Owens Community College

Combined: Electrical Engineering & Computer Technology Advisory Meeting
Date: October 17, 2014
Location: Audio Visual Classroom Center (AVCC), Room 125/128
Industrial Attendees: John Butson, Steve Byerly, Wayne Corggens, Jason Dugan, Kurt Everson, Steve Hanenkrath, Sri Kolla, Craig LaHote, Tom McLeary, Jim Olzak, Jyotsna Phadke, Jack Rex, Robbie Robinson, Dave Schuck, Mike Sparks, Barb Vidra, Roger Warnock, Jim Wolsiffer, Phil Ziemke
Student Attendees: Steven Biela, Nicholas Byrne, Brian Gradomski, Terry Rodabaugh, Tony Smoktonowicz
Owens Attendees: Lynn Kendall, Tom Mahas, Jacey Parks, Tom Perin, Denise Pheils, Glenn Rettig, Laura Schuster, Bill Shepherd, Diana Stachowiak, Paul Svatik, Don Szymanski, Dan Wedding,

Topic	Discussion/Rationale	Recommendation/Decision/Action
Call to Order and Review of Previous Minutes	• The meeting was called to order at 12:15 p.m. by Chair Diana Stachowiak. • Introductions were made. Tom Perin, Associate Vice President for Institutional Effectiveness, thanked all members in attendance for their support.	• Minutes of the fall 2013 meeting were reviewed and approved with one correction under the Faculty Report section –"Tom Mahas, Computer Science, will be retiring in the near future, but will remain an advisory committee member" will be removed.
Enrollment and Retention Report	• College enrollment has decreased 16.3% (down 2,434 students). • Overall the School of STEM, which includes the Findlay campus, is down 830 students or 18.1%. • The Toledo campus Biomedical Electronics degree is down 25.8% or 16 students. Computer Science is down 24.4% or 47 students. Electrical is down 31.6% or 37 students. Network Information Systems Support is up down 23.1% or 24 students. Systems Security and Information Assurance is down 36.4% or 8 students. Wide Area Networking is up 1 student or 2.9%. The Cisco certificate is up 66.7% or 4 students. The Network Administrator certificate is up 2 students or 200%. Network Security is down 66.7% or 2 students.	• All across the country colleges and universities are experiencing dips and drops in enrollments. The drop in census overall (for young people in particular), has contributed to lower enrollments. It is Owens' job to ensure that students are getting what they pay for by giving them the education needed for gainful employment.
Faculty Report	• Paul Svatik reported that there are only six Biomedical interns this semester and every one of them has a position. The AAMI core curriculum has been published and is on-line and in a booklet. It contains what professionals in the field feel students need to be successful. • Tom Mahas reported that the systems in the lab have been updated. Changing the direction of the diagnostics course to more of a systems type interface skill is being investigated as technology is changing. It is also heading toward more of a computer than electrical aspect with the removal of EET 102 Circuit Analysis I and EET 110 Electronics I from the program. Tom was not sure what effect dropping these two	• Workforce and Community Services and the Skilled Trades Department have received a grant and have asked for the EECT Department's input on what PLC or robotics materials/equipment to purchase. If anyone has ideas or suggestions for equipment to purchase, please let Diana Stachowiak or any full-time faculty member know. • If anyone has openings for System Security and Information Assurance students (as a co-op or job shadowing), please let Denise Pheils know.

courses will have on the other EET courses.

- Dan Wedding reported that the Computer Science program has been trimmed back and as much software as possible has been added in an effort to expose students to each type of programming they will encounter in the job market, thus making them more employable.

- Bill Shepherd reported that the Wiring and Codes class is being re-launched as industry felt it was important for students to know. The newer PLC equipment in the lab lacks an interface I/O. Now that the SKT program along with their equipment has moved into the building more topic areas can be investigated for inclusion in the program. Students this semester seem to be more serious about their classes than those in the past. Student material is being collected for the upcoming ATMAE accreditation visit.

- Don Szymanski reported that the Electrical Engineering Technology program was 73 credit hours and is now down to 64. A lot of changes are taking place. Content-wise the program is pretty much the same. Semesters have been cut down to 15 weeks with the exam during the last class period. During the fall, with holidays and days off, it turns out to be 12 weeks. He is looking closely at content to see what to cover and checking with everyone in the department to make sure core courses haven't been dropped.

- Denise Pheils reported that the Systems Security and Information Assurance program is also cutting required credit hours. The capstone course will be utilized for students competitions and work experiences. Students have helped over 80 not-for-profits over the last eight years. Students gain work experience for their resume and increase their employability. She is working with Capella University on their cyber defense system. They are willing to open up their system for students. Denise would like to add A+ back into the program .

- Laura Schuster reported that she is an advisor to the Computer Club. Membership has increased to 25 students. They have had 600 computers donated – 400 going to Belize and Jamaica with the other 200 designated for the local area. The Club is branching out into the community. Members have been going to the library and working with kids. Laura

	is working on redoing the Networking and Information Systems outcomes. The degree is doing very well with a lot of students enrolled. Some of the degree is still under the Business area, so bringing it back together is being investigated. • Lynn Kendall who is the EECT lab technician stepped up as the lead instructor for the Wide Area Networking program until a replacement for Jay Taylor/Brian Garza can be hired. Darren Grubmaier and Tim Ledoux are two new adjuncts that were hired to teach classes. The equipment is up-to-date, although Cisco is constantly updating the curriculum.	
Student Report	• Biomedical student Brian Gradomski is interning at UTMC where he is being shown many of the skills learned at Owens. Lab reports are helping him get ready for the future as he documents everything he does. He feels that all the courses have helped him understand what he is getting himself into. Brian said he is lost as far as what classes he needs to take next semester due to time constraints and what is being offered, otherwise, everything is going well. • Student Steven Biela stated that the Computer Diagnosis class is more interfacing than diagnosing. He agreed that students in class are definitely more serious this semester. Steven feels that all his professors are over-qualified for their job – they know more than what they are telling them. • Student Tony Smoktonowicz has one semester of Environmental classes and two classes in Electronics to complete before he graduates. Owens is fortunate to have accredited programs. He wants to make sure that all students are aware of the opportunity to apply for scholarships through NASA. After being awarded the NASA Scholarship, Tony was invited to participate in a 4-week on-line course. Participants are given Mars coursework and geography on-line, then are to design a mission and draw a Rover using a CAD program. Winners are invited to an on-site location for three days exposure to program educators, scientists and engineers. Tony was pleased to announce that he will be participating as a winner. He is the president of the Tau Alpha Pi Ohio Zeta Chapter and will do what he can to try to increase student participation in these programs as it will help students in their careers.	• Student Brian Gradomski feels that adding more networking classes to the program is very positive. • Student Steven Biela felt that using Visual Basic as an intro programming class will be very helpful. He finds it annoying to come to campus and find the open computer lab in the Industrial & Engineering building closed. The computer lab in College Hall only has four computers with the pertinent software for Engineering students to use. • Student Tony Smoktonowicz thanked Owens for trying to bring back robotics. • Congratulations to Tony for his success in being awarded a NASA Scholarship and for winning an invitation to the exclusive NASA three-day program.

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	• Student Terry Rodabaugh has only taken Intro to Computer Programming, Visual Basic, and Intro to Circuits, so he can't speak about the program. The Circuits class is great as it has a lot of hands-on. He has a Bachelor's degree and did not get as much out of those classes as what he is getting here at Owens. The Intro to Computer Programming was good and had a lot of good information. Terry thought starting with C would be a better idea as he doesn't get all the on-line notes posted to help figure out programming. • Student Nicholas Byrne he loves the program and Lynn Kendall is good at what she does.	
Outcomes Assessment Status Report	• The Assessment Status Report will be presented at the individual Spring 2015 meetings.	
Program and Curriculum Enhancements	• The total number of program credit hours are being cut back because the Ohio Board of Regents thought our programs were creeping up toward a Bachelor's degree and a number of the credits would not transfer • The Biomedical Electronics degree has been revamped to no more than 64 required credits. Advisory committee recommendations were to add more networking to the curriculum as more equipment is going wireless. • Wide Area Networking (WAN) advisory committee members want to see employees communicate more effectively. • The removal of IST 268 Web Based Tech Support & Documentation from the degree Networking & Information Systems Support (NIST) degree will get rid of redundancy and allow more in-depth topics in other courses. Students will be able to take ENG 112 or choose from a number of other courses. • System Security & Information Assurance (SSIA) students will be able to participate in competitions on the local and national level that deal with system security. Students will be able to choose between IST 289 Project Management or IST 293 Co-op. • The Electrical Engineering Technology program will be brought down to 64 required credits. The advisory committee recommended emphasizing writing skills, so more report writing will be included in the earlier classes. • Computer Science advisory members wanted students to be	• The removal of ENG 112 Composition II and PHY 115 Physical Science for Technology from the Biomedical Major for the Fall 2015 catalog has been approved. EET 118 C Programming is replacing EET 119 Visual Basic Programming, and EET 282 Routing Protocols and Concepts is replacing EET 212 Electronic Systems. • Changes submitted for the Wide Area Networking degree include replacing EET 119 with EET 118. SPE 210 Small Group Communications is replacing SPE 101 Public Speaking, MTH 122 Math for Computing is replacing MTH 151 Applied Algebra and MTH 152 Applied Geometry & Trig; and PHY 151 Ind. Physics-Mechanics and PHY 152 Indus. Physics-Heat, Light, Sound are replacing PHY 115 Physical Science for Tech. ENG 112 is being removed. • Changes to Networking and Information System Support degree include the removal of IST 268 Web Based Tech Support & Documentation from the degree. PSY 111 Indus/Organ Psychology will be added. • More sections of Math 122 will be offered to better fit student's schedules. • ENG 112 is being removed from the System Security & Information Assurance (SSIA) degree. IST 296 System Security Capstone will be a required course. A three credit ART or HUM elective will be added in the last semester. • ENG 112 is being removed from the Electrical

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	exposed to as many computer languages as possible. Students will get Visual Basic, C Programming, JAVA, Unix, and X/HTML	Engineering Technology program. PHY 151 and 152 are replacing PHY 115. EET 118 is replacing EET 119. EET 291 is being replaced with EET 165 Automation Control: PLC I. • ENG 112 is being removed from the Computer Science program. EET 102 Circuit Analysis I and EET 110 Electronics I have also been removed completely from the degree. EET 118 and IST 126 Intro to X/HTML have been added. MTH 228 was replaced with MTH 122. PHY 151 and 152 will replace PHY 115.
Equipment, Facilities, and Staffing	• The network licenses will be updated. • Four new adjuncts were hired to teach upper level WAN and SSIA courses.	
Accreditation Status	• Chair Diana Stachowiak informed the group that 11 degrees will be going through the accreditation process in spring of 2015. The EECT Department has collected all the student material needed for the visit. • The NIST and SSIA degrees are currently accredited through ACBSP and will be submitting their continuous quality report in January. Faculty are busy assembling their curriculum maps. Once this is complete, the programs will moved over to ATMAE.	• The School of STEM expects to have a successful ATMAE visit. The implementation of changes based on committee members, faculty, and students will help with this success.
Other	• Jim Wolsiffer, Buckeye Cable System, said it is difficult to hire employees willing to work nights and weekends. It may be helpful for advising staff to inform students that the reality of the service industry is that they will be working nights and weekends. • Spring meetings will be separated out by degrees. • Advisory members were thanked for their participation. • Meeting adjourned at 1:20 p.m.	• Tom Perin mentioned that it might be worth looking into creating a certificate program for RF electronics. • Tom Perin reported that Owens is putting a tremendous investment in retention efforts. Our marketing strategy is changing. Nationwide, fifty percent of students do not make it past the first year. Many of the reasons students leave we cannot change, but we are working on what we can change. Our new goal is completion and graduates. Everyone employed by the College is being trained on how to better engage with students. Advisory member help is needed for coop experiences and internships.