

Owens Community College

Computer Science Major Advisory Meeting

Date: March 23, 2016

Location: Industrial & Engineering Technologies Building, Room 130

Industrial Attendees: Ted Fisher, Tom Gray, Sean Nestor, Dave Schuck, Barb Vidra, Matthew Zuccarell

Student Attendees: Josh Mack

Owens Attendees: Tom Mahas, Jacey Parks, Diana Stachowiak, Dan Wedding

Topic	Discussion/Rationale	Recommendation/Decision/Action
Call to Order and Review of Previous Minutes	<ul style="list-style-type: none"> • The meeting was called to order at 5:40 p.m. • All minutes are posted to the School of Science, Technology, Engineering, and Mathematics (STEM) website under the appropriate program. 	<ul style="list-style-type: none"> • Minutes of the spring 2015 meeting were approved.
Enrollment and Retention Report	<ul style="list-style-type: none"> • Overall the College is down 12.4%. There were 12,630 students last year compared to 11,068 this year. • There are 4,137 students in the School of STEM this semester compared to 4,119 last year at this time. That is a 0.4% increase • The Computer Science program had 121 students last year at this time compared to 130 this year. This is a 7.4% increase. Toledo Campus is up 9 students for an 8.8% increase. Findlay Campus is holding steady with 19 students. 	<ul style="list-style-type: none"> • The EET, WAN, and Computer Science programs have all seen an increase in enrollment. This is very good, even if it is only a little.
Faculty Report	<ul style="list-style-type: none"> • Tom Mahas reported that he is trying to find ways to update the program and bring it into the 21st Century. He is trying to implement more integrated circuit applications into the curriculum. Tom wanted to know if rather than having EET118 and EET119 be basically the same, we should have one of the courses be more basic and the other be more advanced. Tom asked this question because graduate Robert St. John complained about learning loops and if then statements twice. To that, committee members Tom Gray and Sean Nestor said that Robert was a more advanced student and that most of our student population was inexperienced enough that they need to see the same concepts more than once before moving on to the upper level courses. EET118 and EET119 instructor Dan Wedding concurred. Tom Gray and Dan Wedding commented that the students coming into EET221, EET222, and EET205 now are well versed in programming and are flying through 221, 222, and 205 course material. • Thanks to advisory member input the program was 	<ul style="list-style-type: none"> • Tom Mahas asked advisory members what would be needed to include Apple MacIntosh and/or Android OS in the curriculum. • The committee members noted that individuals who can program in general and program mobile devices and microprocessors (like PICAXE chips and Raspberry Pi's) as well as do network programming are in high demand. • Committee members encouraged Tom Mahas and Dan Wedding to continue to add more PICAXE chip and Raspberry Pi projects to the program because the more actual hardware a student can program, the more employable they become. • Committee members felt that because the Computer Science degree is a two year program and many inexperienced incoming students, it is fine to keep EET118 and EET119 the same besides the differences in syntax etc. The committee members also commented that is very difficult to choose which advanced language to teach because there are so many languages and one does

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	<p>renamed Computer Science and both EET 102 and EET 110 were dropped from the curriculum. This has helped with enrollment.</p> <ul style="list-style-type: none"> • Tom Mahas commented that he plans to add 2 weeks of networking to EET130. 	<p>not know where the student will get a job. Better to give a solid foundation in the basics than to pick an advanced language tailored to one specific job.</p>
Student Report	<ul style="list-style-type: none"> • Student Josh Mock is two semesters away from graduating. When the curriculum changed and students were given the choice to stay with the old or go with the new, he chose to stay with the old. He is interested in programming so he is thinking about interning somewhere after he graduates or transferring to a four-year university. • There was some discussion on the way high schools are teaching math. Matt Zuccarell thought this might be a problem for in-coming students. • The School of STEM has an amazing advising team that is trained in all of the Engineering programs. Each student is assigned an advisor who makes sure they are on the right track. 	<ul style="list-style-type: none"> • Student Josh Mock said the only complaint he had was to include a C Programming course to the curriculum and that has been done. He was glad it was included, because it helped him with the basics. • In-coming students complete a COMPASS test to assess what level of math is appropriate for them. • MTH 122 has been added to the curriculum. • The curriculum was redesigned to make sure students have programming at the front end before they take digital. • Programming seems to be a hot commodity right now, but there are not enough qualified applicants to fill these positions. Most systems have database applications.
Outcomes Assessment Status Report	<ul style="list-style-type: none"> • Normally, Diana Stachowiak would share the results of how students are doing in individual courses with advisory members. She was unable to do it this spring, due to the College dropping the TaskStream database where all the information was stored. With the College being on fiscal watch, the software became too cost prohibitive and was not renewed. 	<ul style="list-style-type: none"> • Diana Stachowiak stated she is collecting the data, but it will take a little longer for her to build the reports as she will have to create new templates. This information should be available for the fall meeting.
Outcomes Competency Validation	<ul style="list-style-type: none"> • There are industry competencies in all areas of the Computer Science field. 	<ul style="list-style-type: none"> • There is state-of-the-art learning validation for this program and competencies are based on active industry feedback and curriculum updates.
Professional Development, Partnerships and Articulation	<ul style="list-style-type: none"> • The State is emphasizing that representatives from colleges, universities and high schools meet to agree on common material and standards for each program. These standards are called Transfer Assurance Guides (TAG) courses. • The benefit of having courses TAG'd is that all schools with a corresponding TAG'd course would automatically accept our TAG'd course for credit as long as the student has passed the course with a C or better. If the student gets a C and wants to transfer the credit to Owens, Diana Stachowiak will look at it a little closer and meet with the 	<ul style="list-style-type: none"> • EET TAG courses include EET 101, EET 102, EET 110, and EET 201. • The first four CISCO courses and EET 130 are also TAG courses. • EET 222 has been submitted for TAG – waiting to hear if it has been accepted.

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	<p>student to see how solid they are to ensure the student's success in the class.</p>	
<p>Program and Curriculum Enhancements</p>	<ul style="list-style-type: none"> • Diana told the advisory committee that when describing the Computer Science degree vs. the Computer Programming degree in the School of Business to a prospective student the analogy is as follows....”There are 2 types of computer programmers in industry both are equally vital. The first writes computer code to control machinery (the EET courses in the EECT department) and the second type writes computer code to manipulate data in large data bases (the IST courses in the ISOA department). • The IT field has expanded to be so large, that everything cannot be packed into one degree. • The latest window servers coming out have power shell scripts, not GUI. Juniper is also easier to work with. 	<ul style="list-style-type: none"> • Advisory committee members agreed with the description of the Computer Science degree in comparison to the Computer Programming degree. • Advisory members felt the current curriculum was good. The programming classes should progress and build onto each other namely that EET 118 helps with programming PICAXE chips and EET 119 helps with building the GUI interface, vital skills for the EET205 capstone course.
<p>Equipment, Facilities, and Staffing</p>	<ul style="list-style-type: none"> • Budgets are tight and enrollments are down which means little or no lab fee money. This makes it hard to put equipment into the classrooms. • The NIST program has equipment that is dying out. Diana Stachowiak has come up with a plan to replace these with a system that would cover a number of degrees. • Department heads will be submitting projected budget needs for the next 5-6 years, along with quotes for these items. • Advisory members that are adjuncts want to be able to get up to speed with new equipment and/or software before the semester starts. 	<ul style="list-style-type: none"> • Diana Stachowiak trying to get three servers that would support 355 virtual machines on any given night. Funds will be sought from the Owens Foundation, donations, a Perkins grant and raising lab fees. • We get the servers we will be able to offer VM Ware courses. • Owens currently has the lowest lab fees in the state, so department heads were told to adjust them where needed. A portion of lab fees will be available to be spent now and a percentage will be put aside for future needs. • Diana Stachowiak assured adjuncts that since the schedules are determined a year in advance, communications with adjuncts will happen much sooner than in the past.
<p>Accreditation Status</p>	<ul style="list-style-type: none"> • ATMAE gave us a partial compliances with being able to track what graduates are doing in the field. • The College now has an internship and co-op director, Fiknete Shutina, who will be working with Chairs to place students, as the Career Services no longer exists. 	<ul style="list-style-type: none"> • Getting student's personal email addresses in the first year classes is being discussed as well as having students set up a LinkedIn page. Instructors can have students update their pages as an assignment in various courses throughout the program. When the students build LinkedIn pages and Institutional Research can has the students personal emails, the college can do a better job of tracking program graduates to correct the partial compliances from ATMAE.

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		<ul style="list-style-type: none">• CSCI committee members felt that collecting the personal email and building LinkedIn pages in the first semester classes and upgrading this information through the degree is an excellent idea as members sited that this is how employers search for employees.• Sean Nestor volunteered to help build and administer a base of email addresses connected to LinkedIn.• Committee members also suggested a “business networking social” event once a year that would include alumni, current students, committee members, and interested employers.• This event would come with REQUIRED student attendance as it would help students develop their soft skills.
Other	<ul style="list-style-type: none">• Advisory members were thanked for their commitment and service.• Chair-Barb Vidra, Vice Chair-Tom Gray, Secretary-Tom McLeary• The meeting adjourned at 6:55 p.m.	