

Engineering Technology Advisory Committee Meeting Minutes Friday, December 18, 2020

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Meeting started at 9am.

1. Introductions

Everyone in attendance at the start of the meeting were done. (Excuses to anyone not given a chance to introduce themselves. The online format did not allow for easy notification of new attendees.)

2. Curriculum

The degrees and certificates for the program were covered. No comments were made about the content of the courses or the certificates/degrees. It is suggested that some work be done with both Computer Information Systems with programming and Visual Communications on website development.

3. Enrollment, Retention, and Demographic Data

A review of enrollment and retention as covered. The curriculum is being done on-site, and therefore can only accept ½ the normal enrollment, having a direct impact on enrollment. Retention for 2020 (Fall 2019 - Spring data available) showed bad numbers (as far as the program is concerned from history). We do have more female students this year. We lost between 8% and 20% of the Spring crew, depending on the course.

Eileen Vesey did chime in that we are doing better than other colleges. The Chicago Tribune did an article on the drop in enrollment in community college and our numbers are not that bad.

Ref: https://www.chicagotribune.com/coronavirus/ct-covid-19-illinois-community-college-enrollment-20201019-zdy6gwl2lfc57can2z62rk75si-story.html

This term was better because we knew what was going on walking in the door and warned everyone. For this term, even though we started as in-person, we did allow for the synchronous learning opportunity for those students that could not come in to class this term. And, using the Zoom in class and with those who needed to login, allowed for being able to work effectively, regardless of where they are.

Sharris did inform everyone that TEAMS does allow for driving another person's computer software. TEAMS comes with the school software and not an additional cost as Zoom. Blackboard Collaborate works well with being able to mark on a person's screen, but does not allow for the ability to access their computer. All three allow for call-in.

The conversation included talking about the high schools and Covid impact on dual credit.

Oak Park – River Forces is still remote. There is a hybrid plan in place for second semester, but that will be dependent on the (Covid) numbers.

As for dual credit classes, the conversation is the assess what is needed and how to meet the needs of the classes to allow for dual credit to happen.

Sharris suggested some ideas, some on-site meetings at the campus vs the HS. Logistics will be the concern to come by Triton but the conversation needs to happen now. The suggestion of completion in the summer is another idea. Depending on the school, there no plan yet for summer completion.

Davidson did confirm we have funds incombered to deal with the costs of having less enrollment, as all other schools are dealing with the same issues. We are working on the FY22 plan now and we are working to cut costs where we can, like moving away from Zoom.

Morton is 100% remote and students can come in to use lab equipment, but it is very spotty and doing 3D printing for the most part. There are some plans for doing an intro to PLTW in the summer, but it is all in talks. Recruitment for next year is the big concern. Getting new people in the program is also a concern.

Leyden is starting second semester remote and tied to the governor's tiers. If stay at Tier 3, they will stay remote. If the governor drops us to tier 2, then the students will start coming back per the allowances. They tabled the metals and autos courses.

Ridgewood confirmed the students can come in for hands-on for their dual credit. If they don't show up, they can't get the dual credit.

Ken did talk about different events for promoting these programs to the public since Covid has hurt us getting info about hands-on programs. Sharris suggested a Maker Day. It may help to promote them to the upper levels of courses that lead to Engineering Technology.

Ridgewood is planning to do GADgET next summer.

Lynn from NFPA talked about the Festo MechLabs. If anyone wants to do anything in the summer, lets help. Virtual speakers are available, too. She is also willing to help on the wooden kits. Sharris did alert that there is a Mini-Fluid Power Challenge that will happen in February.

None of the FAMTEN schools could do anything this Fall. Hoping to do something in the Spring. Perhaps more of the wooden kits would be useful for this upcoming Spring term. Morton would like those kits.

Regarding online instruction with CAD intensive products there is a difficult prospect. TEAMS in heavier than Zoom to run this way. Best practices include having the cameras off and closing the heavy applications, like the office products. The solutions include using cloud-based software vs native to the computer. Not all software lends itself to this. Perhaps having a server on-site can help with this, assuming the needs exists there beyond the present.

4. Employment

Seiler from ICATT gave everyone an overview of ICATT. The companies have not slowed down on their hiring of apprentices. The number did not drop, but all is good. The program is not an internship. The student is HIRED by the company, with a 5 year commitment, with the first 3 being in school and at work and the last two years working there full time. The student graduates in three years with no debt, as the company pays for everything and two credentials, from DOL and the international one from ICATT, with a commitment to stay the last two years. They are available to present to the high schools.

Side Note: For high schools, I know the word "year" sounds like a lot to the kids. Use MONTHS in selling this, please. It's a 60-month programs, with 36 months being in school and work with school all paid for and the last 24 months working for the company. They get paid the whole 60 months.

Outside of ICATT, various companies are hiring. Sharris informed the crew on who is hiring, including placements in Hudson Precision and Elkay Manufacturing.

Sutter did alert us that the union apprenticeship program is on hold as the school is closed. They have about 500 applicants and did do a testing event recently, but nothing will get started until next year. The candidate pool is started. There is no forecasted date to open the school yet. The hope is they open by March. In January, the current apprentices will return in a smaller classroom setting being safe and get stuff done.

Sharris asked if there is no need for the apprentices in the field. This is not the case. The companies are not in need of new talent at this time, but the school does not have the apprentices tied to the apprenticeships. The contractors are fine with the talent they have now because it is the winder. Spring may change.

Kaiser is saying Century needs a Cost Estimator or CNC. Ace Metal Craft needs CNC person as well.

5. Looking ahead (outreach and future)

IDEA Drafting Competition for Spring 2021 was covered. Stoch did alert the crew that the IDEA crew was looking to make it as flexible as possible for the teachers and students. What type of presentation process was covered. Figg and Sharris both agreed that it would be easier if it was done live. We'll see how it works out. OPRF and Leyden would like to get involved, but probably 2022.

TechSavvy is shelved for 2022. Mikka-Van Der Stuyf did confirm that it will go this way. Sharris did confirm that most of the volunteers are in the danger age category. Being a hands-on program, it does not lend itself for happening online. Mikka-Van Der Stuyf did confirm only North Dakota help it last year in February. None of the others ran.

Blaylock confirmed that the 2021 FIRST competition is all online. Beyer did alert the crew that there is an NFPA FIRST scholarship is available for the students on the teams, \$40,000, as well as the \$2,000 one to go to Tritons Engineering Technology program.

A walking tour was done of the lab, where the Wazer was shown, the welding lab and projects. The idea is to stay on top of the technology to prepare the students for the fields. Our "old" laser is going to go with culinary arts for their use for cake toppers and customizable boxes for their products.

Curriculum update will include more G-Code reading and editing using different platforms outside of MasterCAM, garnering more interest to learn it. The hope is to spark the interest to learn MasterCAM. Kaiser confirmed that they wish there was more talent out there. She specifically prefers those educated in 5-plus axis.

At OPRF they use 3rd party CNC products, not MasterCAM. Leyden is using MasterCAM, but not just MasterCAM, and other G-Code emulators.

The request has been made for an additional full-time faculty member, but we won't know what will happen at this time. If the position does go thru and interviews happen successfully, the earliest the person can start is Fall 2021.

We will be running the NFPA Mini Fluid Power Challenge for Middle School Youth (planning a small scale version for Saturday, February 13, 2021) – Flyer attached. The appeal was made for the high schools to alert the grade school partners about it.

GADgET (Girls Adventuring in Design, Engineering & Technology), planning for Summer 2021, week of July 19 (to be run by A. Blaylock). GLoW (Girls Learning to Weld, new creation by A. Sharris), Summer 2021, week of July 12 - joint flyer for GADgET/GLoW attached.

Kulatunga did alert everyone that we are working on a pathway to make sure the students can come to Purdue NW and have introduced a 40-week apprenticeship program to advance the students.

Vesey alerted everyone to the training grants that companies can apply for, including ICATT companies.

Meeting adjourned at 10:55am.

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Respectfully submitted,

Antigone Sharris, Full-time Faculty & Coordinator, Engineering Technology Program