INDUSTRIAL ADVISORY COMMITTEE (IAC) MEETING

DEPARTMENT OF TECHNOLOGY, COLLEGE OF ENGINEERING, SIUC

FALL 2010

Agenda

1. Introduction of members
2. Approval of Spring 2010 minutes
3. Announcements/Events
   a. ATMAE conference
   b. Fall Orientation meeting
4. Industrial Technology
   a. Recruitment initiatives
      i. Alumni demographics – RC
      ii. Community college visits/articulation - JD
      iii. Program name change, specialization in quality, program referencing, HS to college programs – TV
      iv. Marketing (internal), update presentation, marketing professional support – BD
      v. Social networking strategy
   b. Program name change/minor in quality
      i. Quality Engineering Technology
      ii. Applied Quality Engineering
      iii. Applied Engineering and Technology w/ specialization in Quality
      iv. Quality Systems Technology
   c. On-line course delivery
   d. Skill set matrix
   e. IT445/IT455 lab merger
5. Manufacturing Systems
   a. On-line course development
   b. Explore new course options (EET faculty)
   c. Program name change

Industrial Advisory Committee
Technology Department
Meeting Minutes: November 5, 2010
College of Engineering
Carbondale, IL

Present:

1. Tom Bennett (Aisin)
2. Chuck Kuhn (Aisin)
3. Earnie Mulvaney (Nascote Industries)
4. Todd Suits (Cooper B-Line)
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 Spring 2010 Minutes

Minutes of the Industrial Advisory Committee meeting held on April 30, 2010, were reviewed. *Motion to approve the minutes was made by C. Kuhn, seconded by R. Chang. Motion was approved unanimously.*

Announcements

a. M. Savage stated that the he and B. DeRuntz attended the fall ATMAE conference. A robotics team, consisting of 7 students from the Department and College, represented SIUC. The team placed 2nd in the overall robotics competition and tied for 1st for the best electrical/control methodology award.
b. The department held a fall orientation meeting on November 3rd for the purpose of introducing new students to the department faculty and providing all students an opportunity to interact with each other. In addition to presentations from alumni in local industries, representative members from each of the department's RSOs talked about their organizations' activities.

Industrial Technology

a. <u>Recruitment initiatives.</u> The department communicated its recruitment strategies to members of the committee.

i. R. Chang presented a plan for enlisting program alumni as a source of recruitment. Requests to contact alumni through the University foundation have not yielded results, so attempts will be made to identify alumni through records housed in the off-campus program. B. DeRuntz commented that non-traditional students who have completed the program can be strong advocates in promoting others to apply. C. Kuhn recommended highlighting the changes in the program for those who are only familiar with the curriculum that existed 10 years ago or more. There are significant differences now that should be outlined as bullet points in communicating with alumni. T. Suits inquired about the career paths of students regarding the percentage that went into manufacturing. R. Chang responded that most graduates work manufacturing. T. Suits asked if the department marketed to students interested in healthcare due to the implementation of lean and six sigma in this area. T. Velasco stated that some students in the Six Sigma classes have worked on projects in healthcare. J. Dunston commented that the department needs to market the broad applicability of the curriculum. R. Chang articulated the three primary marketing groups: high school graduates, community college graduates, and current employees.

ii. J. Dunston discussed that the department would continue to visit community college classrooms to recruit students from those programs. In order to assist transfer students, work will continue on developing articulation agreements between specific community college programs and technology.

iii. T. Velasco stated that he would discuss the program name change when the committee reached the agenda item related to this topic.

iv. T. Bennett asked if there were many students that transferred within engineering. M. Savage commented that he and Carl Spezia had met with the staff of pre-majors to discuss ways to reach those students. It was suggested by the staff that the department do an outreach activity in the dorms. For the spring semester, the department is planning on setting up a display in the common room of the engineering dorm to highlight the department and its program. C. Kuhn asked what the pre-major pool size was. M. Savage replied that there were currently about 950 students. T. Bennett inquired whether more could be done to recruit from within engineering; suggested getting engineering students to take IT classes. T. Suits asked if it was possible to get engineering students to take the IT courses as electives. M. Savage stated that the RSO groups in the department can help raise the level of awareness of our program. Technology students are leading the start-up of a mini-Baja RSO that would involve students from other departments within the College. The ATMAE RSO membership is made up of approximately 50% of students in departments outside Technology; in addition, the hovercraft club (housed in Technology) also includes other students within the College. T. Bennett suggested enlisting the help of professors teaching math/physics to recommend technology to students who struggle in their courses. B. DeRuntz discussed the department's efforts to engage the university marketing group in assisting with recruiting. Since the university is currently developing a new marketing direction, the marketing group will provide input to the department after the university finalizes its plans. T. Bennett discourages the department from marketing around Six Sigma, Lean,

etc. He suggested focusing on aspects of the program that are interesting, placement of graduates, and average starting salaries; these are items that would be motivating for students. T. Suits added that the department should market the different segments that graduates could work in, such as manufacturing, healthcare, etc. T. Bennett proposed that a link to the department website be placed in the D.E. or Southern Illinoisan to target the local audience. Additionally, the department could market to the large group of Illinois veterans that receive federal funding for education.

    v.   J. Dunston commented that the department is investigating the best social networking strategy for communicating with students, such as Facebook, Twitter, YouTube, etc.

b. T. Velasco presented the committee with current information on job outlooks in fields related to industrial technology, as part of the discussion within the department on renaming the current IT program. T. Velasco listed four potential names proposed by the faculty: Quality Engineering Technology, Applied Quality Engineering, Applied Engineering and Technology w/ specialization in Quality, and Quality Systems Technology. A discussion on the names ensued. T. Bennett commented that "quality" alone doesn't identify other areas covered in the program, such as process improvement. T. Suits recommended having "engineering" in the name in order to provide students with more "clout" when applying for jobs. C. Kuhn stated he was in favor of Applied Engineering and Technology. The consensus from the committee was that the program name should not be restrictive for students submitting résumés to human resource personnel who are simply looking at key words. If the name was too specific, qualified applicants could be removed from the pool in the first round of review. *Motion to change the name of the Industrial Technology program to Applied Engineering and Technology was made by R. Chang, seconded by C. Kuhn. Motion was approved unanimously.*

c. R. Chang presented the department's plan to offer on-line courses in the existing IT program. T. Bennett recommended marketing to students that are outside the existing feeder schools. *Motion to approve on-line course delivery was made by R. Chang, seconded by C. Kuhn. Motion was approved unanimously.*

d. J. Dunston referred to the IT courses skill set matrix developed by the department. C. Kuhn commented that the matrix was broad and identified general competencies, but that it would be beneficial to identify skill sets for each course according to topic. The department will revise the matrix prior to the spring meeting.

e. As discussed previously in the spring 2010 meeting, the Robotics course (IT455) will become a core course in the IT program. In order to prevent conflict with delivery of the course in the off-campus program, it was proposed to move the lab component into a separate course (IT405), which would also include lab elements from the Computer-Aided Manufacturing course (IT 445). *Motion to approve the IT445/IT455 lab merger was made by C. Kuhn, seconded by R. Chang. Motion was approved unanimously.* Discussion ensued on possible names for the lab course. *Motion to name the IT405 course "Applied Robotics and Control" was made by T. Bennett, seconded by C. Kuhn. Motion was approved unanimously.*

Manufacturing Systems

  a. J. Dunston stated that the on-line delivery of courses in the Manufacturing Systems program was slated to begin in Fall 2011.

  b. C. Spezia presented a rough draft of the syllabus for a course in Energy Management that he is proposing for on-line implementation. C. Spezia commented that the syllabus was based on the body of knowledge for the Certified Energy Manager exam. C. Kuhn stated that the content was ambitious and that the material probably needed to be trimmed down. R. Chang added that the course should be taught in such a manner that no prerequisites would be required. C. Spezia responded that he could do that by focusing on policies and procedures, along with risk management. T. Suits suggested covering maintenance management and cost optimization aspects. R. Chang recommended developing course content within the context of the existing core courses: quality, efficiency, elimination of waste, reliability, etc. T. Bennett added that solar and geothermal energy should be included, as well as content related to maintaining equipment to prevent degradation of performance. C. Kuhn had several areas that he recommended to be covered: contract review based on fixed cost, compressed air audits, CO_2 emissions, significant aspects in ISO14001, recovery systems, and where to check for grant opportunities related to energy management. C. Spezia stated that he would take the committee's suggestions and develop a more refined syllabus for future review.

  c. M. Savage reiterated some of the internal and external issues related to changing the name of the Manufacturing Systems program to the proposed "Quality Engineering and Management" name. At this time, the department is tabling its effort to change the name until such time when the undergraduate Industrial & Quality Engineering program is approved.

The meeting was adjourned at approximately 4:00 p.m.