

College of Technology – Site Coordinators Meeting

Date: Thursday, December 21, 2023 Time: 9:00 AM Location: Central CT State University 1615 Stanley Street, New Britain, CT 06050 Building: Memorial Hall, Room: Constitution Room

ATTENDEES

CT State Colleges & Universities

Karen Wosczyna-Birch, Executive Director, College of Technology – National Center for Next Generation Manufacturing Wendy Robicheau, Assistant Director – National Center for Next Generation Manufacturing Sue Spencer, Program Coordinator, CT State - Gateway Lin Lin, Program Coordinator, Middlesex CC Eric Flynn, Program Coordinator, CT State – Gateway John Jagtiani, Professor, CT State - Northwestern Mehrdad Faezi, Professor, CT State – Manchester Sharon Lutkus, Director, Adv. Mfg Technology Center, CT State – Naugatuck Valley Steve LaPointe, Director, Adv. Mfg Technology Center, CT State – Quinebaug Valley Mary Bidwell, Dean of Advanced Manufacturing, CT State - Asnuntuck & Tunxis Mathew Spinelli, Director, Advanced Manufacturing Technology Center, CT State - Manchester Keith Carter, Director, Advanced Manufacturing Technology Center, CT State - Middlesex Matthew Enjalran, Professor & Chair, Physics, Southern CT State University Ravindra Thamma, Associate Dean and Professor, Central CT State University Luz Amaya, Professor, Central CT State University Miah Dreger, Interim Associate Dean of SEST, Central CT State University Steven Minkler, Dean, SEST, Central CT State University William (Terry) Brown, AVP Strategic Economic and Partnership Development Zulma Toro, President, Central CT State University **Other College & Universities**

Kylene Perras, Assitant Dean of CoE, UConn Hong Zhou, Professor, University of St. Joseph

MINUTES

Welcome Remarks

- Dr. Karen Wosczyna-Birch, Executive Director of the College of Technology (COT) & Executive Director & PI of the National Center for Next Generation Manufacturing, noted it is nice to be back at Central CT State University after a couple of years.
- Dr. Zulma Toro, President of Central Connecticut State University (CCSU), noted that CCSU is pleased to host this meeting
 and to be a partner of the COT. STEM jobs will grow 11% by 2031 and we know our students should fill those jobs. She is
 confident that with the COT partnership we will meet those workforce needs. The transfer student experience is a
 priority of CCSU and is included in the university's strategic plan. CCSU has invested more resources than ever into STEM
 including lab space. CCSU is proud of the XR Lab that also supports students in nursing, history, the arts, and music. Last
 week CCSU was recognized as a STEM Education Center of Excellence by the ITEEA. Most new programs are
 multidisciplinary, including the new rehabilitative engineering program.
- Dr. Steven Minkler, Dean of the School of Engineering, Science, & Technology at Central Connecticut State University, thanked Dr. Toro for her leadership and welcomed the attendees to CCSU.
- Attendee Introductions All Attendees
- COT and NCNGM Upcoming Initiatives, Activities, and Important Dates Dr. Karen Wosczyna-Birch
 - Dr. Andre Freeman, Professor at CT State Capital, provided and up on artificial intelligence (AI) at CT State Community College. He developed an AI Option under the COT's Technology Studies A.S. degree. He attended a virtual Train-the-Trainer under Intel's AI for Workforce Program. He noted that the curriculum provided by Intel includes modules and courses that faculty can consider offering. Right now this AI Option is offered at CT State Capital and the machine learning course is available at CT State Tunxis as part of their data science program. Karen Wosczyna-Birch was invited to attend an AI conference in Germany that was organized by the German Chamber of Commerce.
 - UConn and Yale are lead institutions on an NSF planning grant to prepare for a full \$160M proposal in 2025 to create and "NSF Engine." Karen Wosczyna-Birch is a part of this team along with Matthew Enjalran of Southern CT State University. Matthew noted that they are looking at all levels of education and partnerships, including government, and there will lots of opportunities and work so many people will be involved. Kylene Perras of UConn recently attended a

Deans' meeting at Yale. The principal investigator from Yale did a review of what Quantum is offering and that workforce development will be imperative to collaborate on. Matthew Enjalran noted to watch for opportunities to be involved and there is a need to look into how Quantum fits into different levels of education. Karen added that at the last group meeting a list of jobs was provided and technician jobs were included.

- AARP Manufacturing Scholarships Contact Wendy Robicheau wrobicheau@txcc.commnet.edu
 - Requirements enrolled in community college advanced mfg program, age 50+, willing to share success story with COT, NCNGM, and AARP
- AARP Manufacturing Scholarships
 - Contact Wendy Robicheau at <u>wrobicheau@txcc.commnet.edu</u> if you have students that meet the following requirements: enrolled in a community college advanced manufacturing program, age 50+, and willing to share success story with COT, NCNGM, and AARP. The funds are provided by AARP-CT and is held at the Tunxis Foundation so contact Wendy to work with your local foundation to award the scholarship to your student.
- Xometry Scholarships
 - Contact Marisa Rubera at <u>mrubera@ccc.commet.edu</u> at CT State Capital for more information. This
 partnership was brought to the COT by CCAT. Marisa has already sent out information on receiving funds for
 the 2023 fall semester. Contact Marisa is you have not be involved yet but are interested.
- Share newsletter stories with Wendy Robicheau at wrobicheau@txcc.commnet.edu. This can be anything related to students, faculty, events, and awards that can be shared statewide and nationwide.
- CONNSTEP Digital Transformation Presentations for Manufacturers Per Rich DuPont of CT State Housatonic CONNSTEP, the Manufacturing Extension Partnership for Connecticut, will be hosting breakfasts with presentations on digital transformation for manufacturers at eight CT State Community College campuses, UConn and Central CT State University. These will be funded through the Manufacturing Innovation Fund.
- <u>Journal of Advanced Technological Education</u> The next deadline for submissions is January 31, 2024. Articles for this peer-reviewed journal can be submitted by students and faculty. Submissions can be long or short articles or even opinion pieces.
- Upcoming events and conferences focused on engineering and technology education are listed below. The NCNGM can
 provide travel funds for professional development; however, you must request professional development funds at your
 campuses first and submit an NCNGM form.
 - o AACC WDI Jan 23 Jan 26, 2024, New Orleans, LA
 - ASEE CIEC Feb 6-9, 2024, Garden Grove, CA
 - o ITEEA March 6-9, 2024, Memphis
 - o <u>Innovations</u> March 17-20, 2024, Anaheim, CA
 - Manufacturing, Engineering and Technology Internship Career Fair 4/11/24 Quinnipiac University, in partnership with CCAT
 - o <u>CyAd Conference: Cybersecurity Across Disciplines</u> June 12-13, 2024 Palo Hills, IL
 - ASEE Conference June 23-26, 2024, Portland, OR -
 - <u>HI-TEC</u>, July 29-August 1, 2024, Kansas City, MO
- CT State Updates Dr. Terry Brown, Associate Vice President for Strategic Economic & Partnership Development for CT State Community College, noted that CT State is approaching six months since its official beginning. His role is in partnerships. CT State just submitted a DOL grant. He is gearing up to be a full partner with all of this work at CT State.
- Program Replication: Technology Studies: Data Science Certificate at CT State Three Rivers
 - Three Rivers originally had a different data science certificate and has decided to adopt the COT data science certificate and terminate the original data science certificate they offered.
 - Motion to approve the replication of the Technology Studies: Data Science Certificate, a COT program, at CT State Three Rivers made by John Jagtiani of CT State Northwestern; motion seconded by Andre Freeman of CT State Capital. The motion was unanimously passed with no abstentions.
- Aligned Program Modification: Engineering Science
 - Add MATH2621 Linear Algebra (4 credits) to the list of Specialization Electives for this program.
 - Add MFG 1010 Parametric Design (Solidworks) (3 credits) to the list of Specialization Electives for this program. This course is cross-listed with CAD 220 Parametric Design (Solidworks), which is already on the listed of Specialization Electives.
 - Motion to approve the addition of MATH 2621 and MFG 1010 to the list of Specialization Electives for the COT's Engineering Science A.S. degree made by Mehrdad Faezi of CT State Manchester; motion seconded by Mathew Spinelli of CT State Manchester. The motion was unanimously passed with no abstentions.
- Aligned Program Modification: Technology Studies: Industrial Technology, AS
 - Remove EGR 2250 Computation Methods for Engineering (3 credits) because EGR 2250 has a prerequisite of MATH 2600 – Calc I whereas the major has a maximum math requirement of MATH 1200 – Pre-Calc

- Motion to approve the removal of EGR 2250 from the COT's Technology Studies: Industrial Technology, AS degree made by Mathew Spinelli of CT State Manchester; motion seconded by Hong Zhou of University of St. Joseph. The motion was unanimously passed with no abstentions.
- Steve LaPointe of CT State Quinebaug Valley asked who is responsible for fixing catalog issues. Mary Bidwell of CT State Asnuntuck noted that she has a contact that she works with, but contacts may be specific to each campus. Attendees determined Mike Stefanowicz might be the best contact at CT State to ask about this and to invite him and other personnel involved in this, including someone who oversees DegreeWorks, to a future COT Meeting. One goal of this is to gets courses and programs updated in the catalog and in DegreeWorks to eliminate the need for the amount of waivers and variances that are currently needed. Mathew Spinelli of CT State Manchester and Terry Brown of CT State added that for the variances, the Banner9/Elucian update is a major cause of issues that require information to be entered manually; therefore, creating a backlog of manual updates.
- Mary Bidwell of CT State Asnuntuck noted that Asnuntuck only has PHYS 1100 and asked if the COT can add an "OR" to the physics requirement to the Technology Studies manufacturing programs only. If PHYS 1201 02 PHYS 2201 are needed for transfer, the students will be advised to take the appropriate course at a different campus. Attendees informally agreed that this is acceptable and Mary should submit an official program modification to the COT.
- Central CT State University School of Engineering, Science, and Technology Overviews & CT State Curriculum and Transfer
 Discussion
 - Steve Minkler of CCSU noted that the popularity of dual enrollment programs is another opportunity for pathways through the COT to CCSU. There are 71 majors in CCSU's School of Engineering, Science, and Technology (SEST). One-third of students who transfer from CT State do so into the SEST. The Electrical Engineering B.S. degree launched in 2021.
 - Dr. Luz Amaya, Associate Professor of Engineering and SEST Leadership Fellow at CCSU, provided a presentation on the <u>SEST CareerLink</u>. This is an employment information network for SEST students. Employers participate in career fairs, info sessions, and company days.
 - Dr. Luz Amaya also provided flowcharts that show which courses from the Engineering Science A.S. degree will transfer to the Mechanical and Civil Engineering B.S. degrees at CCSU.
 - Dr. Ravindra Thamma, Professor of Robotics and Mechatronics & Associate to the Dean for the School of Engineering, Science, & Technology at Central Connecticut State University provided a presentation on Robotics & Mechatronics at CCSU. The Robotics and Mechatronics was established in 2012 with input from an industry advisory board. It was the first program in New England with ABET-ETAC accreditation. The program has 100% job placement. The labs use industrial grade equipment. It is an average of 3.5 years to the degree. The program has pathways mapped out from CT State for maximum benefit. For the internships, industry will contact CCSU to participate or faculty will visit companies and take students. CCSU faculty prefer students to learn from Allen Bradley materials. There are discounts available. The program also visits high schools and offers high school workshops on campus.
- Tour Attendees toured the Applied Innovation Hub at CCSU.

Working Lunch

Upcoming COT Meetings

Thursday, January 25, 2024 – 2:00-4:00pm – Virtual Friday, February 23, 2024 – 9:00-11:00am – Virtual Thursday, March 21, 2024 – 2:00-4:00pm – Virtual Friday, April 26, 2024 – 9:00-11:00am – Virtual May 2024 – TBD – In-Person