

**Industrial Advisory Committee
Technology Department
Meeting Minutes: November 9, 2007
College of Engineering
Carbondale, IL**

Present:

1. Chuck Kuhn (Aisin)
2. Brian Milligan (The Boeing Company)
3. Ron Milligan (The Boeing Company)
4. Tim Moore (Crain Industries)
5. Earnie Mulvaney (Nascote Industries)
6. Ron Young (The Boeing Company)
7. Roger Chang
8. Bruce DeRuntz
9. Julie Dunston
10. Mandara Savage
11. Tomás Velasco

The meeting convened at approximately 10:00 a.m.

Agenda

1. Introduction of members
2. Nomination/approval of new IAC member
Ron Young, The Boeing Company
3. Approval of Spring 2007 Minutes of IAC meeting
4. Review Undergraduate Curriculum (30 min.)
 - New course offerings for 2007-2008
 - IT 110 Geometric Dimensioning & Tolerancing
 - IT 450 Project Management I
 - IT 470a, b Six Sigma Green Belt
 - IT 480 Six Sigma Black Belt
 - Six Sigma certificate program
5. Short-/Long-Term Goals
 - a. Industrial & Quality Engineering program
 - i. IBHE proposal review/approval
 - b. Recruitment Plan (30 min.)
 - i. Enrollment numbers
 - ii. SIPOC model
 - iii. Short-term strategy
 - iv. Long-term strategy
 - c. Off-Campus Industrial Program
 - i. University Center of Lake County
 - ii. Master's program
6. Review Graduate Curriculum (60 min.)

- Review of courses/course content
 - Proposed course: MFGS 550 Project Leadership
- Non-thesis/non-research paper option

Nomination/approval of new IAC members

Ron Young (The Boeing Company) was introduced as a new IAC member. *Motion to approve Ron as an IAC member was made by B. DeRuntz, seconded by M. Savage. Motion was approved unanimously.*

Approval of Spring 2007 Minutes

Minutes of the Industrial Advisory Committee meeting held on April 20, 2007, were reviewed. *Motion to approve the minutes was made by M. Savage, seconded by R. Change. Motion was approved unanimously.*

New Business:

Approval of New Course (MFGS)

- B. DeRuntz presented a proposed new course, IT 550 Project Leadership, for the Manufacturing Systems program. The syllabus for the course was distributed and reviewed by IAC members. B. DeRuntz stated that Microsoft Project would be utilized by students in the course. The Project Leadership course would be added as a core course in the Manufacturing Systems program and would be a complementary course to the existing IT 450 Project Management course (offered for the first time in Fall 2007). *Motion to approve a new Project Leadership course was made by M. Savage, seconded by R. Milligan. Motion was approved unanimously.*

Review Undergraduate Curriculum

- J. Dunston listed that 5 new courses, previously approved by the IAC, are being offered for the first time during the 2007-2008 academic year. The courses are: Geometric Dimensioning and Tolerancing (IT 110), Project Management (IT 450), Six Sigma Green Belt (IT 470a), Six Sigma Green Belt II (IT 470b), and Six Sigma Black Belt (IT 480).
- T. Velasco announced that SIU will be an ASQ examination site for all certifications, including Six Sigma Green Belt and Black Belt.
- A discussion ensued on the Six Sigma courses:
 1. B. DeRuntz asked if there was a supplemental text that was being used for the Six Sigma courses, in addition to the Primers. T. Velasco stated that there was additional material used since the Primer provides the fundamental concepts but is lacking in examples.
 2. B. Milligan enquired about the project requirements for Six Sigma certifications. T. Velasco replied that 2 projects are required but that 1 project can be waived for experience in the area of quality.

3. T. Velasco stated that enrollment in the IT 470a course was around 65 students, with majors from other programs. The College of Business will begin requiring that students enrolled in Operations Management take Six Sigma as an elective.
 4. B. Milligan asked if there was a manufacturing focus in the Six Sigma course. T. Velasco replied that the course primarily covers manufacturing examples, but that students are made aware of the fact that other organizations, such as health care, are implementing the Six Sigma methodology.
 5. C. Kuhn suggested covering the Toyota Production System and recommended “The Field Handbook”.
 6. C. Kuhn suggested that the Japanese industrial standards (JIS) be introduced in the GD&T course, along with the ISO standards; possibly broaden to Chinese standards.
- R. Chang presented requirements for two certificate options, as defined by the Illinois Board of Higher Education (IBHE). One is an undergraduate certificate which requires a minimum of 30 semester hours. The second is a post-baccalaureate certificate which is specified as 18 hours beyond a bachelor’s degree.
 1. R. Milligan stated that he believed the undergraduate certificate would be more attractive. C. Kuhn agreed.
 2. B. DeRuntz suggested that the certificate be offered at one off-campus site initially and expand from there. R. Milligan asked about the possibility of providing courses through distance learning.
 3. B. Milligan expressed concern over offering 400 level courses in an undergraduate certificate program for students who have not taken any other lower-level courses. R. Milligan shared this concern.
 4. The general consensus was to investigate an undergraduate certificate. R. Young suggested that surveys be sent out to help define courses. J. Dunston recommended sending surveys to base coordinators.
 5. R. Milligan asked about the impact of an undergraduate certificate program on current undergraduate students. They could essentially obtain a certificate along the way.
 6. Five courses were identified to be part of the certificate program: Six Sigma Green Belt I and II, Six Sigma Black Belt, Project Management, and Lean Manufacturing. A discussion ensued regarding the courses to be added to the initial list, with the following recommendations: risk management course (M. Savage); lean manufacturing II, project management II (T. Velasco); Cost Estimating, Production and Inventory Control, Safety, First-Line Supervision, Manufacturing Processes (C. Kuhn). All meeting attendees listed their five choices out of the eight recommended, and the votes for each were tallied (high to low):
 - Production and Inventory Control - 11
 - Cost Estimating - 11
 - Safety - 8
 - Manufacturing Processes – 7
 - First-Line Supervision – 7
 - Project Management II - 5

- Risk Management – 4
- Motion and Time Study - 1
- Lean Manufacturing II - 1

R. Chang made a motion to consider the following 10 courses for an undergraduate certificate program: Six Sigma Green Belt I and II, Six Sigma Black Belt, Project Management, Lean Manufacturing, Production and Inventory Control, Cost Estimating, Safety, Manufacturing Processes, and Supervision; and to collect additional survey data before finalizing the course; B. Milligan seconded the motion. Motion was approved unanimously.

Short-/Long-Term Goals

- J. Dunston and T. Velasco presented the proposal to be submitted to the IBHE for a new program in Industrial & Quality Engineering. After review of the proposal by the committee, it was recommended by C. Kuhn that a high-level programming language course be added to the curriculum, such as C++.

C. Kuhn made a motion to approve the proposal document with the recommended change; R. Milligan seconded the motion. Motion was approved unanimously.

- J. Dunston presented enrollment figures for the department for the current semester. M. Savage presented the SIPOC model developed for the department in order to determine the areas to target for recruitment and retention. Ideas were solicited from industrial members regarding the enrollment problem.
 1. R. Milligan asked about the possibility of offering courses through distance learning to attract a broader base. B. Milligan added that on-campus and off-campus students could take courses concurrently.
 2. R. Young and T. Moore recommended actively recruiting in high schools and community colleges. R. Chang suggested that industry employees be invited to attend community college recruiting trips.
 3. C. Kuhn recommended recruiting in vocational schools, and that there is an additional market in home-schooled students. T. Moore added that forming relationships with vocational schools would provide a feeder directly into the IT program.
 4. B. Milligan suggested surveying students to identify when the decision was made to pursue IT, and target recruiting efforts at that point.
 5. T. Moore proposed the development of long-term relationships with industry for the purpose of providing internships to students, starting in the 1st or 2nd year of study. R. Milligan added that a further collaboration would be to obtain a 3-month commitment from the company to hire graduates on a trial basis.
 6. R. Young suggested forming an ad-hoc committee to solicit companies to provide internships, employment upon graduate, etc. to IT students on a long-term basis.

A motion was made to form an ad-hoc committee to identify potential industrial partners to form long-term relationships with for the purpose of establishing student internships and

guaranteeing employment of graduates; T. Velasco seconded the motion. Motion was approved unanimously.

R. Chang made a motion to adjourn the meeting; C. Kuhn seconded the motion.

The meeting adjourned at approximately 4:15 p.m.