



ST. PETERSBURG COLLEGE

Department of Engineering Technology & Building Arts ADVISORY MEETING

Thursday, May 28, 2014

5:00 - 6:30PM

Clearwater Campus

Collaborative Center for Emerging Technologies

2465 Drew Street

Clearwater, FL 33765

SUMMARY

Members Present: Ken Conforti, Matt Smith, Greg Seay, Marcos Cabrera, Bob Hudson, Brad Jenkins.

Members Excused: Don Houdek, Tina Brudnicki, Mark Snyder, Dan Bloom, Lou Grilli, David Reese, Roger Harvey, Scott Choquette, Ed Homan, Lisa Maciolek, Joe DiPasqua, Steve Askew, Bill Erdmann, Randy Swanson, Rodney Jaramillo.

Guests: Jill Flansburg, Giovanna Taylor, Krista Fusari, Julie Gomez, Dave Outlaw.

Introduction of Committee Members and Guests

Brad Jenkins welcomed the advisory members and guests to the Collaborative Center for Emerging Technologies (CCET) for the spring meeting.

Course Enrollment Spring-Summer 2014 & Graduates from December 2013 - May 2014:

Brad Jenkins provided the Graduation data from July 2013, December 2013, and May 2014. The data indicated for Engineering Technology, 15 A.S. degrees and 66 Certificates were awarded, and for Building Arts, 12 A.S. degrees and 14 Certificate were awarded. For Spring 2014, the enrollment is up 1.35% in Engineering Technology and decreased 7.27% in Building Arts, as compared to the Spring session in 2013. (the revised graduate and enrollment information is attached) For the year 2014 the enrollment in Engineering Technology was just about the same, 2555 SSH in 2014 compared with 2550 SSH from 2013; the Building Arts was slightly down from 1205 SSH in 2014 to 1269 SSH in 2013.

Update on Action Items from the September 12, 2013 meeting:

The committee members not attending the meeting received an update on the graduate data and enrollment along with the equipment approvals for the Collaborative Center of Emerging Technologies.

The Collaborative Center for Emerging Technologies (CCET) Activities and New Equipment - 2013/2014

Brad Jenkins provided a tour of the Collaborative Center for Emerging Technologies (CCET) and highlighted the newest equipment and activities that have taken place since the fall of 2013. The equipment added included another FANUC robotic arm, a FARO Reverse Engineering Arm, and 5 additional Allen Bradley MicroLogic 1500 Programmable Logic Controllers (PLCs). Brad also reported that the students enrolled in the Florida TRADE training programs are now using the Center for their lab work related to the Manufacturers Skills Standard Council (MSSC) Certified Production Technician (CPT) training as well as the students enrolled in the Mechatronics training courses that started this spring.

Architecture & Building Arts Updates

Bob Hudson reported that 3 Architectural AA degree transfer students received scholarships at the USF Graduate School of Architecture and Community Design, and one student was accepted to the UF Graduate School of Architecture. The Building Arts Department has selected 2 current Architecture students to receive the Don Bergsma Travel Scholarship for this year, in support of their summer travels exploring and expounding on their Architecture studies.

Committee Activity – Specialties for Engineering Technology

The activity or the advisory committee centered on developing additional technical specializations or skills for the Engineering Technology degree. Some of the key technical terms and activities associated with the specializations include machining, CAD, automation, six sigma, safety, prototyping, logistics, troubleshooting, quality assurance, and 3-D printing. Based on these terms and other technical skills, these questions are presented to determine the technology needs for the specializations.

The committee formed 4 groups and the combined results with all the responses to the questions are provided.

1. What are the most important technical skills required by the manufacturers in Pinellas and Hillsborough counties?

Basic electronics (both assembly and troubleshooting)

Metrology and inspection

Lean Agile

Strong CAD experience - AutoCAD

Quality assurance, CAD, Six Sigma -the older generation doesn't have these backgrounds; very essential to productivity.

Basic computer skills

Soft skills – teaming and solving interpersonal conflicts

2. What gaps exist concerning the “Technicians you have and the Technicians you want”?

RF troubleshooting skills-higher frequency knowledge-30-60 GHz, newer technology

Electronic theory
Wireless communications
Technical theory
Troubleshooting
Problem solving
Looking at the problem as a system- “understand all the ways it does not work”

3. What specializations would benefit the county manufacturers?

More Lean and Six Sigma- Lean tools could be expanded
Quality assurance
Troubleshooting skills
Automation
SPC benefits small business companies well
Project management-scheduling, planning, resources, budget
Welding
Team environments
Leading or managing a project

4. What are some of the new technologies or specializations that you may want to develop?

Nanotechnology
Biomedical
Networks – systems that resist hacking
Need people who also understand the older technologies
More involvement in leadership
SPC should offer a bachelor’s degree in ET-more technical, not technology management
Cyber technology

NSF and DOL Grant Updates

Brad reported on the FLATE activities for the spring. FLATE has expanded the Robotic and Engineering Camps not only in Pinellas and Hillsborough, but in other areas of the state for this summer. There are now 14 state colleges that have adopted the A.S. degree in Engineering Technology. Additional state colleges expressing interest in the A.S. degree include Santa Fe, Broward, Gulf Coast, Florida Keys, and Pasco-Hernando. The Manufacturing Day was hugely successful with 2300 students participating with 67 schools and 71 manufacturers around the state. FLATE is continuing to work with the Florida Department of Education (DOE) to review and update the Electronics Specialization curriculum frameworks of the Engineering Technology A.S. degree for this summer.

All the information is available on the FLATE website: (www.fl-ate.org and www.madeinflorida.org).

The U.S. Department of Labor (DOL) Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant updates were provided by Jill Flansburg, for Florida TRADE and Giovanna Taylor, for the Bioscience Credentialing: Biomedical Devices grant.

Jill reported on the internships and employment for the students completing the training programs. 41 students have been enrolled with 31 completers of the training. 27 students received their credentials and placed in internships or part time employment with local manufacturers. The Manufacturing Skills Standards Council (MSSC) Certified Production Technician (CPT) has been most successful with the second class offering here at the Clearwater Campus that will finish this summer with 10 participants. Other training this spring included the CNC machining at Luma Stream, in downtown St. Petersburg, and the Mechatronics training that began this May at Clearwater.

Giovanna provided the update on the training that will begin this summer for the Entry Level Production Technician certificate for biomedical devices and provide the first group of students for the new degree program.

Giovanna presented an overview of this new 62 credit A.S. degree Biomedical Engineering Technology (BMET) program that will be approved later this fall. The program will provide an opportunity for the students to obtain an entry level job as a Biomedical Equipment Technician (BMET) and then after completing the A.S. degree, obtain the Certified Biomedical Equipment Technician (CBET) and the Comp TIA A+ certification. A copy of the program will be included with the summary of this meeting.

New Business and other Discussion Items:

Brad reported that the curriculum frameworks for the Electronics Specializations of the AS degree in Engineering Technology are required by the Department of Education (DOE) to be reviewed this summer. A statewide committee of industry representatives and educators will be formed to provide that review.

Action Items:

The action items of this meeting included:

1. Brad Jenkins will send an updated list of the graduate data and enrollment to all advisory members not attending this meeting.
2. Selected members of the committee will be asked to work on the Curriculum Frameworks in regards to the Electronics Specialization of the Engineering Technology degree.

Next Meeting: 6:00PM, Tuesday, September 9, 2014 – EpiCenter, Dinner meeting

Respectfully submitted,

Brad Jenkins

Engineering Technology & Building Arts

Graduate Data for July 2013 Graduates

Engineering Technology

3 AS degrees: 2 - Engineering Technology; 1 – Aviation Maintenance Management

11 Certificates:

- 5 - Lean Six Sigma Green Belt
- 1 - Six Sigma Black Belt
- 2 - CADD
- 1-Medical Quality Systems
- 2 -Rapid Prototyping & Design

Building Arts

4 AS degrees: 1 –Architectural Design & Construction; 3 – Drafting and Design

4 Certificates:

- 4 – Building Construction

Graduate Data for December 2013 Graduates

Engineering Technology

6 AS degrees: 3 - Engineering Technology; 3- Aviation Maintenance Management

21 Certificates:

- 11- Lean Six Sigma Green Belt
- 6- Engineering Technology Support
- 2-CADD
- 2 -Rapid Prototyping & Design

Building Arts

3 AS degrees: 2 –Architectural Design & Construction; 1 – Drafting and Design

7 Certificates:

- 5 – Building Construction
- 2 - Drafting

Graduate Data for May 2014 Graduates

Engineering Technology

6 AS degrees: 3 - Engineering Technology; 3- Aviation Maintenance Management

34 Certificates:

- 11- Lean Six Sigma Green Belt
- 9- Six Sigma Black Belt
- 5 – Engineering Technology Support
- 3-CADD
- 3-Medical Quality Systems
- 3 -Rapid Prototyping & Design

Building Arts

5 AS degrees: 3 –Architectural Design & Construction; 2 – Drafting and Design

3 Certificates:

- 4 – Building Construction

Total Department Enrollment from 2013 Spring – Spring 2014 (based on student semester hours (SSH))

Engineering Technology: Spring 2013 = 1107 SSH; Spring 2014 = 1122; increase 1.35%

Building Arts: Spring 2013 = 591; Spring 2014 = 548; decrease 7.27%