Engineering Technology professor at Central Florida Community College, in Ocala. He is the program facilitator for the new A.S. degree in Engineering Technology with an emphasis in Quality, and commends CFCC for taking a leading role in adopting the FLATE-created statewide engineering technology degree, and the MSSC certification.

Niespodziany says knowledge and skill are centerpieces of today's high-tech manufacturing. He says the best way to promote STEM education is to "make learning fun," and post-secondary level education is a time for students to mature into responsible adults. He advises his students to treat this experience as work, not school. The best way to do that is to "show up every day, show up on time, and to show that you know something."


**Anthony Fedd** has been a relentless supporter in promoting career and technology education in Florida. He is recipient of the FLATE Industry Distinguished Service award, a strong advocate for promoting Florida's manufacturing industry, and a champion of FLATE's diverse initiatives.

Fedd has an impressive degree of experience, and an array of decorated credentials. He is the site manager for the Quincy Attapulgus Operations of BASF Corporation. He was also the former Chairperson of the Workforce & Education Committee of the Manufacturers Association of Florida (MAF), the chairperson for the Industry Sector Committee and member of the region's Workforce Plus Board of Directors and works closely with the Florida Minerals and Chemistry Council (FMCC).

Fedd says the strength of Florida's manufacturing industry lies in its diversity, and in the academic institutions that have played an integral role in addressing its workforce needs. Against the backdrop of mounting global competition, Fedd advises manufacturers to invest in a skilled workforce, manage operating costs efficiently, and to take advantage of technology in improving and creating new products, services and solutions.

As a leading voice in Florida's manufacturing arena, he underlines the importance of applying automation (material handling and robotics) and advanced manufacturing practices (lean and six sigma) to lower costs in all manufacturing operations. He says, "The outreach to students, teachers and parents through the "made in Florida" website, videos and printed articles provides pertinent career information and encourages further interest." For more information visit www.fl-ate.org/awards.

> The Made in Florida campaign is "one of the most successful models" in promoting careers/ education in manufacturing, and in defining the importance of manufacturing to the local and state economy.

# The 21st Engineering Technology Forum

**Facilitating effective changes to the statewide course numbering system**



The 21st Engineering Technology Forum was a fertile venue for educators to exchange ideas, discuss issues/policy updates, and review technical curriculum frameworks pertaining to the engineering technology degree. Advancing Technology Changes—the theme behind this fall's forum—served as a focal point in addressing changes needed to meet current industry standards and in embracing changes in technology.

Central to this meeting's efforts were two important tasks associated with the state common course numbering system (SCNS). In a special ongoing effort since early 2008, the division in the department of education that oversees courses/course numbers began a comprehensive look at several discipline areas, including engineering technology. The objective of the project is to move courses to discipline areas that better define them; consolidate redundant courses, review and update discipline area descriptions / definitions, and reorganize what discipline areas are subsets of another.

ET forum attendees have hands-on experience with Fanuc Robots.

Matthew Keelan, assistant administrator for the office of articulation at the Florida department of education (DOE), addressed the Forum eliciting help from the group after providing background on how the system works at the state level. Keelan focused on several issues concerning the EET/CET (electrical engineering technology /computer engineering technology) numbers, and what discipline(s) should have ownership of those courses.

Forum members worked diligently to develop a new definition for a new century level discipline area in engineering technology. Under this definition "courses associated with applied engineering focused on the practical aspects of the specific technical disciplines preparing students to do one or more of the following: analyze, assemble, design, fabricate, install, operate, troubleshoot, maintain, and manage engineering and related systems." Under this discipline will be housed the: CET, EET, EST, ETC, ETE, EIT, ETM, ETD, taxonomies.The Forum also recommended energy-related courses, biotechnology and medical technologies courses to be developed under engineering technology.

On a similar token, DOE's workforce education division is engaged in a parallel effort to closely review the contents of the curriculum frameworks in all 16 career clusters. The effort is targeted to ensure the frameworks are up-to-date, meet industry needs, align with certifications, and are housed in appropriate clusters. FLATE's work last year in developing the new ET A.S. degree was one impetus for all of this reform activity at the state level, and it continues to play an important role in the review processes.

The next Forum has been scheduled for April 9-10, 2009 at St. Petersburg College. For more information visit www.fl-ate.org/partners/et_forum.htm or contact Brad Jenkins at jenkinsb@spcollege.edu.

# NCME's online materials and information resource centers

Many resources exist to assist engineering technology educators in creating effective curricula, courses, and learning activities. Since 2005, two online searchable databases have played an integral role in serving the needs of engineering and manufacturing technology educators. These databases serve as a central point for gaining high quality materials, and aim at improving class and lab activities.

The National Center for Manufacturing Education (NCME) is a NSF resource center that expands and facilitates growth of these opportunities. It is dedicated to identifying, evaluating, collecting, and disseminating exemplary materials in manufacturing and engineering technology education. The Center offers a variety of services including consultation in implementing novel curriculum materials; hosting webinars and operating a clearing house of materials for manufacturing education. The website also features several interviews with personnel from manufacturing companies, showcasing what employers are looking for, and what educators can do to bridge the gap between educational and industry needs.

One of NCME's most recent company interview features Carla DeFrank. DeFrank is a human resources manager with Masco Builder Cabinet Group Ocala Merillat Plant, one of FLATE's industry partners. She stresses the importance of team work, good time management and interpersonal skills in today's new hire. *"We look for proven history of working in a team environment, good time management and the ability to accept changes constantly. Those that are promoted, move on to specialized training and coursework provided by Central Florida Community College."* DeFrank also encourages educators to "treat school as students' first exposure to the job environment" and enforce "traditional workplace requirements such as being to work/school on time."

NCME also has conducted interviews with additional FLATE's partners. You can read an interview with Todd Gladden, training manager at Linvatec in St. Petersburg, and learn about upcoming interviews with BioDerm located in Largo, FL, and .decimal located in Sanford, FL. For information visit www.merconline.net/company_interviews, or contact Sandy Feola at sandra.feola@sinclair.edu.

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