Industrial Advisory Committee Technology Department Meeting Minutes: April 26, 2013 College of Engineering Carbondale, IL

Present:

- 1. Jim Akers (Woodward Governor)
- 2. Kelly Fenton (Versatech)
- 3. Kent Gouty (GM)
- 4. Ron Milligan (The Boeing Company)
- 5. Roger Chang
- 6. Bruce DeRuntz
- 7. Julie Dunston
- 8. Mandara Savage
- 9. Tomás Velasco

Introduction of Members

The meeting commenced with an introduction of the industrial advisory committee members and on-campus faculty.

Approval of Fall 2012 Minutes

Minutes of the Industrial Advisory Committee meeting held on November 30th, 2012, were reviewed. *Motion to approve the minutes was made by R. Chang, seconded by R. Milligan. Motion was approved unanimously.*

Announcements

- a. J. Dunston presented the proposal for a joint on-line master's program between the College of Engineering (Technology Department) and the College of Business. The proposed degree is entitled "Supply Chain and Logistics", with classes expected to commence in fall 2013 as part of a certificate program that will transition into a full degree option once approval is obtained.
- b. The department's participation in UCOL101 during the fall and spring semesters was summarized. Both programs in the department, IT and EET, develop hands-on activities for students that give them a sense of what the programs are about. UCOL101 is required campus-wide due to general content that must be covered; beyond that, the course has flexibility to incorporate college-specific content. The UCOL101 course in the College of Engineering exposes freshmen to the various fields in engineering through a variety of hands-on and laboratory activities.
- c. The 10th annual ASQ conference was held on the SIUC campus on April 25th, 2013. T. Velasco announced that there were approximately 65 attendees, with roughly half being students. This number was down from previous years. In order to increase

attendance, T. Velasco stated that he plans to survey participants to identify topics of interest for them. R. Milligan suggested benchmarking other ASQ conferences as well as advertising in multiple sites. In addition, R. Milligan recommended highlighting research in the department through presentations by master's students. M. Savage discussed the possibility of a meet and greet, along with arranging a panel discussion. K. Fenton suggested having a reception after the conference, displaying exhibits and soliciting company sponsors to assist with conference costs. B. DeRuntz proposed obtaining a list of southern Illinois companies and circulating conference information to them. T. Velasco added that IMEC could provide information on companies within the area.

Industrial Technology

- a. J. Dunston stated that a set of standard syllabi has been developed for all IT courses, on-campus and off-campus. The syllabi were finalized by on-campus faculty, with input from off-campus faculty on textbooks, content, etc.
- b. On-line course development has begun for IT courses, with one off-campus faculty member identified as the developer for each course. It is expected that all IT courses will have an on-line section completed by the end of this summer. M. Savage mentioned that on-line IT courses will be 12 weeks in duration.
- c. An action plan has been identified for the development of end-of-course assessments for each course. A common assessment exam will be administered to on-campus, off-campus and on-line students to evaluate consistency in achieving course objectives across all groups. M. Savage emphasized the importance of providing documentation to ATMAE (accreditation agency) that demonstrates a consistent level of achievement across all delivery formats (on-campus, off-campus, and on-line).
- d. IAC members reviewed the existing IT curriculum and input was solicited on recommended changes to the program. K. Fenton suggested looking at lean concepts in support functions (offices, etc.). K. Fenton also mentioned that model-based product definition is becoming prevalent in many organizations. K. Gouty, J. Akers and R. Milligan were also in agreement on the importance of providing students with solid modeling concepts. Discussion ensued regarding whether or not to replace the GD&T content with solid modeling or incorporating content into an existing course. R. Milligan mentioned the possibility of incorporating GD&T into the manufacturing processes course, or transitioning the current GD&T course to solid modeling. K. Fenton recommended the use of Autodesk factory design suite software. M. Savage commented on the challenge of finding an instructor for teaching solid modeling. There was no consensus on the extent to which solid modeling should be incorporated into the program. R. Milligan stated that he would contact B. Milligan for his input regarding the topic since he has more expertise in that area. A recommendation was made to include a supply chain management course in the curriculum. R. Chang suggested adding the course as an elective. B. DeRuntz stated that it should be required. Motion to add a new course under the manufacturing specialization that addresses supply chain and logistics engineering was made by R. Milligan, seconded by K. Fenton. Motion was approved unanimously.

e. J. Dunston stated that an ad-hoc college assessment committee has been formed within the College of Engineering. In order to satisfy University accreditation requirements, the department has to complete an assessment plan for each program utilizing a specific template. The assessment document for IT was presented for committee perusal.

Quality Engineering and Management

- a. M. Savage presented enrollment numbers for IT for fall 2011, fall 2012, and spring 2013. For the current spring semester, IT enrollment is 279 total, with a breakdown of 60 on-campus students, 80 students in the military programs, and 139 students in the industrial programs. In the QEM program, 4 students are currently cleared for graduation. An increase in QEM is expected for fall 2013 based on projected enrollment data which includes 7 new on-line students and 17 new on-campus students.
- b. The course of study for QEM students (on-line and on-campus) was presented.
- c. An on-line course assessment survey has been developed through the University's Center for Teaching Excellence. The department is in the process of evaluating the existing survey and modifying it to better suit the assessment needs of the department.
- d. Since there are three Six Sigma courses that are prerequisites in the QEM program, an action plan in the department is the development of an exam to assess student knowledge in the area of Six Sigma. This placement test would apply to students who come into the QEM program without an IT degree. J. Akers inquired as to whether or not ASQ certification would be used to evaluate the level of Six Sigma knowledge. This has not yet been determined, since the faculty are still discussing the details of the evaluation process.

PhD Program

T. Velasco mentioned that a proposal was submitted to the College PhD Committee to add an industrial and quality engineering specialization to the PhD in Engineering Sciences degree. The proposal was approved by the College of Engineering's PhD Committee and will be forwarded to the Graduate Council for approval.