Industrial Technology/General Technology Annual Advisory Committee and AMT Sub-Committee Meeting
April 10, 2015
7:00 a.m. – 8:30 a.m.

Meeting called to order and welcome by Terri Messer, filling in for Reginald Davis, JSCC Industrial Technology Advisory Committee Chairman with the following members present:
Toni Alexander, Jason Bates, Jere Cox, Rich Cunningham, Debra Eanes, Jeff Gaston, Kyle Geary, Rodney Grimes, Jeremy Gurley, Ellen Hudson, Roger James, Mike Kennedy, Bill Kipp, Jack Laser, Ben Lawrence, Nona Lawson, Craig Little, Dale Popp, Allen Powell, Cathi Roberts, Tammie Robinson, Dan Rodenbaugh, Richard Skelton, Janice Taylor, Lynda Trick, Candy Ward, David Weathers, Swee Har Wilcox, Kevin Williams and Chris Zamora.

Introductions by attendees.

Welcome by Kyle Geary, Industrial Tech student. Kyle discussed what the AMT Cohort means to him. Kyle works at TBDN.

We are focusing on our Multi-Skilled Maintenance Technician Program. We have another concentration: Applied Manufacturing

Old Committee Business:

Lab transformation…….Steve Adams and group have been very helpful. We have wonderful donations. ARJ donated a welding robot.

New Business:

Future McWherter expansion – the first phase will continue on. We will add more technology. There are still some things on backorder for the motion controls part. The big news is we will now have more space to continue upgrading our labs.
In order to keep up with the technology, we need to keep up with the training. We would like to have a night training for encumbent workers and would offer as a credit or non-credit….the courses will be same that the co-op or IT students are taking now. If you have that need, please let us know.

The positive is we are on the upward trend. The AMT is not the only piece. Overall enrollment is up.

We only have about five graduates this year.

Right now, we have 48 students…..of those we expect at least 20 graduates here on out.

Of these five graduates, they have a comprehensive exit exam, we generally look for scores of 70 or above. This is concerning for a number of reasons. This is a requirement for graduation but they don't have to score a certain amount. We have to have a corrective action plan.

We have 17 companies that are a part of our consortium. We have been working with the Missouri group. They have five companies that they are working with.

Ben Lawrence introduced. Ben has a background in electrical engineering.

We are still looking for one more instructor.

Update from Cathi Roberts:

I have been recruiting for the AMT Co-op……..traveled to 19 schools, have spoken to over 1,600 students…..usually take an AMT student and someone from industry to the schools, career fair at a basketball game, and attended several high school parent meetings, unfortunately, very few parents attend.

As of now, we only have about 12 applications……one will not make it to the application process……will have about 30 applicants.

Question: Of the applicants so far, were the majority from outside of Madison County?
Answer: None were from Madison County.

Question: Do you think it has anything to do with TN Promise?

Answer: It is whoever the influencers are

Brief discussion followed.

We have one application from Scotts Hill and one from Chester County.

We would like to get into the schools during inservice.

We will be starting something new…….Maymester – online welding class.

Lean Manufactuing, NCRC exam

Question: Is there any flexibility with the April 15 deadline? Some of us could make contact with some of the schools.

Sometimes you have to push the agenda on the Board of Education. Gibson County is doing a lot this year.

Question: Is there some way we could get all of the vocational schools together?

We are maxing our classes to 16.

Prior Learning Assessment:

With the reconnect, will there any eligibility for funding? The rumblings is that it is for TCAT only. Next year it will be for community colleges.

EET 170 – can be done online and in electronic format.

Question: Does it include electrical schematics/power electronics?

Discussion followed.

EET 200 working with the Kellogg's group……strong utility manager. We have equipment in place but it is not up to where we want it right now.

Motor reversal in my facility.

Part C providing hands on…..what I am looking for is more quality feedback. If you need specifics, I will be happy to send you syllabi.

David Weathers: Certainly I would like to do that. How do you discern issues from electrical issues?

Jere Cox: This is probably one of the most important classes you will teach. There is a lot to keep up with. There is no hardware any more.

The new technology but the line share of our companies will use it until it is no longer usable.

Question: Do you cover DC Motors also? We cover it……..emphasizing auto tuning.
How much time do you allocate it?

There are drives with PLC in them that do motor controls. There is enough material to have two classes just on motor bearings.

Motor Control and Solid State Motor Controls……..you give them the basics…….once they go on into industry, the will learn the rest.

I need your insight into smartly manage it….the students will take this class by itself this summer. This is one of those topics.

You may cover robotics servo motors within robotics. Is this covered in this or covered in robotics?
We will get a much more to servo motors. They will share the body of knowledge with robots and motors.
EET 230 – PLC I how to program and the parameters of programming.
PLC II – analog and scaling and advanced instrumentation
0-10 volts
4-20 volts is standard signal

Injection….what platform? All three of them…stick, five, control logics
Tag based or motor based? They have a project to do during the semester.

EET 240 – Fluid Power – easier to manage than the motor controls. We have two trainers in the the lab……pump drive is to provide pressure or flow…..they have three exercises where they have to draw out 8-12 labs that have 9 hydraulic and 3 pneumatic.

EET 260 - Instrumentation – we look a sensors and how they interact…..flow controls…level controls…..where it is laser level the different technologies that are on their. We want it to fir your needs. Jot down those ideas…….what you rely on the most…….we have examples of most everything.

EET 270 – Robotics – this class is mostly focused on programming, material handling but easily adapted…….six axle, any artisian……user space changing frames……your basic programs…use the frame and different spaces. We only have one robot……we have FANUC….we do have simulation software. Getting the motorman is n excellent supplement. It should not be a problem to go in between the two…..FANUC and motorman.

EET 297 – Capstone Couse – opportunity for the students to show us everything they have learned. It is project based lecture minimum. Technically PLC III…..using the trianer

EET 180 – Programmable Logic Controls I
The placing of the course is changing. The course will be offered in the spring. Students will need a good background in EET 130 (AC/DC Circuits).
Jason Bates added that we are comfortable with what they are getting.
No additional open discussion.

MET 110 – Introduction to Drafting & AutoCAD Applications
Item D will need the most attention.
Students will receive an acknowledgement that they completed all the courses.
Reading schematics is covered in just about every class that we have.
Richard requested examples of actual schematics that you are willing to share that will be helpful in training.
Due to time constraints, Roger requested people "side bar" rather than open discussion.

EET 150 – Electromechanical Devices
The course is still under construction. You will receive information about course through email.

Meeting adjourned.