

**Engineering Technology Forum**  
**Virtual Meeting**  
**March 19 and 26, 2021**

**General Summary**

The 46th statewide Engineering Technology Forum was held virtually over two consecutive Fridays, March 19 and 26 from 9:00AM -11:30AM.

The ET Forum was hosted by FLATE as part of the FloridaMakes Network.

**Friday, March 19**

Using Zoom, there was 57 participants representing 16 state and community colleges, two technical colleges, three state universities, and 6 vendors that participated in this virtual meeting.

Marilyn Barger, FloridaMakes/FLATE, Sam Ajlani, Director, Engineering Technology, at the College of Central Florida, and Brad Jenkins facilitated the program agenda and discussion topics.

The March 19 morning session opened with a welcome from Marilyn Barger and Sam Ajlani.

Sam presided over updates from the following colleges:

Mohammad Dabbas, Broward College, has added a new program in Advanced Manufacturing. Students in the Bio Medical program are performing their internships in local hospitals.

Sam Ajlani, College of Central Florida, added an Electronics Specialization to his program. He reported this is the largest program as many students are from Lockheed Martin. He is also working on a new program in Aquatronics.

Leon Dante, Daytona State College, reported a slight drop in enrollment from the fall to spring semesters. He also remarked that the CAD labs are being updated.

Bruce Heshner, Eastern Florida State College, reported on the Alternative Energy program. Bruce reported that his classes are in person now with students in labs.

Alan Jeffries, Gulf Coast State College, stated that the electronics specialization was eliminated from the AS degree.

Tracy Barnes, Hillsborough Community College (HCC), Dale Mabry Campus stated that the enrollment for the hybrid ASEET program was good.

Shirley Dobbins, HCC, Brandon Campus, reported she will be offering a summer program in coding along with a CPT camp for the high school students.

Alex Alessandro, HCC, Brandon, reported that a new building for Engineering Technology is underway.

Carlos Genatios, Miami-Dade College (MDC), reported on a new 12 credit hour Robotics program and is working with Tesla regarding a new program development process.

Jeff Miller, MDC, stated he working with FIU and FAU for transfer of the ASEET degree to those universities.

William Eustace, North Florida College, is offering the MSSC as an on line certificate.

Michael Emigh, Northwest Florida State College, is the new program person at the college.

Andrew Forsman, Pasco-Hernando State College, reported on the MSSC certificate.

Mori Toosi, Polk State College, reported that the enrollment is steady, added 3 more CCC's and 6 new networking courses as electrics to the program. He also stated that the Advanced Manufacturing graduates need networking courses in the program as required by the companies hiring.

Cecillia Larsson, Seminole State College, stated they are offering the Automation Certificate along with the Robotics.

Jay Paterson, St. Johns River State College, Palatka reported their programs will be going hybrid in the fall and the CPT is offered now in Palatka.

Lara Sharp, St. Petersburg College, reported the enrollment is steady and there is a lab expansion for GIS in the Building Arts program. She also stated there will be a name change for the department next year: Applied Engineering Technology. The BioMed program has 2 new college certificates: Medical Device Networking & Cyber Security, and Medical Device Design and Manufacturing.

Scott Balog, Tallahassee Community College, reported on the new building arts and welding lab.

Paul Wilder, Valencia College, stated the college name a new president this spring. Paul is expecting an increase in enrollment and their BS degree is now ABET accredited. Radu Bunea announced the new Advanced Management program has 52 students enrolled on the Osceola campus. Kevin Curley reported on the Supply Chain, Automation, and Mechatronics programs. Andrew Ray reported the enrollment has increased in the CAD and Rapid Prototyping courses and the GIS courses are using drones in the curriculum.

Steve Athan, Keiser University, reported on the IEEE student volunteer program.

Mike Ennis, Eastern Regional Manufacturing Space Coast Association, reported on a training curriculum survey indicating the training needed were: Non-Destructive Testing, Throughhole Soldering and Cable Wire Harness assembly.

Bob Blevins, State Supervisor for Engineering & Technology Education; Manufacturing; Transportation, Distribution & Logistics; Career and Technical Education, FDOE, reported on the Specialty Updates including the new Supply Chain Certificate from Valencia College and the Medical Device Networking and Cyber Security Certificate from St. Petersburg. There are also the 2021 framework reviews concerning the manufacturing programs in secondary education and the career certificate programs. Bob reported on the USDOE CIP Codes that are in effect now. He also reported on the CTE Audit review. Bob is the FLATE Grant manager and the Year 1 will include the

Strategic Implementation Plan. The new Get There Florida website has information listed on programs and certificates from the 48 technical colleges and the 28 state and community colleges, addressing the needs for HS graduates looking for a career.

Kathryn Wheeler, FDOE, reported on the CAPE funding for post-secondary including the college funding eligible occupational areas. The presentation included direct funding eligibility, the procedures for the eligibility, and the MSSC certification funding.

Nasser Hedayat, Valencia College, reported on the Council for Workforce Education (CWE). This group was formerly known as the Occupational Education Standing Committee (OESC) which was a subgroup of Council of Instructional Affairs. In June 2019, the Council of Presidents (COP) approved changing the OESC to the CWE to foster workforce education programs to meet the needs of Florida. CWE meets 3 times a year and the voting members include workforce education administrators recommended by their college president. The current work of the council includes AS degree general education requirements, program accountability, using CTE audits regarding retention, success, placement and earnings, CIP to SOC crosswalk, and curriculum framework updates. Nasser also presented the new workgroups to address CTE transfer pathways, apprenticeships, and professional licensure disclosure requirements.

Lakshmi Jayaram, USF, provided an update on the PathTech LIFE and LISTEN grants from the National Science Foundation (NSF): PathTech LIFE (2015-2019), the national survey from 3216 students from 96 colleges in 38 states; and the PathTech LISTEN, (2018-2021) the follow up study from 2363 students who were surveyed from PathTech LIFE. Lakshmi presented information about the new initiative, Hire a Grad! This program will provide employers the skills and competencies of the graduates and InfoGraphics will be developed listing the technical and soft skills. This program can be personalized for each college. Please contact Will Tyson or Lakshmi to receive the information concerning the InfoGraphics.

In the closing remarks of this session, Marilyn Barger stated all the ET presentations and handout material will be in the Engineering Technology Shared Folder on the ET Google Drive.

The meeting was adjourned at 11:30AM and the ET Forum will continue next week, Friday, March 26.

## **Friday, March 26**

The second Zoom Meeting of the ET Forum was held Friday, March 26, with 57 participants.

Marilyn Barger opened the session with an update on the FLATE Strategic Plan. The Goals are: 1) Support state -of -the -art Industry 4.0 manufacturing curriculum; 2) Develop world class educators and faculty; 3) Develop a comprehensive recruitment strategy. Several areas of discussion involved the sharing of advisory committees from the various colleges with FloridaMakes and the re-establishment of the Endeavor academy for teacher internships. Marilyn also presented a number of topic (Big Ideas)

and asked the Forum participants to vote for the Top 4 priorities that would be of best interest to the colleges.

Mori Toosi, Polk State College, moderated an industry panel discussing the value and role of the industry advisory committees That included the following participants: Michelle Hintz-Prange, Human Resources Manager, TSE Industries; Kon Champavannarath, CIO, PalletOne, Inc; Peter Cirak, Quality Assurance Director, Seal Dynamics; and Orathal Northern, Polk College. In a series of questions presented by Mori, the panel discussed the role of advisory committees, including FLATE as part of FloridaMakes, the role that advisory committees play in curriculum development, the use of robotics and automation, the technology requirements for program development, and the hiring methods for graduates. Orathal also provided a background of the Perkins Funding and the role the Perkins funding provides to the colleges. The panel also discussed the benefits of a statewide advisory committee for Engineering Technology. Rich Gilbert, USF, also added the ET curriculum, developed by FLATE, and in 20 Florida community and state colleges is the best program in the country. A statewide advisory committee would get national attention and could serve as a national model.

Lara Sharp, St. Petersburg College and Mori Toosi led a discussion concerning the MSSC articulation to the Engineering Technology degree. Lara mentioned that SPC is doing course to course articulation for any Industry Certification and the Electronics course cannot be articulated due to the fact that the MSSC does not include electronics. Mori stated that the core in the ET degree is common with all colleges. Further discussions included FTE funding, standards and frameworks, articulation vs funding, and changing the credit hours from 15 to 12. Marilyn proposed a committee be formed to discuss changes and suggestions for the articulation.

The ET Committee Reports included an update by the Curriculum Committee by Ron Eaglin, Daytona State College concerning college credit for Industry Certifications, based on outcomes. Ron remarked that course material would be shared on a Google Drive, credit for Industry Certificates would be on a course level and course outcomes would have to be developed for each course and that the Industry Certificate would have to meet the course outcomes. A statewide committee would review all credit for the Industry Certificates.

Marilyn Barger and Lara Sharp led a discussion on presentations and professional development for the ET faculty. A series of “Tech Talks” were scheduled for this spring and included presentations on the CMM, Root Cause Analysis, and OSHA for Manufacturing. Also discussed was a series of professional development webinars. Mori suggested having student presentations to the proposed statewide Advisory Committee.

Mori also provided an update on the NSF/ATE project with Excelsior College and Polk State College. This involves Energy Manufacturing through use of educational simulations. These simulations are available for other colleges to use. You can contact Moti for additional information.

In the closing remarks of this session, Marilyn reported on the project in mapping skills in the ET degree to the benchmarks. The next review cycle for the ET degree will start next year.

The Fall Engineering Technology Forum will be held September 30 – October 1, 2021.

A college has not been named yet for in-person Forum. There will be additional information forthcoming.

Here are the on-line resources presented during the Forum Sessions:

- Google Drive – [Engineering Technology Shared Folder](#) (presentations, sessions' recordings, handouts, materials)
- [GetThereFL.com](#), a new Florida's workforce education initiative aimed at raising awareness of short-term but high-value career and technical education programs.

The meeting was adjourned at 11:30 AM.

Respectfully submitted,

Brad Jenkins  
Co-Chair ET Forum