



FLATE FOCUS

FLORIDA ADVANCED TECHNOLOGICAL EDUCATION CENTER
A National Science Foundation Regional Center of Excellence in Manufacturing Education.

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The Engineering Technology Degree and Curriculum

FLATE's review and reform of statewide curriculum frameworks have redefined manufacturing and related curriculum in Florida. In March 2007, Florida Department of Education approved a new A.S./A.A.S degree in Engineering Technology with 5 specialization tracts and 9 specialization certificates. The basic premise of this "one-plus-one" approach is a year-one technical core curriculum that aligns with the Manufacturing Skill Standards Council (MSSC) Portable Production Technician certification. The 18 credit hour "ET Core" covers introductory computer aided drafting, electronics, instrumentation and testing, quality, safety, and processes and materials.

Year two of the ET degree focuses on one of the specialization tracts, which have some required and some elective topics. Each community college is free to adopt any or all of the specialization tracts and certificates depending on local industry needs. The newly approved specialization tracts are: Advanced Manufacturing; Advanced Technology; Electronics; Mechanical Fabrication & Design; and Quality. Two additional specialization tracts are under development and will be added in the fall of 2007. Five community colleges have begun their institutional processes to adopt the new degree program and will have it available for students in the fall of 2007.

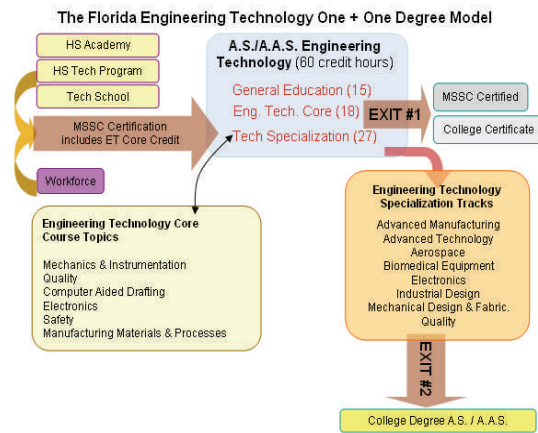
The Engineering Technology degree is part of a much larger unified curriculum project. It reaches out to the high school technology programs and career academies, incumbent worker training and bachelor degree programs. Embedding the MSSC

skill standards into the ET Core automatically provides an articulation pathway from secondary programs that addresses these same industry skills. It also provides a pathway for incumbent workers to gain college credit by experience through certification. Student workers will be able to take the MSSC certification exam at

testing centers across the state, thanks to the work of the Employ Florida Banner Center for Manufacturing Education located at the Brandon campus of Hillsborough Community College. To ensure the success of this unified curriculum plan, FLATE has begun working with manufacturing related secondary programs to develop new secondary level curriculum frameworks to include the MSSC skills. For the community colleges,

FLATE will develop the needed curriculum for the ET Core and provide professional development for teachers and faculty to ensure that students wishing to become MSSC certified are successful. FLATE will also provide support for colleges during their institutional implementation phase, as well as undertake a statewide promotional campaign for the unified curriculum aimed at educational communities and manufacturing industries.

For more information visit the "what's new" section on:
www.fl-ate.org



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Manufacturing Monthlies

Check out highlights on industry related news at:

www.fl-ate.org/media

FLATE FOCUS

From the Executive Director's Desk



“Workforce” and “Education,” were the central focus of the Manufacturers Association of Florida’s (MAF) legislative session this year.

FLATE played a pivotal role in promoting MAF’s agenda in that, it was invited twice to join MAF’s delegation to testify before the Senate and House education committees on capitol hill, in Tallahassee.

Dr. Eric Roe gave presentations on behalf of FLATE, MAF and all of Florida’s manufacturing community advocating: relevant career and technical education; the inclusion of “practical arts” as a high school elective, incorporation of the industry recognized certification such as MSSC (Manufacturing Skill Standard Council) into high school curriculum, and articulated pathways to community colleges.

Additionally they sought specific funds for manufacturing in the SUCCEED Florida grant program; CHOICE Career Centers; and the Employ Florida Banner Center for Manufacturing. The presentation can be found on the FLATE website

M.I.F. TOUR UPDATES

As part of the “Made in Florida” Industry Tours, Chris Bessette from Lakewood Ranch High School won a video iPod after being randomly selected from a pool of students that attended a tour, explored the “MadeInFlorida.org” website, and correctly answered a quiz about modern manufacturing in Florida. Chris attended a tour of New England Machinery in Sarasota with his class from Lakewood Ranch High School in November of last year. He said that the tour changed his view of what manufacturing is today.

The Made in Florida Industry Tours are made possible through a partnership between FLATE, SAMA, MACF, BAMA, the Florida High-Tech Corridor Council and local manufacturers. They are designed to showcase modern manufacturing facilities and careers in manufacturing throughout Florida, for middle and high school students.



(www.fl-ate.org) under the News and Publication section.

We are proud that in just under 3 years, FLATE has become an important resource for the entire state in both the promotion and reform of Workforce Education and Career Pathways.

In this issue, you will read about the completion of the first phase of FLATE’s curriculum reform initiative for manufacturing and related technologies. The result of this effort is the A.S./A.A.S. degree program in Engineering Technology with 5 specialization tracts, among others currently under development. Additionally, 13 certificates to be housed under the degree tracts have also been approved.

This issue also provides updates on FLATE’s outreach activities, including hosting the Florida Skills USA Manufacturing and Robotics competitions, an upcoming summer Robotics Camp, and the new MSSC Production Technician Certification.

Lastly, you might have noticed something is missing from our name and logo. After discussions with our National Visiting Committee (NVC), and possible new marketing and branding opportunities, we have dropped our hyphen. FL-ATE is now: FLATE.

2007 Events

- 05/19/07: FLATE Industrial Advisory Committee Mtg
- 05/29/07— 06/01/07: Sterling Conference (Orlando)
- 06/25/07 — 06/29/07: FLATE/First Step Robotics Summer Workshop at HCC
- 06/23/07 — 06/29/07: ASEE Conference (Hawaii)

Industry Tours

April/May 2007

- Braden River High School at Teltronics (Sarasota)
- Eustice High School at Featherlite (Sanford)
- Lakewood High School: CAT students at Conmed Linvatec (Largo)
- Lyman High School at .decimal (Sanford)
- East Lake High School at Sun Hydraulics (Sarasota)
- Nature Coast Technical High School at Universal Microwave and Hi Tek Truss (Brooksville)
- Palmetto High School at Sun Hydraulics (Sarasota)

Look out for FLATE on wheels!!



Remembering Clyde Nixon

Clyde Nixon, former chairman of Sun Hydraulics, died April 29th after a year long battle with mesothelioma. Clyde was one of FLATE’s founding National Visiting Committee members as well as a tireless leader at Sun Hydraulics and in his community. His leadership and guidance while serving on the NVC has most certainly helped us achieve the success we have had in our manufacturing curriculum reform and outreach initiatives.

Peter Straw, the Executive Director of SAMA was quoted in the Sarasota Herald Tribune about Clyde’s sense of humor: "I once did a TV panel

interview with Clyde, and the interviewer introduced me as an advocate for the manufacturing industry. The tape was rolling, and Clyde gets this twinkle in his eye. ‘Wow, an advocate,’ he says, ‘That’s what I want to be when I grow up.’”

Apparently Clyde did grow up, because he was a strong advocate for manufacturing, education, and workforce/economic development. All of us at FLATE appreciate the time that Clyde committed to our Center and will miss his guided passion.

The Sarasota Herald Tribune ran an article on Clyde’s passing in the May 2, issue, of it’s business section. It can be accessed at: www.heraldtribune.com

Made in Florida TOUR HOST SURVEYS

If you’ve hosted an Industry Tour, please remember to complete your online survey at: www.surveymonkey.com/s.asp?u=733153557539

MADE IN FLORIDA

Are you a manufacturer in Florida? Would you like to showcase a sample of your product(s) to students all over Florida? If so, contact Dave Gula at: gula@fl-ate.org or 813.259.6581

Summer Robotics Workshop at Hillsborough Community College

Hillsborough Community College and FLATE have partnered with First Step Robotics, Inc., to offer a 5-day summer robotics workshop at the HCC, Brandon Campus from June 25-29.

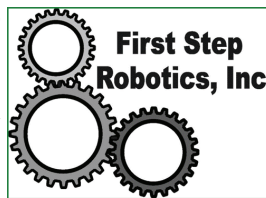
Designed primarily for middle school students, the workshop will provide an exciting opportunity for students to gain hands-on knowledge and experience in robotics, basic physics, science, mathematics, technology and modern manufacturing.

During the workshop, each student

will be given a kit to design and build their own robot. The robots will not only be used as a tool for teaching, but will also be used to complete intended assigned tasks.

Presentations by local manufacturers, college faculty and a tour of local manufacturing facilities are included in the schedule.

If you would like additional information or would like to be a part of the Robotics Workshop, please contact Dave Gula at 813.259.6581 or email him at: gula@fl-ate.org.



NEW AT: www.madeinflorida.org **CHECK OUT TROPICANA’S “MADE IN FLORIDA — UP CLOSE” VIDEO**

Talent Abounds at Manufacturing Related High School State Championships

This quarter witnessed FLATE's involvement in three statewide competitions for high school students, celebrating science and technology and their path leading to national championships

All three of these competitions created a mechanism for students to hone the skills needed for today's high performance manufacturing workplace, while learning the leadership qualities necessary to succeed in today's global marketplace

On March 9 and 10, 51 teams competed in the Florida Regional **FIRST** (For Inspiration and Recognition of Science and Technology) Robotics Competition at the University of Central Florida. This highly energized robotics competition was like attending a high-tech world cup. The teams competed with their self-designed and constructed robots while selflessly cheering each other on.

On April 20, middle and high school students gathered in Orlando for **TSA** (Florida Technology Student Association) State Conference and Competitions. Dean Miller from Jaeger, and David Gula

from FLATE judged the Control Technology competition where eight high school teams and five middle school teams competed. Students were presented with a complex problem and had 3 ¾ hours to set up, develop a solution, and build a working model of the solution using Lego, or Fischer parts and equipment.

On April 24, FLATE hosted the manufacturing competitions for the Florida **SkillsUSA** State Skills and Leadership Conference. Students from across Florida came to the Hillsborough Community College Brandon Campus to compete in contests related to advanced manufacturing. The contests (Robotic Workcell Technology and Automated Manufacturing Technology) focused on the hard skills associated with materials fabrication. Dr. Eric Roe from FLATE, and Richard Jenkins from Jaeger judged the event. Both winning teams were from the Manufacturing Career Academy at Treasure Coast High School in St. Lucie County.

Congratulations to all the teams, and good luck at your respective nationals. To learn more visit: www.floridafirstregional.com, www.skillsusa.info, www.floridatsa.com

MSSC Certification - get ready for a “ready-to-work” manufacturing workforce



Through the efforts of FLATE, MAF, the Department of Education, and the Employ Florida Banner Center for Manufacturing, Florida is well on its way to creating a unified educational system to support its manufacturing community. This allows Florida to become the first state in the nation to create such a system to prepare the high-tech workforce needed to sustain and grow manufacturing. The system we are building incorporates secondary career academies, post-secondary programs at technical schools and community colleges, industry certification, and entry level incumbent worker training.

A key component of this system is industry certification. Certification ensures relevance in academic curriculum, and facilitates the creation of ready-to-work employees with a nationally portable credential that also serves as an articulation pathway within the academic system. The national certification identified to fill this need is the Manu-

facturing Skill Standards Council (MSSC) Production Technician Certification.

MSSC, is a national, industry-led organization built upon the U.S. Department of Labor's efforts to identify the foundational knowledge/skill competencies required for developing and sustaining the nation's high-performance manufacturing production workforce. These competencies form the backbone of the certification, which is awarded to workers who pass the certification's four test areas: Manufacturing Production & Processes; Maintenance Awareness; Quality & Continuous Improvement; and Safety.

These core competencies are essential to all of Florida's diverse manufacturers; whether they're building components for the global automotive market or supplying Florida orange juice to the world. With the unified system now being implemented, manufacturers should be on the look out for certified candidates to arrive at their Human Resource departments, and plan to reduce the training needed to bring onboard “ready-to-work” employees.