



# FLATE FOCUS

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## New Statewide Articulation Agreement in Engineering Technology: A Path to Broader Opportunities

A FLATE-led initiative to create a statewide Engineering Technology(ET) degree program has met with another tremendous success. Florida's Department of Education recently approved the implementation of a statewide articulation agreement for the new ET degree. This agreement awards 15 credit hours of the A.S./A.A.S. Engineering Technology degree core for the Manufacturing Skill Standards Council's (MSSC) Certified Production Technician (CPT) certification.

This articulation was made possible through the structure of the new ET degree. The degree consists of a common technical core followed by one of five specialization tracks in: advanced manufacturing, quality, mechanical design & fabrication, electronics, or advanced technology.

The common core curriculum of the degree aligns with the national MSSC CPT credential and four assessment areas : safety, quality practices and measurements, manufacturing processes and production, and maintenance awareness. This creates an opportunity for certification holders from high school career academies or CTE programs, technical schools and incumbent workers to gain college credit for their acknowledged competencies.

The ET degree program is now being offered at Brevard Community College, Central Florida Community College, Pensacola Junior College, and St. Petersburg College. Several other community colleges are poised to adopt, in 2008, the ET degree with its MSSC-aligned technical core.

For more information please visit: [www.madeinflorida.org/ET\\_Degree](http://www.madeinflorida.org/ET_Degree) or contact the Flate staff at [flate@fl-ate.org](mailto:flate@fl-ate.org).

## Presenting a Unified Voice

In addition to laying the groundwork for a statewide articulation agreement, FLATE has developed a comprehensive set of marketing materials targeted at raising awareness about the engineering technology program.

Both print and online

promotional materials, comprising of inserts, posters, web-based banner ads are available for each of the colleges that have, or are in, the process of adopt-

ing the degree program.

For information visit:  
[www.madeinflorida.org/ET\\_Degree](http://www.madeinflorida.org/ET_Degree)

## From the Executive Director's Desk



Dr. Marilyn Barger  
Executive Director

### EVENTS CALENDAR

5/27-30: 16th Annual Sterling Conference.  
(Orlando, FL)

6/3-5: Next Generation Showcase: Toothpick Factory Workshop.  
(Hartford, CT)

6/22-25: American Society for Engineering Education Conference.  
(Pittsburgh, PA)

07/14-18: FLATE/HCC LEGO Robotics Summer Camp  
(Brandon, FL)

07/22-25: 42nd Annual FACTE Conference and Trade Show  
(Ponte Vedra Beach, FL)

07/28-31: SAME-TEC Conference  
(Austin, TX)

As we move closer to the start of our second round of NSF funding, FLATE's leadership team has been working closely with NSF-ATE to refine our objectives. We remain committed to meeting our vision to place FLATE as "Florida's leading resource for expertise in relevant workforce education and training, and in promoting current and future high performance production."

The NSF staff identified, during the renewal process, numerous exemplary aspects of intellectual merit and provided the following comments about our first 3 years: "The principal investigators are highly qualified to lead this activity and are supported by many partners. The proposed activities clearly build on and expand the scope of the original regional center award. The new work plan is robust and clearly builds on what has been accomplished with the first award. The development of an engineering technology core with numerous specializations and common expectations and numbering across many community colleges in the state is truly transformational. One of the strongest features is the new curriculum process and framework approved by the Florida Department of Education (FLDOE) for the A.S./A.A.S. Engineering Technology degree...FLATE has positioned itself in a strong advisory role with FLDOE as a result of the curriculum convergence and con-

rol of redundant courses. Additionally, funding from the first grant have been well used to provide good outreach, partnership and curriculum development, support in the state in community colleges... and other stakeholders. There is a very good plan to build on those efforts and move towards more implementation in the current grant."

Under broader impacts: "Reviewers and NSF agree that the potential for broader impact is huge... There is broad outreach throughout the region with support from partner colleges, the K-12 school districts, and very strong support within the business community, state and regional manufacturing communities. The "Made in Florida" campaign has been branded and has broadly promoted manufacturing. The statewide articulation of 15 credits of high school work to college is commendable as is the fact that the MSSC certification will provide additional evidence of student knowledge and skills before students are awarded college credit."

As we move forward, it is time to pause and thank all of you for the roles you have played in helping us meet our objectives. Your support has made a tremendous impact in positioning manufacturing and the related technical education system as a valuable asset for Florida's high-tech workforce, and the envy of the nation.

## In the Spotlight: Campus President at HCC-Brandon

Community colleges play an integral role in addressing and supporting the educational and workforce needs of the community. Hillsborough Community College (HCC) at Brandon is no exception. Dr. Carlos Soto—campus president for HCC-Brandon for the past nine years—has an overarching vision to position the institution as a center for academic excellence throughout the greater Tampa Bay region.

Soto is responsible for overseeing a

wide range of operations that include teacher preparation programs, curriculum development, management of day-to-day operations, and engaging in community development initiatives targeted to augmenting the college's mission. Additionally, he is actively involved in monitoring other grant-funded projects such as CASS (Cooperative Association States for Scholarships, C-STEP (Computer Science Transfer Programs) and the Employ Florida Banner Center for (Continued on page 4)



Dr. Carlos Soto  
President, HCC Brandon

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**Flater's Space on MySpace**



Join FLATER and his friends on MySpace. Be sure to check out his NEW podcast on the Engineering Technology degree

[www.myspace.com/floridaflater](http://www.myspace.com/floridaflater)

**Trio of Competitions**

FLATE has organized and facilitated a spectrum of competitions in the past few months. Most recently, FLATE partnered with Tropicana to host the Florida SkillsUSA manufacturing championships.

The two-day competition had teams from many schools throughout Florida competing for the opportunity to go to Kansas City for a national championship title. The event represented a coalition of effort between students, teachers, and industry working to ensure America has a skilled workforce.

Dr. Eric Roe, FLATE Director, helped evaluate contestants on various aspects of high-tech modern manufacturing operations that centered on two computer-aided simulations: “Automated Manufacturing Technology” and “Robotics and Automation Technology.”

The “automated manufacturing technology” event evaluated teams on their use of computer-aided drafting/design, computer-aided manufacturing, and computer numerical controlled machining. Likewise, the “robotics and automation technology” event evaluated teams on modern control systems. Participants were also evaluated on efficiency, speed and teamwork.

The winner of the “automated manufacturing technology” and the “robotics and automation technology” in the secondary level was Treasure Coast High School in Port

St. Lucie.

Similarly, the winner of the “automated manufacturing technology” in the post secondary level was Manatee Technical Institute in Bradenton.



Students adding a micro-switch to a “robotic workcell” at the SkillsUSA manufacturing championship

The FLTSA (Florida Technology Student Association) conference in Orlando was yet another effort illustrating FLATE’s commitment to further technical education on a statewide level. David Gula, outreach manager at FLATE, served as one of the judges for the Systems Control Technology II competition that was held on April 25. The competition

involved 23 teams comprising of middle and high school students throughout Florida.

Participants worked in a simulated industrial setting to develop a computer-controlled advanced safety system for the debut of a high-speed train in Mexico. Teams were asked to analyze the problem, build a computer-controlled mechanical model, program it and draft a comprehensive report with instructions on how to operate the device.



Team “Black Knights” make final adjustment to their model at the Systems Control Technology competition

Besides being a high-tech endeavor, the event was part of a multi-dimensional effort to enhance technology education programs, and provided extra-curricular and leadership skills

for middle and high school students.

FLATE also played a role in supporting teams from Ridge Community High of Davenport and East Lake High School of Tarpon Springs that

*(continued on page 4)*

## Trio of Competitions

*(Trio of Competitions: Continued from page 3)*

participated at the 2008 Florida Regional FIRST Robotics Competition. The three-day event was held in March at the University of Central Florida.

First Overdrive—the theme behind this year’s competition—brought 61 teams from across the country, some as far as Massachusetts and Puerto Rico, to compete at the regional competition. The game was made up of two scoring periods. During the first 15 seconds, the robots operated autonomously, but during the next two minutes of scoring play, they were radio-controlled by team operators standing at either ends of the field.



Audience cheering for their robot on the track at the Regional FIRST Robotics competition

Two, three-team alliances raced around a 54' x 24' track in counterclockwise direction manipulating the opposing teams' trackballs. Besides facilitating a “super-charged learning environment,” the competition served as an

excellent resource for students seeking scholarship opportunities.

In conjunction with its members, FIRST offers close to 500 individual scholarship opportunities worth \$9.6 million through more than 100 scholarship providers. For more information on these events contact the state winners or visit [www.skillsusa.info](http://www.skillsusa.info), [www.floridatsa.com](http://www.floridatsa.com) and [www.floridafirstregional.com](http://www.floridafirstregional.com)

*(In the Spotlight: Continued from page 2)*

Manufacturing. These projects, according to Soto, “add to the pot of resources that strengthens the manufacturing industry,” and places FLATE as the “key enabler” in implementing these efforts.

Soto is also a liaison between FLATE and the different manufacturing communities in the region, and hopes to “serve as a champion in encouraging students to pursue careers in advanced manufacturing.” He points to significant identifiable benefits of having an NSF-funded center for manufacturing on campus. Besides being a “high prestige endeavor,” he says FLATE’s multi-faceted operation has enabled HCC to “serve as a dynamic vehicle for re-engaging people in manufacturing.”

Furthermore, Soto acknowledges FLATE’s role in the state with issues relating to curriculum. This, according to him, “puts a whole new face to what’s happening in manufacturing,” especially with the sister colleges that have adopted and changed from manufacturing technology to creating the umbrella A.S./A.A.S engineering technology degree. He adds, “As more and more people recognize these value-added activities” it will yield the development of stronger partnerships between FLATE and HCC. That to him is paramount in securing a successful partnership and positions FLATE and HCC as the experts in the manufacturing community.

## 2008 FLATE AWARDS

FLATE is accepting nominations for the 2008 Industry Honors and Professional Recognition Program.



Awards are presented in three categories: Manufacturing Post-Secondary Educator-of-the-Year, Manufacturing Secondary Educator-of-the-Year, and Industry Distinguished Service to Manufacturing Education. Deadline to submit the nomination is August 31.

For more information, contact Dr. Roe ([roe@fl-ate.org](mailto:roe@fl-ate.org)). To nominate your candidates online, visit: [www.fl-ate.org/awards](http://www.fl-ate.org/awards).

## Faculty Development Workshops For Technical Educators

TeachingTechnicians.org is the new NSF ATE-supported web resource that houses information about professional development opportunities for



Find and Post  
Faculty Development  
Events  
Click here for details.

TeachingTechnicians.org  
Expanding Excellence in Technician Education

faculty and teachers who teach in technical programs at community colleges and high schools.

Many of the NSF ATE-supported projects offer faculty workshops that partially subsidize participants with NSF grants funds making these opportunities even more attractive. Workshop topics range from emerging technologies to teaching and assessment methods, and pedagogy.

Visit this valuable resource at [www.TeachingTechnicians.org](http://www.TeachingTechnicians.org), and find great opportunities this summer to enrich your teaching.

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