



## College of Technology – Site Coordinators Meeting

Date: Friday, February 21, 2020

Hosted by: University of Hartford

200 Bloomfield Ave., West Hartford, CT 06117

Building: United Technologies Hall Room: 320 (Maker Space)

**UNIVERSITY OF HARTFORD**

COLLEGE OF ENGINEERING,  
TECHNOLOGY, AND ARCHITECTURE

### ATTENDEES

#### CT State Colleges & Universities

Karen Wosczyzna-Birch, Executive Director, College of Technology – Regional Center for Next Generation Manufacturing  
Wendy Robicheau, Project Manager, College of Technology – Regional Center for Next Generation Manufacturing  
Sue Spencer, Program Coordinator, Gateway CC  
Stephen LaPointe, Director, Advanced Manufacturing Technology Center, Quinebaug Valley CC  
Eric Flynn, Department Chair – Engineering & Applied Technologies, Gateway CC  
Mary Bidwell, Dean of Advanced Manufacturing, Asnuntuck & Tunxis Community Colleges  
Adam Scobie, Instructor, Housatonic Community College  
Felisha G. Fleurimond, Recruitment/Retention Coordinator, Housatonic CC  
Joe DeFeo, Director, Naugatuck Valley CC  
Lin Lin, Program Coordinator, Middlesex CC  
Jakob Spjut, Program Coordinator, Quinebaug Valley CC  
Mobin Rastgar Agah, Professor, Norwalk CC  
Sharon Gusky, Professor, Northwestern CT CC  
Mehrddad Faezi, Professor, Manchester CC  
Ashoka Rahman, Program Coordinator, Tunxis CC  
Jordan Domkowski, Academic Advisor, Tunxis CC  
Michael Gentry, Program Coordinator, Three Rivers CC  
Crystal Wiggins, STEM DC, Northwestern CT CC  
Matthew Enjalran, Professor & Chair, Physics, Southern CT State University  
Segun Odesina, Associate Dean, Central CT State University  
Lesley Mara, Director of Strategic Partnerships, CT State Colleges & Universities  
Kelli Vallieres, President, Sound Mfg and Consultant, CT State Colleges & Universities  
Jim Lombella, Regional President, CT State Colleges & Universities  
Jemiel Rose, Project Director, CT State Colleges & Universities

#### Other College & Universities

David Giblin, Professor, University of Connecticut  
Laurie Granstrand, Graduate and Transfer, College of Engineering, Technology, and Architecture, University of Hartford  
Hisham Alanjjar, Dean, College of Engineering, Technology, and Architecture, University of Hartford  
Evan Holliday, Manager of Collegiate Admission and Retention, University of Hartford

#### High Schools

Cristina Stisser, Manufacturing Cluster, CT Technical Education & Career System

### MINUTES

#### **Welcome Remarks - Dr. Hisham Alanjjar, Dean, College of Engineering, Technology, and Architecture (CETA), University of Hartford (UHart)**

- UHart was the first private university to be part of the College of Technology.
- UHart's College of Engineering, Technology, and Architecture (CETA) has grown in capacity.
- The programs focus on hands-on learning. There are approximately 40 labs.
- The area for the new engineering building is about to be fenced off. This building will have a green roof.
- CETA focuses on undergraduate education and grants typically focus on working with students.
- CETA has a very active advisory board that includes Pratt & Whitney who gives scholarships to CETA.
- CETA trains Pratt & Whitney engineers every Friday on metrology.
- There is a new program in Robotics Engineering (design). This is the second program like this in the country. The Acoustical Engineering & Music program is the only one like it in the country.
- CETA is moving into aerospace engineering and cybersecurity, which includes the creation of new IOT labs.
- The focus when hiring faculty is their interest in working with students rather than research.

- Success is measured by placement rate and most programs in CETA are above 90% with some being at 100%.

#### **Update on Statewide Manufacturing Initiatives**

##### **Dr. Jim Lombella, North-West Regional President, CSCU**

- Feels like the College of Technology is one of the best kept secrets. He attended the National Science Foundation Advanced Technological Education Principal Investigators Conference in Washington, DC where he presented to about 800 people. He realized how COT work is nationally recognized. COT is a body of experts to keep education relevant to industry. He comes from manufacturing for almost two decades and came into education to teach manufacturing at Asnuntuck Community College. He then became Dean of Finance then CFO there, then president of Asnuntuck and Tunxis Community Colleges and is presently Regional President of the North-West Region.
- Tunxis Community College just bought a 44,000 square foot building adjacent to the current campus that will be used for their manufacturing programs.
- We need to make sure we are meeting industry needs in our programs.

##### **Dr. Kelli Vallieres, President / CEO, Sound Mfg, Inc. and Vice Chair, Governor's Workforce Council, and Consultant, CSCU**

- She became involved with workforce development through having to staff her own organization. She is currently the vice-chair of the Governor's Workforce Council and is consulting for the CT State Colleges & Universities System.

#### **Attendee Updates**

- Eric Flynn of Gateway Community College reported that he just hired three new faculty in his department.
- David Giblin of University of Connecticut reported that UConn is working on distance courses to have an online engineering network throughout CT/UConn.

#### **US Department of Labor Apprenticeship Grant – Lesley Mara, Executive Director, Strategic Initiatives, Sponsored Research and Outreach & H. Jemiel Rose, Project Director, NAMAP, Connecticut State Colleges and Universities (CSCU)**

- In June, the CSCU System received an \$8 million grant for the National Advanced Manufacturing Apprenticeship Project (NAMAP), which puts CT on the map nationally. This is not a capacity-building grant. Its purpose is to get apprenticeships scaled nationally. Pratt & Whitney, Electric Boat, Lockheed Martin, and IBM are the four industry anchor partners. The program needs to have 3000 apprentices over four years.
- Jemiel Rose is the new NAMAP Project Director. He comes from an engineering background and then educational program development at Electric Boat.
- We just received word that the CSCU system was awarded another \$2 million grant. More details are to come on this grant. Goodwin University is a partner on it. Incumbent workers at small and medium-sized manufacturers.
- Jemiel has done a lot of work with Workforce Investment Boards (WIBs), Three Rivers CC, and Quinebaug Valley CC. Working in workforce development has been most rewarding and this position will provide the opportunity to share that knowledge and experience.

#### **College of Technology – Regional Center for Next Generation Manufacturing - Dr. Karen Wosczyzna- Birch, Executive Director, COT-RCNGM**

- AARP did a survey with our system that went to manufacturing companies in CT to get feedback on if employees would have an interest in teaching. This led to a scholarship opportunity for our manufacturing students age 50+. The instructor recruitment model and scholarship model are being pushed out nationwide. AARP will also sponsor Intro to Manufacturing Bootcamps for Housatonic CC and Asnuntuck CC as pilots for similar programs for people over 50.
- Through our French partnerships Crystal Wiggins of Northwestern CT CC had her statistics students work with quality control students in France. They used live streams to work together on analyzing and presenting data. Sharon Gusk of Northwestern CT CC had her biology students collect soil samples and calculate their antibiotic resistance. Mobin Rastah Agar of Norwalk CC had his Intro to Engineering class work with French students to design a solution to a problem statement and do live virtual presentations. The applications for students to attend the French Embassy Bootcamps were due Monday. The COT-RCNGM will also be holding an aerospace bootcamp in France through NSF supplemental funding. Karen Wosczyzna-Birch was in New York Wednesday night with French Embassy representatives including those from Washington, DC. Connecticut received a lot of accolades for what we are doing with our partnerships.
- The Epsilon Pi Tau application deadline is March 27, 2020. Honorary and faculty nominees are needed too.

- The National Science Foundation is conducting an Undergraduate STEM Education Survey to learn more about what they can do to improve participation in STEM. This comes from their S-STEM program which is based on H1B visa fees that go towards student scholarships.
- There will be a Women & Girls Day Expo on March 6 at the CT Capitol. The COT-RCNGM, Naugatuck Valley CC, Asnuntuck and Tunxis CCs and Women in Manufacturing will be there with a booth.
- CareerConn2020 is scheduled for March 19 at Dunkin Donuts Park. This is more for private institutions but there is a request to see if CSCU can participate.
- HI TEC is scheduled for July 27-30 in Portland, OR. This is one of the main community college conferences for engineering and technology faculty.
- The STEM Guitar Workshop is scheduled for July 20 – 24 and will be hosted at Asnuntuck CC. Jakob Spuijt of Quinebaug Valley CC has participated in this workshop and created a course using what he learned. He has invited anyone who would like to visit his class to contact him. The commitment for the workshop is to incorporate a lesson into curriculum.
- A flyer was distributed for an Additive Manufacturing Workshop the is scheduled for May 15-16 at Tennessee Tech.
- Another drone workshop like the one that was held last year will be scheduled for June or July.
- The CSCU and RCNGM websites are being updated. The CSCU transfer pages will be more inclusive of COT programs.

#### **COT Curriculum Discussion/Updates**

- Asnuntuck Community College – Mary Bidwell presented a program modification for the Robotics and Mechatronics certificate program. She will send the paperwork once it is complete. This will be a 2-semester certificate rather than 3 semesters. No electives will change. There will be a Circuit Theory I class for 4 credits. The second semester will include a new course called Digital Control and Automation Fundamentals. This will still have an internship component. They will work with Accuplacer to see what level math someone needs for the program.
- Asnuntuck Community College – Mary Bidwell will present a program modification for Machine Technology in the future. They are cleaning up the courses in that program.
- Jakob Spuijt of Quinebaug Valley CC noted that as we are putting together new courses and programs, make sure to work more on making common course numbers and other components to make transfer easier for students.

#### **NSF ATE-I - Spain Program – Sharon Gusky, Professor, Northwestern CT Community College**

- The NSF Advanced Technological Education (ATE) Program is a great way for community colleges to get grants. NSF sent out a call for current ATE awardees for international travel for faculty and students. Went to Spain in January and will be going to Germany in August. There is one faculty spot available for this. In Spain, visited University of Complutense Madrid to learn how they do technical education. Also visited Salesian Technical School (high school). The company visit was to Wittmann Battenfeld, which has its headquarters in Torrington, CT. They make robotics for injection molding. Participants learned the importance of getting students into manufacturing tours early on. Also visited SAS Spain, which focuses on data science. The students were intrigued that SAS does more than just data science.

#### **CT Apprenticeship Program for Robotics and Automation (CAPRA) – David Giblin, CAPRA Principal Investigator, University of Connecticut**

- The CAPRA program started about two years ago. It is focused on robotics. Industry was surveyed for appropriate curriculum to be used in the program. The robotics and mechatronics certificates are a good match for the program. Faculty are involved to recruit students and match them to companies. There are a number of students who are interested. There could be new companies who are interested in hosting a student. There will also be a faculty-in-residence program through Central CT State University. The program has been extended to run through August.

#### **University of Hartford Updates**

- **Evan Holliday, Manager of Collegiate Admission and Retention, UHart** – The electromechanical program is fairly new and was created in response to industry. There is also a new robotics program. Programs are nationally accredited by ABET. There is a real focus on club access in CETA.
- **Dr. Hisham Alnajjar, Dean, CETA** – There are merit and need-based scholarships that make tuition about a \$5000 difference from UConn. Technology programs are flexible. Community college students are typically the most determined.

- **Laurie Granstrand, Manager of Graduate Programs, CETA** – Suggested surveying courses in the community colleges for Engineering Science students who will go into civil engineering. UHart's Civil Engineering program has a sophomore-level surveying pre-requisite. Three Rivers CC has this course.
- Any questions can be sent to [cetainfo@hartford.edu](mailto:cetainfo@hartford.edu) (Evan's email); [cetagrad@hartford.edu](mailto:cetagrad@hartford.edu) (Lauri's email); or [cetahelp@hartford.edu](mailto:cetahelp@hartford.edu) (general email).
- Karen Wosczyzna-Birch noted that mechatronics and robotics has a great need nationally. Companies want well-rounded employees with multiple skill sets. Cybersecurity is also important across many industries. Real programmers of CMM are also needed. Troubleshooting and problem-solving are important skills.
- Jim Lombella noted that companies lose thousands of dollars every minute a machine is down. Entrepreneurship is also important in the gig economy. How do we get information out to legislators and other critical stakeholders. Requested newsletter from COT and inviting manufacturing caucus members to a COT Meeting.

**CSCU Manufacturing Updates – Dr. Jim Lombella, North-West Regional President, CSCU& Dr. Kelli Vallieres, President / CEO, Sound Mfg, Inc. and Vice Chair, Governor's Workforce Council, and Consultant, CSCU**

- Jim Lombella noted that he made his comments at the beginning of the meeting.
- Kelli Vallieres' experience is in manufacturing and workforce development. She was asked by the CT State Colleges & Universities to create a strategic plan that is driven by data and objectives to meet industry needs. She works closely with Garrett Moran who has the ear of the governor. The strategic plan includes manufacturing.
- The Governors Workforce Council (GWC) is working to bring together all organizations that are working in silos on similar initiatives. Legislature is looking for data on capacity in manufacturing since complete data has not been presented yet. We will need to take a good inventory and define "what are 'manufacturing' programs?" and "how to we categorize them?" then determine what categories are within companies' needs.
- One other objective of the governor is to update all outdated software and management systems in state agencies.
- Another initiative would be to allow students to complete programs without taking long winter or summer breaks.
- In addition to the data, we will also have to understand the costs of the programs. Data will be requested through Mary Bidwell.
- Cristina Stisser of the CT Career & Technical Education System noted that there are 1600 students in five manufacturing programs in the system. Currently students have to fill out extensive paperwork for dual enrollment credits to be awarded. This should be looked into to make the process easier. We also need to make sure high school students are given the same credit at community colleges throughout the state.
- The main goal is to make sure we have accurate data so everyone is getting credit for everything they are doing.
- Jim Lombella noted that the strategic plan will be endorsed by the COT and Advanced Manufacturing Center Directors before being moved along.
- For the next COT Meeting at Central CT State University, everyone should bring all program (business and industry, credit, and non-credit, etc.) configurations. Mary Bidwell will invite someone from institutional research. We want to capture FTE and headcount data as well as utilization (% of time labs are actually used). Include the source of your data. Mary, Kelli, and Jim will standardize a way for the utilization to be reported.
- Data reporting will begin with manufacturing programs and if they are credit/non/credit/B&I, etc. then we will discuss where to go from there.

Attendees toured the Metrology Lab with Dr. Chittaranjan Sahay, Professor & Director, Center for Manufacturing and Metrology, UHart.

**Upcoming COT Meetings**

March 27, 2020 – Central CT State University

April 17, 2020 – Housatonic CC

May 15, 2020 – Naugatuck Valley CC – Waterbury Campus

**Important Dates**

May 1, 2020 – Epsilon Pi Tau Induction Ceremony at Manchester CC

May 15-16 – Additive Manufacturing Workshop – Tennessee Tech

July 20-24 – STEM Guitar Workshop – Asnuntuck Community College