

MIE Industrial Advisory Board

Wednesday November 15, 2013 Meeting Minutes

UMASS-Amherst, Massachusetts

Held at iRobot – Bedford, MA

Attending:

- 1 Don Fischer, Department Chair MIE
- 2 James Rinderle
- 3 David Anderson
- 4 Gerry Caron
- 5 Gary Epstein
- 6 Tom Lyden – via telephone
- 7 Mike Mahoney
- 8 Rajesh Nair
- 9 Marty Ross – via telephone
- 10 John Stuart
- 11 Arnie Vandoren
- 12 Paul Washburn

Meeting minutes:

- 1 Thanks to Gerry Caron for hosting an excellent outreach event**
- 2 The minutes of the May 1, 2013 Industry Advisory Board (IAB) meeting were approved with the following change**
 - a. Change Section 8, Item g to read “Mariellen Gilbane Dachos” instead of “Shakenna Williams”
- 3 John Stuart and Paul Washburn led a discussion regarding the end of their term as co-chairs of the MIE IAB**
 - a. It was agreed that the co-chair model works well
 - b. John provided a summary of co-chair responsibilities
 - c. Don thanked John and Paul for their service
 - d. Tom Lyden was unanimously elected as a co chair the IAB
 - i. Tom will reach out to all board members by end of the year
 - e. We need another person to volunteer to serve as a co-chair
 - i. Paul and John will work to recruit someone and wrap this up within a month or so

- f. John will update the MIE IAB roster and get it to Pam

4 Don provided a state of the department update.

- a. TEACH campaign should be priority
 - i. Lack of intimacy in classes with over 50 students
 - ii. “Distance learning beings after the fourth row”
 - iii. Amphitheater format will allow no one to be beyond the fourth row
 - iv. Will allow professors to better connect with students
 - v. A question was raised regarding was one enough, response was that it would be a great start
 - vi. IAB stated that this is a worthwhile proposal and should be pursued
- b. Erin Baker has IGERT and has applied for NSF research center proposal
- c. Sundar is leading DMDI proposal (\$70M) between MIT/Draper Labs and UMass

5 Jim Capistran and University of Massachusetts Innovation Institute

- a. Historically Universities excel at research, however don’t do development/commercialization
- b. Goals
 - i. Support technology transfer
 - ii. Massachusetts partnerships for economic growth
 - iii. Campus capacity for research
 - iv. Create industry friendly, responsive and flexible environment
- c. John suggested that Jim check out BU since they are establishing a successful center
- d. Gerry asked about metrics
 - i. Being developed
 - ii. Industry research dollars going up, but still lag well behind government research dollars
- e. Need to work with industry and university to see what each ones’ priorities are (IP, research \$, etc.)
 - i. Different industry partners will likely have different priorities (some will want ownership of IP, some will strictly want research, etc.)
- f. John asked how the IAB can help
 - i. Get the word out – UMII can eliminate hurdles to working with and between the university and industry
 - ii. Write up success stories such as the relationship with Saint Gobain

6 ABET Update by Jim Rinderle

- a. Jim updated IAB on ABET process and where we are in the timeline
- b. 3 day visit completed in October
- c. Strengths
 - i. Strong IAB and close meaningful relationship between IAB and department
 - ii. Addressing increased enrollments well and the transition to larger classes

- iii. Faculty commitment to undergraduate education
- d. Deficiencies – Non Compliances
 - i. None!
- e. Weaknesses – Compliant but Requires Follow Up
 - i. Continual Improvement – Don't do direct assessments of student outcomes (ME & IE)
 - 1. Did put process in place just before visit
 - 2. Pre-vetting this with ABET auditors
 - ii. Curriculum – Need to pay more attention to industry standards in capstone course (ME & IE)
- f. Concerns – Make sure you don't slip in this area
 - i. Don't adequately document faculty meetings (ME & IE)
 - ii. Program Criteria – IE tech electives (IE)
 - 1. Some are non traditional (finance, math, game theory, etc.)
 - 2. Number of them
 - iii. May want to put a second IE faculty member on Undergraduate Committee to ensure that IE perspective is adequately represented (IE)
- g. On track with responses
 - i. Awaiting report in December, then will respond
 - ii. Final result next summer
- h. Jim may not be doing ABET during the next six year cycle so we need to be sure we don't lose the recipe during any transition
 - i. Paul will provide IAB support as required

7 Don and Jim reviewed ABET Program Educational Objectives for ME & IE and asked for IAB feedback

- a. Objectives
 - i. Think critically, creatively, and rigorously, and employ engineering methods to identify and solve important problems in industry, business, government, and academe
 - ii. Communicate effectively and function cooperatively in professional contexts
 - iii. Approach professional practice responsibly and ethically, and with an awareness of business, environmental, safety, cultural, societal, and global concerns
 - iv. Demonstrate professional leadership
 - v. Employ their engineering education as a foundation for advanced study, lifelong learning, and career development in engineering, management, and other professional fields
- b. Feedback
 - i. Communication is very important – it is captured
 - ii. Societal concerns are important – it is captured
 - iii. Collaborative skills are important – it is captured

- iv. Extensive discussion surrounding them yielded consensus that the goals are good and are very appropriate

8 Each board member presented a short update on their company

9 It was agreed to table the last two agenda items until the next meeting

- a. Responsibility Centered Management
- b. Transition Development

10 The meeting adjourned