

College of Technology – Site Coordinators Meeting

Date: Friday, September 22, 2023 Time: 9:15 AM

Location: Virtual

ATTENDEES

CT State Colleges & Universities

Karen Wosczyzna-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
Steve LaPointe, Director, Advanced Manufacturing Technology Center, CT State - Quinebaug Valley
Sharon Lutkus, Interim Director, Advanced Manufacturing Technology Center, CT State - Naugatuck Valley
Jakob Spjut, Professor, CT State - Quinebaug Valley
Richard Gnall, Professor, CT State - Manchester
Sharon Gusky, Professor, CT State - Northwestern
Stella Litwinowicz, Professor, CT State - Housatonic
Adam Scobie, Director, Advanced Manufacturing Technology Center, CT State – Housatonic
Felisha Guirand-Fleurimond, Recruitment/Retention Coordinator, CT State - Housatonic
Danny DaXian, Professor/Program Coordinator of Engineering Technology, CT State – Tunxis
H. Justin Moore, Dean, School of Engineering & Technology, CT State
John Jagiani, Faculty, Program Coordinator, CT State - Northwestern
Mobin Rastgar Agah, Professor, CT State - Norwalk
Keith Carter, Director, Advanced Manufacturing Technology Center, CT State - Middlesex
Kristen Dagan, Department Chair, Engineering & Technology, CT State – Naugatuck Valley
Renee Dunbar, Micro-credential Coordinator, CT State - Tunxis
Matthew Enjalran, Professor & Chair, Physics, Southern CT State University
Ravindra Thamma, Associate Dean and Professor, Central CT State University
Rich DuPont, Director of Community & Campus Relations, Advanced Manufacturing Center, CT State - Housatonic
Lesley Mara, AVP, Systemwide Initiatives and Sponsored Programs, CT State Colleges & Universities
Thomas Coley, Executive Vice President of Strategic Partnerships and Enterprise Performance, CT State

Other College & Universities

Stephanie Gillespie, Associate Dean, Tagliatela College of Engineering, University of New Haven
Harvey Hoffman, Associate Dean, School of Engineering, Fairfield University

Other

Eileen Candels, Director of Partnerships, Connecticut Center for Advanced Technology, Inc.

MINUTES

Welcome Remarks - Dr. Karen Wosczyzna-Birch, Executive Director, College of Technology & Executive Director & PI, National Center for Next Generation Manufacturing

Attendee Introductions – All Attendees

Connecticut Center for Advanced Technology (CCAT) Updates - Eileen Candels, Director of Partnerships, Connecticut Center for Advanced Technology, Inc.

- If you're not familiar with Connecticut Center for Advanced Technologies (CCAT), we want you to be and we have open houses that go on welcome you to attend those, welcome you to check us out and my contact information is going to be available to you. CCAT is a nonprofit that is largely state or federally taxpayer funded often along with private grants. In partnership with CT State, we have helped bring the Xometry scholarships to Connecticut.
- CCAT works on different grants and has been asked by Paul Lavoie, CT Chief Manufacturing Officer, to lead certain programs in the Manufacturing Innovation Fund. We coordinate a statewide manufacturing month calendar (www.ctmfgmonth.com) to share activities with Wendy and me. There are a number of companies that have open houses that you could share with your students. Our E-Blast goes out every other week. If you're not on that list and you want to be for the future, please email me.
- CCAT ran a very successful engineering internship program this summer that helped attract students who wanted to work in small and medium size manufacturers across Connecticut. Thank you to so many of you for referring people. We had students both from 2-year colleges and 4-year universities. We had a lot of University of New Haven students who participated in the program. Last year was our first year that was sponsored by the Manufacturing Innovation Fund, and

we had 35 interns. This year we had 119 interns participate in the program and that included six different tours of manufacturers around the course of the summer across the state of Connecticut. There was a kickoff at Trump with a professional development focus and keynote speaker, along with Paul Lavoie, and then some social events as well. And in addition to that, for those companies who had engineering students from a 4-year university engineering program, the company could be eligible for up to \$3,500 in a matching wage subsidy for up to two qualified interns. They could have been interns.

- CCAT has funding to do short term consulting. On projects that your students have going on and they can talk to one of our engineers about digital thread, industrial Internet of Things, additive technologies and things that they might have going on either as a capstone project or some form of advanced study. Please get in touch with me because and I will connect you with the correct engineers at our operation.
- [Dr. Amy Thompson](#) joined CCAT. She had been at UConn, and I have attached her bio for Wendy to share. She will be helping lead a new [DoD funded Digital Thread Labs](#) that we will be kicking off in January. That will largely be for manufacturing company employees, but it is for those even outside of the state of Connecticut.
- There were three other programs or events coming up this fall. One is a Siemens [NX Cam One Day University](#) for any teachers or students who want to come to that. The cost is \$40 if you register before Wednesday and \$60 if you register after that. It is from 8:00 to 4:00 in East Hartford on October 3rd.
- On October 4th we have, from 3:00 to 6:00PM, a [Smart Manufacturing Careers Tours and Employer Meet Ups](#) focused on high school students and their parents along with educators to make them aware of careers and manufacturing. That will be at Goodwin University at our Advanced Composite Center. We will have at least 5 employers there with us that afternoon including and a couple of organizations from the Connecticut area.
- On October 11th, we have Jeff Crandall, Director of Additive Technologies at CCAT, doing an [Intro to 3D Printing/Additive – Overview of Adoption into Manufacturing](#). It is a hybrid event either you could come live to East Hartford from 12 to 1:30 or you could participate remotely.
- Eileen Candels can be contacted at - ecandels@ccat.us.
- Karen Wosczyzna-Birch noted that our National Center for Next Generation Manufacturing can provide funds for professional development so for example if your faculty professional development cannot cover the Siemens NX Training at CCAT, our grant can cover that fee.

COT and NCNGM Upcoming Initiatives, Activities, and Important Dates - Dr. Karen Wosczyzna-Birch

- The Quantum grant is a National Science Foundation (NSF) funded initiative. UConn and Yale University are the leads on this grant, and they have a planning grant right now with the expectation that in two years, they are going to submit a full proposal for \$165M to be an “Engine.” This is under the NSF’s new Technology and Innovation Programs directive. Engines are regional, but they’re very large engines again to really capitalize on engineering education. The expectation is that the full proposal is going to be quite broad and very comprehensive. Christine Broadbridge from Southern Connecticut State University and I are on the leadership team, making sure that we are part of this initiative and have a presence. CT State Colleges & Universities can complement what UConn and Yale plan to offer. The grant requires an ecosystem that includes workforce, pathways, and diversity and we can fill some of those buckets. They also like to leverage any other NSF grants so I know our Center will be a good initiative to leverage. Sharon Gusky from CT State - Northwestern CT, has some projects we should look at too and make sure we identify initiatives we have. We will keep you informed. If anybody has any ideas or suggestions let me know and I will make sure they are heard. Richard Gnall of CT State – Manchester noted that quantum is a general term and asked if there is information about specific technologies that of interest in the grant, for example quantum electronics or quantum computing and what kind of equipment will be bought with the funding? Karen Wosczyzna-Birch responded that the current funding is a planning grant so that is what is being fleshed out in the next two years. Wendy, Christine Broadbridge, Matthew Enjalran and I met along with two other physics faculty from Southern CT State University last week to discuss how we can make sure we are continuously at the table and included in this proposal. Matthew noted that the main motivation just from following the field in general in physics, is quantum computing maybe the driver, but it needs to be a very broad appeal because the size of this grant. It is up to us or other groups of individuals throughout the country to have the research end and have the training end. Richard Gnall asked if there is any semiconductor manufacturing of any type in Connecticut. Matthew responded that the Dutch company ASML has locations in CT. They manufacture the machines that manufacture the chips. Mobin Rastgar Agah of CT State – Norwalk added that Norwalk hired a new faculty for optical engineering technology programs, so curriculum is being developed and they are working closely with ASML. Adam Scobie from CT State – Housatonic noted that ASML and M Cubed have a big presence in chip manufacturing. Sharon Lutkus of CT State – Naugatuck valley noted that ASML in Wilton is an optical fabricator, and a contact is Aleksandra Mstowska-Tsiokos at 203-969-4443. Mathew Enjalran noted that several graduates from Southern CT State University work at ASML and their backgrounds are physics/engineering with some training in materials and optics at Southern CT State University. Karen Wosczyzna-Birch added Southern CT State University has a nanotechnology center. A university can apply to be identified as the center of excellence and I worked with Christine Broadbridge on the application for Southern to be identified as the center of excellence and included the College of technology as part of

that center, which still exists. We want to make sure our students are prepared for the workforce. Richard Gnall asked if Southern CT State University has a clean room and Matthew Enjalran responded no, they do some fabrication and mostly characterization. Karen Wosczyzna-Birch added that Trumpf in Farmington has a clean room, and they are doing an expansion. We will want to connect with Christine Benz from Trumpf to share ideas on how to collaborate.

- October is National Manufacturing Month and National Manufacturing Day is October 6th. Send any activities you are organizing or know of to Wendy Robicheau at wrobicheau@txcc.commnet.edu. She will post them on the nextgenmfg.org website and also let Eileen Candels from CCAT know to list them on the site for CT activities. We are gathering activities from our national partners as well.
- AARP Manufacturing Scholarships are still available and you can contact Wendy Robicheau at wrobicheau@txcc.commnet.edu if you have an eligible student. Eligibility requirements are that the student is enrolled in a CT State Community College advanced manufacturing program, age 50+, and willing to share their success story with COT, NCMGM, and AARP/AARP-CT. The funds are held at the Tunxis Foundation, so contact Wendy and she will work with your home institution for awarding the scholarship.
- Xometry scholarships were made possible through the partnerships of the COT and CCAT. Marisa Rubera at CT State – Capital organizes the distribution of these scholarships. She recently sent out an email regarding requesting funds for fall 2023. The deadline is January 5, 2024. Contact Marisa at mrubera@ccc.commnet.edu for more information.
- Share newsletter stories, events, and photos with Wendy Robicheau at wrobicheau@txcc.commnet.edu. The newsletter is shared within the state and nationally as well. Newsletter items can be about students, faculty, and administrators who have impacted our engineering and technology programs.
- The Journal of Advanced Technological Education (J ATE) was created specifically to have a peer review journal for technician education with a focus on community colleges. Karen is on the editorial board. You can access it virtually. If there is something you are doing, and you would like to get an article peer reviewed and published you should submit to this journal. It would be good for someone who is going for tenure or promotion. John Jagtiani of CT State - Northwestern CT has an article with one student pending submission. Karen will look into the next deadline since it is not on the website yet. Sharon Gusky of CT State - Northwestern CT is involved in a mentoring program with J ATE and they have a February 2024 deadline and that they also publish student articles so an article written by our MET² Program students would be good.
- [High Impact Technology Exchange Conference \(HI-TEC\)](#) Summary
 - This conference is held every summer and is focused on advanced technological education. Quite a few people attended on behalf of CT State including students. We had a panel presentation with our students on diversity and technology education. We had four female students who were involved in the MET² Program speak about their experiences. Three of them applied for the NSF ATE Student/Alumni Award and were accepted. Two are from CT State – Gateway and one is from Southern CT State University. They will be going in October to the NSF conference to receive that recognition. A student from CT State – Northwestern CT and a student from CT State – Housatonic were also accepted. Only 60 students from the United States are selected for this.
 - We had a special interest group (SIG) that was organized and funded through the National Center where we brought people together from across the United States and people from industry to take a look at where we are with advanced manufacturing and where should we be really targeting our efforts as we revise curriculum and move forward. This SIG was sold out, so we have a list of attendees we are hoping to engage with, especially since the National Center is exactly that - national. So, it is important to show that our impact is broad and comprehensive and at manufacturing across the United States.
 - We did a pre-conference workshop on logistics and quality assurance and two concurrent sessions. One concurrent session was about the future of advanced manufacturing what you and your students need to know and then adjusting advanced manufacturing for workforce needs and the recruitment and retention of women where we had our panel students speak too.
 - Sharon Gusky of CT State – Northwestern CT also did a session on her NSF project of building a pipeline for middle school to high school to the community college. It was well attended. Sharon is working on a J ATE article on that topic. She found their dual enrollment has increased from seven students to 85 students since we have done this project.
 - Next year HI-TEC will be July 29 – August 1, 2024 in Kansas City. You can submit for professional development funding at your campus, or if you need additional travel funding, the National Center can help.
 - This year there was a poster session as well that we did with a focus on advanced manufacturing workforce skills for Industry 4.0 and beyond.
 - We had a conference expo so we had a booth and had our faculty and students representing the National Center. Our national partners participated as well.
 - Karen had nominated Marty Guay from Stanley Black & Decker for the Industry Recognition Award. He is an incredible advocate of what we do and was recently appointed to the Board of Regents for Connecticut State Colleges and Universities by Governor Lamont. He is such a supporter of what we are doing and has been great

with supporting the National Center and trying to engage other leaders in different industries outside of Stanley Black & Decker.

- Rich DuPont of CT State – Housatonic noted there was a phenomenal opportunity for us to collaborate with our partners in Massachusetts and leveraging some of the funding that they have to reach out to industry here in Connecticut. So there is just another plus to this conference. Karen Wosczyzna-Birch noted that Mass Tech just received a significant grant award from the Department of Labor. Connecticut is a partner.
- Upcoming Conferences:
 - NSF ATE PI Conference – 10/25-10/27 – Washington, DC
 - This is an invitation-only conference for individuals that are principal investigators on NSF grants and includes the previously mentioned student awards.
 - [National Careers Pathways Network](#) – 11/8 – 11/10, Charlotte, NC
 - The National Center will have a booth and presentation.
 - [ACTE CareerTech Vision](#) – 11/29-12/2 – Phoenix, AZ

CT State Community College – School of Engineering & Technology Updates – H. Justin Moore, Dean, School of Engineering & Technology, CT State Community College

- Dean Moore had a conversation with CT State Provost, Dr. Levy Brown, and Dr. Brown will be attending the next COT Meeting to introduce himself and engage with the group.
- For Perkins, we are waiting for the state to open the online portal where the application is submitted. Spreadsheets will be going out to campuses early next week so they can start working on budget requests for Perkins. It is suggested to follow the previous budget that your campus was allocated to kind of determine what you want to spend. The state is modifying the application for Perkins to more align with us as a statewide institution now, so they are changing some of the prompts and some of the things that they are going to be asking from us. Perkins is typically done in the middle of November. Sharon Gusky of CT State – Northwestern CT noted that her campus has not had a Perkins grant for a while. And asked if they can apply now. Dean Moore responded that they can apply and he is working with their campus liaison, their Vice President of Development. Perkins applications are typically due mid-November and funding usually arrives on the campuses between early February and late July. Lots of times is a very short window to spend the money.
- October is manufacturing month so if you have events that you have planned send those to Dean Moore so we can use CT State marketing to market them and get more people to your events.
- Provide any insights, perspectives, and feedback regarding marketing your programs and your areas. There will be a meeting with the manufacturing directors to discuss this, but other programs should be thinking about it too. The CT State website has a page for marketing resources (ctstate.edu/marketing). There are PowerPoint templates, agenda

templates, tri-fold brochure templates, social media guidelines, and flyers. There are guidelines on what colors you should be using for materials, and you can download logos for each of our campuses.

- President Maduko has tasked Provost Brown with creating a couple of new internal councils for CT State. One is the advanced manufacturing council and the second is a general workforce council. Dr. Jimmy Adams, Dean of Business and Hospitality, will be working on the workforce council and Dean Moore will be assigned to the advanced manufacturing council. These are planned to launch in mid to late October. There is a meeting early next week to start talking about, who would be the membership on these committees and the purpose of these of these councils.
- There is a scholarship opportunity from the Connecticut Higher Education Supplemental Loan Authority (CHESLA) available for manufacturing and allied health certificate students. Fourteen have been awarded already and there are fourteen more available. Each scholarship is \$1250 for credit and non-credit programs. To qualify, you have to be a resident of Connecticut, be enrolled at least half time, attending an eligible Connecticut campus, and not be in default on any CHESLA loans. Students will also need a letter of recommendation. Scholarship information can be found at <https://www.chesla.org/scholarships>.
- Dean Moore would like to discuss creating exploratory certificates for dual enrollment programs around 6 to 9 credits each where students are taking some intro level classes that do not have prerequisites. A lot of districts and cities want to set up more dual enrollment in engineering, manufacturing, computer science, and cyber security. The state has just given out a lot of grants to high schools for their instructors to get Master's degrees so that they can be certified to be instructors. This is going to enhance the number of student instructors in the high schools and that can teach these dual enrollment courses. It will also expand our adjunct pools. Sharon Gusky of CT State – Northwestern noted that this would be a good opportunity for microcredentials and that her campus had below threshold certificates, but those were wiped out during the merger because they are not funded by financial aid so microcredentials might be the way to go.
- MFG 1405 – Manufacturing Math I (working course title) Discussion - We have Manufacturing Math on the books as a 3 credit, 3 lecture, 3 workload course. The prerequisite used to be MATH 0989 which was a developmental math. The proposed course would be 2 credits and would proceed manufacturing math for those that really need it. Some campuses were requiring all students to take this non-credit math course before they took manufacturing math or along with the manufacturing math while others asked students to test in or out of it. We need to get the proposal to the

Statewide Discipline Committee (SDC) chair by October 27th to get the course fully approved and on the books for next fall. Proposed titles are Basics of Manufacturing Math or Fundamentals of Manufacturing Math. A course number also has to be chosen, 1305 or 1404? The other issue is the number of credits now that that would increase the credits in the Option 1 and Option 2 certificates and the Option 1 and Option 2 A.S. degrees. The other question was testing and how to do you test, who creates the test, who grades it, and how much do we charge for the test? Karen Wosczyzna-Birch noted that Mary Bidwell, Dean of Advanced Manufacturing at CT State - Tunxis and Asnuntuck is on vacation, otherwise she would be participating in this discussion. Susan Spencer of CT State – Gateway asked if the math testing could be incorporated with the current placement testing is already being done on most campuses because it is free. We can look into incorporating it with the Aleks math testing but need to see if all campuses have Aleks. Susan noted it is underutilized by students who can take the exam and if they are not happy with their score, study and take the test again and be placed in a higher-level course. Susan noted that we gave Aleks the parameters for current math courses so we should be able to do this as well. It is part of the state contract so there is no cost to the students and students can take it at home because there are not a lot of testing centers. Sharon Lutkus of CT State – Naugatuck Valley asked what do you do with the students that sign up the day that school starts? Dean Moore responded that we have the seven-day window to move students into the correct class. Sharon noted the best thing may be for students to go into this 2-credit course because most students went into the non-credit math. Adam Scobie of CT State – Housatonic noted his campus used to have that non-credit manufacturing math as mandatory, but they would always offer the opportunity to test out on day one of the class but the only students who would take that opportunity were the ones that just graduated high school and had recent math courses or engineering students who switched to the hands-on program. The course does seem to help students be more successful in the program. Richard Gnall of CT State – Manchester asked what the credit limit is for a general degree right now. Dean Moore responded that most technical programs can go a little higher than 60 credits because they require more hands-on labs that require more contact hours. There are limits to conform with the transfer policies. Karen Wosczyzna-Birch noted that the COT is exempt from the BOR policy on credit limits because it was grandfathered in and had to comply with the COT articulation agreements. Next steps are to continue the discussion and get a draft proposal together.

- Sharon Gusky of CT State – Northwestern shared that some of her students were put in a General Studies – Engineering/Technology Track A.S. degree program and wanted further clarification on what that is. These students are not put in other COT programs. Dean Moore was unaware of this and will look into it further. He is currently looking into enrollments of all the engineering and technology programs, and this would be hurting those enrollment numbers.

Attendee Updates

- Wendy Robicheau relayed a message from Jakob Spjut of CT State - Quinebaug Valley that the NASA Connecticut Space Grant Consortium scholarship applications are open and due by October 13th. The 2023 - 2024, NASA Quadcopter Challenge application is open for teams from each campus to apply. The priority deadline for that is October 13th. Karen Wosczyzna-Birch added that these are great opportunities for our colleges and students to get some funding. Jakob noted that the scholarships are often underapplied to so encourage your students to apply. Dean Moore noted that quadcopter students at CT State – Naugatuck Valley were only just paid, and the team coach has yet to be paid and is being told we cannot pay stipends. Jakob replied that this is a campus issue, and he has not had issues at the Quinebaug Valley campus. Dean Moore asked Jakob to share the best practices of how they can get everyone paid. Sharon Gusky noted that for her NSF grants, they were no longer able to pay faculty stipends and had to switch to NCL contracts and the RTF process.
- Jakob Spjut of CT State - Quinebaug Valley asked that subsequent COT Meetings be run on Fridays that do not conflict with Shared Governance Meetings or class meetings. Karen Wosczyzna-Birch responded that Wendy Robicheau tried very hard to schedule the meetings, so they did not conflict, which is why the remaining meetings for this semester are not on Fridays. Wendy added that there were also conflicts with national initiatives that she and Karen had to attend. Dean Moore noted that the Shared Governance schedule for Spring 2024 is not out yet.
- Sharon Gusky noted that she is in her third no-cost extension for her NSF grant and supplemental funding for international travel. She is organizing a travel trip for technology, engineering, and biotech students to Spain - Madrid and Valencia - May 10th to 24th. There is no money for faculty, but the cost is pretty low. If you are interested, try submitting for professional development funds and the cost is \$2500 to \$3000. There will be four students from CT State – Northwestern and a couple faculty from there too. We will visit SAS, a data science company in Madrid, University of Madrid Complutense, and the Science Center in Valencia.
- Karen Wosczyzna-Birch noted that the COT Meeting on December 21st will be in-person at Central CT State University (CCSU). Several people from CT State are now working at CCSU in the School of Engineering, Science, and Technology. This meeting will include a working lunch.

Important Dates

National Manufacturing Day – 10/6

NSF ATE PI Conference – 10/25-10/27 – Washington, DC

[National Career Pathways Network](#) – 11/8 – 11/10, Charlotte, NC

[ACTE CareerTech Vision](#) – 11/29-12/2 – Phoenix, AZ

Upcoming COT Meetings

Monday, October 23, 2:00-4:00pm – Virtual

Thursday, November 16, 3:00-5:00pm – Virtual

Thursday, December 21, 9:00am – 12:00pm – In-Person @ Central CT State University