Industrial Advisory Board Meeting October 10, 2014

Participants: Mrs. Saralyn Mitchell, Mr. Adrian Vogeltanz (Digium), Mr. Tom Counts (3-GIS), Mr. Dave Freeman (Limestone County), Mr. Chad Easterling (Dynetics), Mr. Wesley Marsh (Nucor), Dr. Christian Tournes (Davidson-Technologies), Dr. Adam Wade Lewis, Dr. Dave Fitzsimmons, Prof. Katia Mayfield

Mrs. Saralyn Mitchell served as a guest speaker to inform the IAB of the different services that were in the works through the Career and Development office and to also speak of opportunities of Internships and Co-op.

It was specially noted that Mock Interview Day is coming up on November 13th and that sessions in either the morning or afternoon will take place. If any of the employers are interested in participating to help our students they might contact Mrs. Mitchell at saralyn.mitchell@athens.edu.

The career fair which took place on October 15th was mentioned and the program for employer sessions was brought up. The employer sessions consist of employer's representatives having a 30 minutes session with students face to face. This way, students are not just getting the information from academic area but also from those in the field, in which they are going into, who are familiar with the recruitment and hiring processes.

It was mentioned, with consideration to Mock Interview Day, that employers could have this opportunity to allow their "green" employees to conduct interviews to gain the experience themselves while at the same time allowing our students to gain experience in the interviewing process. Having employers participate in Mock Interview Day would also give students the opportunity to get their resumes ready.

Professor Mayfield provided follow up information on action items that were assigned and answers to questions that were brought up during the May 16, 2014 meeting.

The main focuses of conversation were the curriculum changes that were passed for the upcoming catalog year. There were some minor changes made to the curriculum where specific class pre-requisites were established instead of a general "topic" that covers the material from the courses required.

The CIS program has changed where students will no longer be required to take business courses as part of the professional courses, however these students will now have to declare a minor that will be required for the option. Another change affecting the CIS minor and other plans of studies is that CIS 325 Digital Enterprise has been removed as a required course and will now be offered as an elective. In its place CIS 321 Systems Analysis and Design will now be required.

In addition to the curriculum changes that were made to the CIS option of the CS program, a new class Scripting Languages and System Administration was also developed. This class will be offered with no pre-requisites so that students in the field of Biology who are studying Bioinformatics may be able to register and also students in Art who may need to know scripting for some of their digital related projects.

While discussing curriculum some of the different suggestions/comments mentioned are:

- 1. Tailoring the curriculum to a position or company that the student may want to work for after graduation. Unfortunately our plans of study have to be created across the board and we follow the recommendations of ACM and IEEE requirements. One way to try and tailor the curriculum is through the electives that the students choose to take, and we should encourage students to take electives that will best fit their goals for after graduation. However, students don't always adhere to our recommendations.
- 2. Offering traditional courses at a rate of completion within a week (40 contact hours) with the added on concept of providing a certificate of completion to those attending. –At this time one of the largest problems that we have facing such a concept is that we have a small department, and even with the core classes that we currently offer we have to hire adjuncts to teach some of them. Another issue is the classes availability to the student body considering that most of our students work full time with employers that would not allow them to take a whole week off to be able to attend a class therefore running the risk of not having enough students to be able to teach one of these courses.
- 3. Think of ways to get students to focus on what they would actually want to do once they graduate. – I believe this one ties in with the first question and raises a question of its own. One of the issues we face is that we have a lot of students that are coming in to study computer science but do not know what they want to do once they graduate. Due to this fact, many students will take their electives without tailoring their choices for the career that they want to have. It was also suggested that we should try and segment students with their career choices in mind to be able to suggest those courses that will make them strong candidates, but again, it is an issue of the student knowing what they want to do.

To address all of the above, there was a consensus that it would be very beneficial if members of the IAB would be willing to come in to the Software Engineering courses and be able to hold an informal conversation with students as to what they can expect once they start looking for employment if they have not yet. We also believe that it may be beneficial if members would be willing to speak with some of our incoming students (maybe in our programming 2 or data structures course) to provide them with information of the possibilities that lie ahead for them and to make mention of those courses which will make them strong candidates. Again, hearing the information from the academic side is different from hearing it from those in academia.

Other areas of discussion were as follows:

- Teacher certification program for CS according to preliminary research this will be an ongoing long term initiative. Currently AL does not have a CS certification exam or a required program of study. Through discussions with a representative of secondary education in the College of Education, it has been defined that the first action should be t conduct a survey to determine the "need" to have students that graduate in Computer Science to be the one's teaching the middle school and high school courses. If the survey shows a need then we will be able to use a report written by CSTA (Computer Science Teachers Association) associated with ACM to try and "build our case". We will not only have to draw up the correct documentation to get an approval for the program through ACHE (Alabama Commission of Higher Education) but we will also need to be able to take the proposal to the State Education Board. With all of this in mind, we will also need to be sure that any program changes that are made will correspond to requirements that will be approved by ABET, which leads us to the second point.
- 2. The Computer Science department has decided that it is to our benefit to seek ABET accreditation. We have lost the opportunity to have students enter our program because of the fact that we are not ABET accredited and therefore their employers will not reimburse them for their studies. A preliminary ABET self-study report has been submitted (November 1st) and we will await the results to continue the process.

Some lasting comments that also provide us with action items from this meeting are:

- 1. Finding out how many of our CIS students have taken advantage of the three course difference to obtain a minor in Business Administration before the changes to the option take place.
- 2. Find out the average age of our students in the Computer Science program only.
- 3. Create a brief survey of what skills sets are valued and not valued and what companies are looking for. Send the survey to IAB members as a starting point and branch out to other employers for feedback. Information from the survey will help faculty guide students with their electives based on what they would like to do after graduation.
- 4. Consider teaching a special topics course in the area of Testing. Software test engineers are needed but many students do not have the knowledge of unit testing, automation, etc. Start early by tying in the concepts of stubs to testing when teaching 317.
- 5. Lastly the faculty will also be continuing the research of establishing a placement exam for incoming students and the possibility of creating an articulation agreement with the

junior colleges, so that students may be able to test beyond CS 317, possibly 318 and be able to take electives such as Algorithms and Object Oriented Programming to complete the hour requirements for the degree.

Next Meeting: February 27th, 2015 – 9:00 – Noon Water's Conference Room 200, followed by lunch off campus.