

**Industrial Advisory Committee  
Technology Department  
Meeting Minutes: April 28, 2017  
College of Engineering  
Carbondale, IL**

**Present:**

IAC members:

1. Jim Akers, Quality Manager (Woodward, Inc.)
2. Chuck Kuhn, Department Manager of Quality Assurance (Aisin Electronics Illinois)
3. Kent Gouty, Quality Engineer (GM)
4. Ron Milligan, Chief Systems Engineer, retired (Boeing)
5. Bart Welker, Manager of Operational Excellence (Department of Central Management, State of Illinois)

Faculty:

6. Roger Chang
7. Bruce DeRuntz
8. Julie Dunston
9. Ron Parks
10. Tomás Velasco

**1. Introduction of Members**

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

**2. Nomination of New Member – Shawn Batka**

Shawn Batka, Director of Strategic Supply at Turtle Wax, was nominated to join the industrial advisory committee by J. Dunston. *R. Milligan motioned to approve Shawn's nomination, seconded by K. Gouty. The motion was approved unanimously.*

**3. Approval of Spring 2016 Minutes**

Minutes of the Industrial Advisory Committee meeting held on April 29, 2016, were reviewed. *Motion to approve the minutes was made by C. Kuhn, seconded by B. Welker. Motion was approved unanimously.*

#### 4. Announcements/Events

ASQ Conference	<p>a. T. Velasco stated that the 14<sup>th</sup> annual ASQ Conference was held the previous day, with the number of attendees estimated at 65. K. Gouty was recognized for sponsoring 5 students at this year’s conference and indicated that he would like to sponsor students again next year. Informal feedback on the presentations was positive and student engagement was high. K. Gouty commented that the session by Sherri Houmadi and Lauren Adams on “What to Expect as a New Quality Engineer in the Automotive Industry” was very beneficial for students. Next year’s conference data has been set for Thursday, April 26.</p>
POET	<p>b. J. Dunston announced that the Professional Order of Engineering and Technology (POET) ceremony would be held on Saturday, May 13, prior to graduation. The order is open to both Industrial Management and Applied Engineering students and Engineering Technology students.</p>
Minor in STEM Leadership	<p>c. B. DeRuntz announced the approval of a minor in STEM Leadership. The curriculum formalizes the existing leadership development program and includes participation by the Colleges of Agriculture, Science, and Applied Sciences and Arts. In addition, B. DeRuntz received an NSF grant to offer scholarships to underprivileged students wishing to major in STEM fields. Twenty scholarships are available with funding up to \$9000/year. Qualifications for the scholarship include a minimum 3.0 GPA and participation in the Leadership Development Program.</p>

#### Industrial Management and Applied Engineering

Enrollment Data	<p>a. J. Dunston presented enrollment data for the IMAE and QEM programs from fall 2012 – fall 2016. The official numbers reported by the university are the 10-day counts at the beginning of the fall semester. On campus enrollment has remained relatively steady and online enrollment has seen continued growth. The off campus sites have seen declining enrollment with a significant decline at our Peoria site due to layoffs at Caterpillar. R. Chang noted an error in the total enrollment numbers calculated. These numbers have been corrected and the updated file is attached.</p> <p>The department has undertaken several initiatives to increase enrollment. These include updating existing articulation agreements and establishing new articulation agreements with community colleges throughout the state, meeting with program advisors and students at community colleges in the Chicago area to promote the IMAE program, and initiating discussion at College of DuPage and City Colleges of Chicago regarding the possibility of opening a site at these locations.</p>
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Curriculum Review	<p>b. J. Dunston presented the current curriculum and solicited feedback on content. K. Gouty confirmed that GD&amp;T was a beneficial course for quality engineers. C. Kuhn recommended the content of the GD&amp;T course include a review of Japanese industrial standards. R. Chang summarized the results of a recent MHI survey of 1100 manufacturing supply chain industry leaders to identify the top emerging technologies/innovations. The top 3 responses and corresponding percentages are as follows: predictive analysis – 62%, Internet of Things – 57%, and inventory/network optimization – 50%.</p> <p>C. Kuhn emphasized the importance of “being in the dirt”, in addition to having theoretical knowledge. An identified need is the ability to define standards and gaps, to work with others on the shop floor and to monitor KPIs.</p>
Assessment Results	<p>c. Assessment results were presented by R. Chang. Student outcomes have been identified for the program and appropriate courses are assigned to measure each of the outcomes. Assessment methods are identified and measured within individual courses and tracked for improvement opportunities. C. Kuhn suggested listing the ideal condition (targets) at the top of the document. For example, the targets for the percentage of students scoring &lt; 70%, between 70 and 89%, and 90% or greater on an assessment item may be 10%, 60%, and 30%, respectively.</p>
Laboratory/Practical Experiences	<p>d. A noncompliance found by the ATMAE accrediting team relative to a lack of laboratory activities has been addressed. J. Dunston presented a flow chart that advisors use to evaluate students entering the program. Beginning in fall 2017, all students must fulfill the laboratory/practical experience requirements prior to graduation. B. DeRuntz proposed identifying opportunities to award students co-curricular credit through participation in Registered Student Organizations (RSOs). R. Milligan suggested putting teams of students on independent study projects that contain laboratory activities.</p>
Strategic Plan	<p>e. The department’s revised mission and vision statements, along with its strategic plan, were presented and input from IAC members was solicited. Increasing enrollment is one of the top priorities within the department. B. Welker stated that the biggest challenge for us was the experience provided by SIUC to prospective students. In his campus visits with his daughter over the past year, SIUC did not fare well compared to other schools. R. Milligan inquired if we had identified our competition in the St. Louis area and suggested looking at specific community colleges such as the Florissant location with its Emerson Manufacturing Excellence Center. K. Gouty also suggested Ivy Tech. DeRuntz suggested building alumni relationships through Facebook. C. Kuhn recommended establishing a matrix to demonstrate how the strategic objectives address the SWOTs. He also suggested identifying top KPIs and sub KPIs that drive them. For the vision statement, a discussion ensued on what “world class” means. J. Akers proposed “employable” graduates and “lifelong learning”. R. Milligan suggested that it is the development of world-class graduates using an exceptional curriculum. C. Kuhn identified terms such as “self-sufficient” and “exceeding industry expectations”. <i>A motion was made by R. Milligan to approve the strategic plan with the consideration of the recommendations of the IAC, seconded by C. Kuhn. Motion was approved unanimously.</i></p>

Minor	<p>f. A recommendation was brought forth by J. Dunston to discuss a proposed minor to be offered by the department. Many students in management take IMAE courses and it may be appealing for them to earn a minor within our program. After much discussion, the following courses were identified for a minor in “Continuous Improvement”: Six Sigma Green Belt, Project Management, Lean Manufacturing, and (Fundamentals of Leadership OR Supply Chain. <i>Motion to approve the minor was made by C. Kuhn, seconded by K. Gouty. Motion was approved unanimously.</i></p>
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**Other**

T. Velasco mentioned that the graduate school is working on a template for an accelerated master’s programs. Under the current discussion, 9 semester hours of coursework can be applied to both the undergraduate and graduate degrees.