

**Industrial Advisory Committee
Technology Department
Meeting Minutes: May 1, 2015
College of Engineering
Carbondale, IL**

Present:

IAC members:

1. Jim Akers (Woodward, Inc.)
2. Chuck Kuhn (Aisin Electronics)
3. Kelly Fenton (Versatech Engineering)
4. Gabe Smith (John Deere)
5. Bart Welker (Air National Guard)
6. Roger Chang
7. Bruce DeRuntz
8. Julie Dunston
9. Mandara Savage
10. Tomás Velasco

Guest attendees:

1. Shannon Barrett (Jabil)
2. Scott Cunningham (Global Experience Specialists)

Introduction of Members

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

Nomination of New Members – Robin Holmberg, Erik Perks

Two new members, Robin Holmberg and Erik Perks, were nominated to join the industrial advisory committee by J. Dunston and Tomás Velasco, respectively. *The approval of the new members was unanimous.*

Approval of Spring 2014 Minutes

Minutes of the Industrial Advisory Committee meeting held on May 2, 2014, were reviewed. *Motion to approve the minutes was made by K. Fenton, seconded by B. DeRuntz. Motion was approved unanimously.*

Approval of Revised By-Laws

The IAC By-Laws were revised to reflect the change in the program's accrediting body from NAIT to ATMAE. *Motion to approve the revised by-laws was made by M. Savage, seconded by B. Welker. Motion was approved unanimously.*

Announcements/Events

- a. J. Dunston announced that the proposed on-line master's degree in Supply Chain Management and Engineering was approved by the IBHE early this year, which is the final step in the approval process. The first cohort of students will enter the program in fall 2016. M. Savage added that a survey will be used to assess an appropriate fee for the program since it will not fall under the standard tuition structure. J. Akers asked which college the degree would be granted from and M. Savage replied that it would be an M.S. degree from the graduate school. T. Velasco stated that 6 courses would be taught by IT faculty and 6 courses would be taught by faculty in the College of Business. B. Welker suggested targeting the Air Force in marketing the program due to the existing policy for promotion to Colonel; in order to attain this rank, all officers have to obtain a master's degree.
- b. M. Savage announced that the proposed name change from Industrial Technology to Industrial Management and Applied Engineering (IMAE) was approved in fall 2014, with the change appearing in the 2016-2017 undergraduate catalog. J. Akers asked which degree title students would hold when graduating in fall 2015. M. Savage indicated that students could graduate under the new degree name if they completed the new supply chain course. G. Smith asked how the university is marketing the degree and suggested identifying specific job titles that graduates of the program would hold. M. Savage replied that doing so would inevitably exclude some industries and that it might be better to identify general career areas for graduates instead.
- c. T. Velasco stated that the 12th annual ASQ Conference was held the previous day, with a record number of attendees at 110. As part of the keynote presentation, a list of employer "wants" relative to the workforce was provided. J. Akers suggested polling industry leaders in the area to determine what their requirements are. T. Velasco announced that next year's conference will be held on the last Thursday in April, which would be on the 28th.
- d. M. Savage outlined the ATMAE accreditation process. A self-study document was prepared for the examining team prior to the campus visit. Based on this document and evidence collected during the site visit, 1 of 4 levels of accreditation is granted: do not recommend reaccreditation, reaccreditation with 2-year visit, reaccreditation with report in 2 years, and full reaccreditation (6 years). The IT department received a recommendation for reaccreditation with a 2-year visit. Out of the 21 criteria items, there were 5 partial compliance items and 2 noncompliance items; the remaining items were in compliance.

One of the noncompliance items deals with the hiring of adjunct faculty in our off-campus and on-line programs. ATMAE specifies that 51% of faculty teaching in the

program should be terminally degreed. In fall 2014, the department percentage was 46. Currently, there are 4 adjunct faculty working on their PhDs. As a result, it is expected that this noncompliance will be corrected within the next year.

The other noncompliance item relates to lab experiences for the students. Over the past several years, the department has moved away from a manufacturing focus towards a management focus. This has been a strategic move that resulted from surveying alumni and employers, feedback from the IAC members and evaluating future industry needs to capitalize on our strengths as a department and to ensure the marketability of our students. However, to address the concerns of the review team, the department will require students to have a minimum of 6 hours of lab experience prior to graduation. The majority of the IT students transfer in with an associate's degree in a technical area and will satisfy this requirement upon entry into the program. For off-campus students, the lab requirement can be satisfied with work experience translated into occupational credit hours. G. Smith asked if externship opportunities could be applied. M. Savage replied that occupation credit is evaluated based on years of experience. C. Kuhn recommended using check sheets for students in the program to outline a plan of study and ensure requirements are satisfied. J. Akers asked if lab courses outside the program would count as lab experiences, such as Physics. M. Savage replied that they would not. S. Cunningham commented that lab experiences don't replace real-world experiences. S. Barrett asked about the feasibility of developing individual student plans and M. Savage replied that this could be done by building it on the front end and training advisor on the process.

B. DeRuntz commented that the department has considered pursuing another accrediting body. M. Savage stated that pursuing ABET accreditation is an option, which would bring the department under one accreditor and could improve the recognition of the degree among employers.

Industrial Technology

- a. The department's short-range and long-range goals were presented to the IAC for approval. For item 4. *Select and administer a certification exam to students*, G. Smith inquired as to which certification exam we would use. J. Dunson replied that the department was considering ATMAE's Lean Six Sigma certification. For item 5.b., related to diversifying IAC membership, C. Kuhn suggested reaching out to HR personnel and B. Welker recommended seeking members from healthcare.

G. Smith emphasized the importance of soft skills and suggested developing student activities in this area. C. Kuhn recommended that students participate in a 360 evaluation on course projects, for example, in which students conduct a self-evaluation and evaluate other team members.

Motion to approve the short-range and long-range goals was made by M. Savage, seconded by B. Welker. Motion was approved unanimously.

- b. J. Dunston presented the assessment plan for the IT program and recommended that a strategic planning meeting take place every fall, with IAC members participating in the process.
- c. R. Chang presented enrollment data over the past two years and discussed one initiative to increase enrollment. In summer 2014, R. Chang stated that he gathered information from the Illinois Manufacturing Directory, starting with manufacturers in the Chicago area, and targeted managers in the area of quality to contact. Approximately 3000 letters were sent out that highlighted the off-campus and on-line programs. A second round of letters will be mailed out this summer highlighting curriculum changes and the Professional Development Sequence (PDS). C. Kuhn asked why there has been a decline in enrollment at the industrial and military sites. R. Chang replied that the change in tuition structure was a contributing factor.

J. Dunston highlighted the PDS sequence in Lean Six Sigma being offered by the department for employees needing CEUs. The courses in the sequence include Project Management, Lean Manufacturing, Six Sigma Green Belt I and II.

The department has established relationships with industry to provide additional opportunities for increasing enrollment. Employees completing a Six Sigma course at Accuride pay a fee to receive a certificate from SIUC. In addition, the department is working with a local community college to offer courses to Aisin employees.

- d. Proposed curriculum changes were presented by J. Dunston. Over the past several years, it became apparent from our alumni and employers of alumni that the IT program will best serve its students by offering courses in quality and manufacturing management. This has moved us, over time, from the manufacturing processes pillar to the manufacturing competitiveness pillar. Gradual modification of the curriculum to emphasize quality, continuous improvement and manufacturing management is consistent with faculty expertise and serves to make our students highly marketable in a wide variety of industries, not just manufacturing. Currently, Robotics is a required course but survey feedback indicates it is not as useful as other courses. Therefore, it was proposed that consideration be given to changing Robotics from a core course to an elective course. The IAC members were in agreement and, in place of Robotics, G. Smith proposed adding the Fundamentals of Leadership to the core. *Motion was made to change Robotics to an elective course and to add Fundamentals of Leadership as a core course was made by C. Kuhn, seconded by B. Welker. Motion was approved unanimously.*

Additional discussion included consideration of adding a technical communication course to the IT curriculum. C. Kuhn commented that the course should develop students' oral and written communication skills. The faculty will continue this discussion in future on-campus meetings and consider appropriate options.

PhD Concentration in Industrial & Quality Engineering

T. Velasco stated that the department has continued its effort in establishing a PhD concentration in Industrial and Quality Engineering within the Engineering Sciences PhD program in the College of Engineering. The Graduate Council vote for approval of the concentration will take place on Thursday, May 7.