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